

Air Permit Review

Issue Date: **Month xx, 2024**

Region: Asheville Regional Office
County: Caldwell
NC Facility ID: 1400101
Inspector's Name: Patrick Ballard
Date of Last Inspection: 03/26/2024
Compliance Code: 3 / Compliance - inspection

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): Teijin Automotive Technologies North Carolina Composites, LLC</p> <p>Facility Address: 601 Hibriten Drive SW Lenoir, NC 28645</p> <p>SIC: 3083 / Laminated Plastics Plate And Sheet NAICS: 326130 / Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p style="text-align: center;">Permit Applicability (this application only)</p> <p>SIP: 02D .0503, .0515, .0516, .0521, & .1806 NSPS: 02D .0524 – Subpart JJJJ NESHAP: 02D .1111 – Subparts DDDDD, WWW, & ZZZZ PSD: N/A PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: N/A</p>
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Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 1400101.23A Date Received: 08/01/2023 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 04667/T20 Existing Permit Issue Date: 02/14/2022 Existing Permit Expiration Date: 04/30/2024</p>
Jeff Matheny EHS Manager (828) 757-8308 601 Hibriten Drive SW Lenoir, NC 28645	Tracy Gray Plant Manager (828) 754-8344 601 Hibriten Drive SW Lenoir, NC 28645	Jeff Matheny EHS Manager (828) 757-8308 601 Hibriten Drive SW Lenoir, NC 28645	

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2022	0.0100	1.34	10.85	1.13	1.06	10.81	10.78 [Styrene]
2021	0.0100	1.24	7.64	1.04	0.8100	7.52	7.50 [Styrene]
2020	0.0100	1.23	5.43	1.03	0.6100	5.41	5.39 [Styrene]
2019	0.0100	1.19	5.84	1.0000	0.6300	5.79	5.77 [Styrene]
2018	0.0100	1.08	5.35	0.9100	0.5400	4.83	4.81 [Styrene]

<p>Review Engineer: Chengqing Xiao</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 04667/T21 Permit Issue Date: Month xx, 2024 Permit Expiration Date: Month xx, 2024</p>
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I. Purpose of Applications

Teijin Automotive Technologies North Carolina Composites, LLC (Teijin Automotive Technologies) operates a Laminated Plastics Plate, Sheet, and Shape Manufacturing Plant in Lenior, Caldwell County, North Carolina. Teijin Automotive Technologies currently holds a Title V Operating Permit No. 04667T20 with an expiration date of April 30, 2024.

Air Permit Renewal Application No. **1400101.23A** was received on **August 1, 2023**, which was at least six months prior to the expiration date of the Title V permit. 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.

II. Facility Description

Teijin Automotive Technologies is a plastic automotive parts manufacturing company. Plastic automotive parts are manufactured from Azdel (a polypropylene/fiberglass composite) and from Sheet Molding Compound “SMC” (a polystyrene resin/fiberglass composite). Teijin Automotive Technologies also molds plastic parts for the home construction industry (air conditioning bases) and have recently started molding a new type of fiberglass-reinforced polypropylene (DLFT). Additionally, this facility does warm forming (closed molding/cut plastic to dimension and heated to 180°F), injection molding using polypropylene beads (8 machines that operate at temperatures of 300 to 400 °F), thermosetting using SMC (temperatures to 400°F), and thermosetting using polypropylene.

The most recent compliance inspection was conducted on March 26, 2024 by Patrick Ballard of DAQ Asheville Regional Office (DAQ-ARO). The facility is in operation 24 hours a day, 365 days a year.

III. History/Background/Application Chronology

Permit History Since Last Permit Renewal

May 23, 2019 – Permit No. **04667/T19** issued as a TV renewal.

July 8, 2020 – Patrick Ballard of the Asheville Regional Office (ARO) completed the annual compliance inspection of the facility.

April 14, 2021 – Patrick Ballard of the Asheville Regional Office (ARO) completed the annual compliance inspection of the facility.

February 14, 2022 – Permit No. **04667T20** issued as a TV modification for a minor modification pursuant to 15A NCAC 02Q .0515 to add plastic parts sanding/drilling/etching operations (ID No. ES-4) with associated bagfilter (ID No. CD-4).

May 4, 2022 – Patrick Ballard of the Asheville Regional Office (ARO) completed the annual compliance inspection of the facility.

May 12, 2023 – Patrick Ballard of the Asheville Regional Office (ARO) completed the annual compliance inspection of the facility.

March 26, 2024 – Patrick Ballard of the Asheville Regional Office (ARO) completed the annual compliance inspection of the facility.

Application Chronology

August 1, 2023 – Permit Application **1400101.23A** received as a TV renewal. This application was deemed complete for processing.

April 22, 2024 – This permit renewal application was reassigned to Mr. Chengqing Xiao, RCO-DAQ Permitting Section.

May 31, 2024 – Emailed the facility’s authorized contact, Mr. Tracy Gray, Plant Manager of Teijin Automotive Technologies NC Composites, LLC to verify equipment changes mentioned in the most recent compliance inspection report

June 10, 2024 – Follow-up email sent to Mr. Jeff Matheney, EHS Manager of Teijin Automotive Technologies NC Composites, LLC; Mr. Matheney sent an email requesting that (1) the facility wants to keep the equipment on the permit including two Presses (ID Nos. 114 and 116), the form-in-place gasket operation (ID No. IAD-1), and the Ink Stamp Process (ID No. ILEN-PAD-P01A) although they were removed from the site. (2) he is served as the Facility & Technical Contact (See Attachment).

June 18, 2024 – Email sent to Mr. Matheney requesting technical additional information.

June 26, 2024 – Received the report of energy assessment and tune-up records for boilers (ID Nos. B-1 and B-1) emailed by Mr. Matheney; the facility chose to keep the boilers (ID Nos. B-1 and B-2) as permitted sources rather than to list them as exempt sources (See Attachment 1).

June 28, 2024 – Mr. Matheney stated via an email that we conduct monthly inspections of our emission sources and have established normal visual emissions and started monthly inspection for ES-4 in December 2021 (See Attachment 1).

August 7, 2024 – Emailed Mr. Matheney the DAQ’s PFAS questionnaire.

August 13, 2024 – Mr. Matheney emailed the DAQ’s PFAS questionnaire. The facility answered “NO” for all questions (See Attachment 2).

August 14, 2024 – DRAFT permit sent to Permittee, DAQ Asheville Regional Office, and DAQ Technical Services Section for comments. Mr. Matheney of Teijin Automotive Technologies NC Composites, LLC replied via e-mail on **August 16, 2024** with no comments. Mr. Samir Parekh of Tech Services replied via e-mail with no comments on **August 16, 2024**. Mr. Patrick Ballard of Asheville Regional Office replied via e-mail with no comments on **August 26, 2024**.

September 04, 2024 – DRAFT permit sent to 30-day public notice and 45-day EPA review.

October 04, 2024 – The 30-day public comment period ended.

October 19, 2024 – The 45-day EPA review period ended.

Month xx, 2024 – Air Permit No. **04667T21** was issued.

IV. Permit Modifications/Changes and TVEE Discussion

The following table provides a summary of the changes to the current permit as part of the renewal process. This summary is not meant to be an exact accounting of each change but a summary of those changes.

Page No.	Section	Description of Changes
Global	Global	<ul style="list-style-type: none"> • Updated the application number and complete date • Updated permit revision number to T21 • Updated the issuance/effective dates to permit
Global	Headers	Amended permit revision number
3	List of Acronyms	Added List of Acronyms
6	Section 2.1 A.4	Removed RESERVED and moved up the condition of 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY to Section 2.1 A.4
10	Section 2.1 C.2.c	Removed “The Permittee shall establish “normal” for this source (ID No. ES-4) in the first 30 days following the beginning of operations.”
11	Section 2.1 D	Corrected “35 horsepower” to “30 horsepower”

13	Section 2.1 D.3.m.ii	Changed MACT DDDDD to current regulatory language
14	Section 2.1 E	Corrected “30 horsepower” to “35 horsepower”
15	Section 2.1 E.4.i.ii	Changed NSPS to current regulatory language
17	Section 2.2 A.1.a.vi.ii	Added electronic reporting provisions
20	Section 3 Insignificant Activities	Moved Insignificant Activities list on Page 20
21-29	Section 4 General Conditions	<ul style="list-style-type: none"> • General Conditions as Section 4 of the Title V Permit • Updated General Conditions (version 8.0, 07/10/2024)

V. Regulatory Review

The facility is currently subject to the following regulations:

- 15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers
- 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes
- 15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources
- 15A NCAC 02D .0521, Control of Visible Emissions
- 15A NCAC 02D .0524, New Source Performance Standards (40 CFR 60, Subpart JJJJ)
- 15A NCAC 02D .1111, Maximum Achievable Control Technology (40 CFR 63, Subparts DDDDD, WWWW, and ZZZZ)
- 15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions (State-Enforceable only)

A. Two natural gas-fired boilers (ID Nos. B-1 and B-2)

1. 15A NCAC 02D .0503 – Particulates from Fuel Burning Indirect Heat Exchangers

This rule limits particulate emissions from heat exchangers (i.e. boilers). The limit is calculated using the following equation:

$$E = 1.090 \times Q^{-0.2594}$$

Where E is the emission limit in pounds per million Btu and Q is the facility-wide heat input rate for fuel burned in heat exchangers. The natural gas-fired boilers (ID Nos. B-1 and B-2, 3.4 million Btu per hour maximum heat input rate each) are subject to 02D .0503. Therefore, Q is 6.8 and the allowable particulate emission rate E is 0.6 lb PM/MMBtu. Using AP-42 emission factors (Natural Gas – Table 1.4-2, rev. 7/98 and Fuel Oil – Tables 1.3-1 and 1.3-2, rev. 5/10), the actual emissions rates are calculated as follows and compliance is demonstrated:

$$E_{\text{actual, (natural gas)}} = 7.6 \text{ lb PM}/10^6 \text{ scf} \div 1020 \text{ MMBtu}/10^6 \text{ scf} = \underline{0.007 \text{ lb PM/MMBtu}}$$

Since the NG is inherently clean and the PM emission rate (emission factor from AP-42) indicates that the emissions would be much lower than the 02D .0503 allowable particulate emission rate, no monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these boilers (ID Nos. B-1 and B-2). This permit renewal does not affect this status. Continued compliance is expected.

2. 15A NCAC 02D .0516 – Sulfur Dioxide Emissions from Combustion Sources

The natural gas-fired boilers (ID Nos. B-1 and B-2) are subject to 02D .0516. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. The following calculation shows that the sulfur dioxide emission rate is equal to 0.00059 pounds per million Btu when combusting natural gas. This calculation is based on an emission factor from AP-42. The equation assumes the sulfur content of natural gas is 2,000 grains/10⁶scf.

$$\text{Natural Gas: } SO_2 = 0.6 \frac{\text{lb}}{10^6 \text{ scf}} \cdot \frac{10^6 \text{ scf}}{1,020 \text{ MMBtu}} = 0.00059 \frac{\text{lb}}{\text{MMBtu}} \quad (\text{AP-42, Table 1.4-2})$$

Natural gas is inherently low enough in sulfur to always be in compliance with this rule. No monitoring, recordkeeping, or reporting is required for these sources. This permit renewal does not affect this status. Continued compliance is expected.

3. 15A NCAC 02D .0521 – Control of Visible Emissions

Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. The natural gas-fired boilers (ID Nos. B-1 and B-2) are subject to 02D .0521. As previously discussed under 02D .0503 and .0516, natural gas is inherently cleaner fuel and the emissions of PM (visible emissions) are low, therefore, no monitoring, recordkeeping, and reporting are required for visible emissions from the two natural gas-fired boilers.

4. 15A NCAC 02D .1111 – Maximum Achievable Control Technology (40 CFR 63, Subparts DDDDD)

For the existing sources(s) designed to burn gas 1 fuels with a heat input capacity of less than or equal to 5 million Btu per hour, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions." The facility is a major source for HAPs and subject to the Boiler MACT. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Per §63.7540(a)(10) and (11) amended at 80 FR 72813, Nov. 20, 2015, the following work practice standards apply. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. The Boiler MACT requires a tune-up every five years conducted no more than 61 months after the previous tune-up, and a compliance report due every five years. The Permittee shall keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or 5-year compliance report that has been submitted. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on May 20, 2019 and ending on December 31, 2023. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. There was no changes on the §63.7540(a)(10) and (11) of the last revised 87 FR 60846, Oct. 6, 2022. Therefore, the above permit conditions are accurate and no revision is required,

Per the report of energy assessment dated January 7, 2016 emailed by Mr. Matheney on June 26, 2024, the energy assessments for the two boilers (ID Nos. B-1 and B-2) were performed on 10/16/2015 and 12/4/2015, respectively. The tune-up records emailed by Mr. Matheney showed that the initial tune-ups were performed on both boilers 04/25/2019. According to Mr. Ballard's most recent inspection report, "The last tune-ups were performed on 11/20/2023 for Boiler No. 1 and 10/09/2023 for Boiler No. 2." The most recent semi-annual report was received on January 30, 2024. The report was reviewed by Mr. Patrick Ballard and appeared to show compliance. Continued compliance is anticipated.

Please noted that the two natural gas-fired boilers (ID Nos. B-1 and B-2) were subject to 15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Boilers and Process Heaters until May 19, 2019. As of May 20, 2019, the two natural gas-fired boilers (ID Nos. B-1 and B-2) are now subject to 40 CFR 63, Subpart DDDDD MACT "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." Therefore, 15A NCAC 02D .1109 was removed from the permit and the word "RESERVED" was put at Section 2.1 A.4 with the previous permit modification revision 04667T20 issued February 14, 2022. The word "RESERVED" is being removed and the sequence numbers of conditions have been moved up from the condition of 15A NCAC 02D .1111 with this permit renewal application,

B. Seventeen SMC thermosetting presses (ID Nos. 101 - 105, 107, 110 - 116 and 119 - 122)

1. 15A NCAC 02D .1111 – Maximum Achievable Control Technology (40 CFR 63, Subparts WWWW)

All seventeen thermosetting presses (ID Nos. 101 through 105, 107, 110 through 116, and 119 through 122), including sheet molding compound (SMC) and bulk molding compound (BMC) handling activities are subject to 15A NCAC 02D .1111: Maximum Achievable Control Technology (MACT), 40 CFR Part 63, Subpart WWWW “National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.”

According to the previous permit review T20 (David Hughes, February 14, 2022), “The initial notification (due August 19, 2003) was received by EPA on August 5, 2003. The initial compliance date for MACT, Subpart WWWW, was April 21, 2006.

Per 40 CFR §63.5805(b) at 70 FR 50124, Aug. 25, 2005, the following MACT requirements apply.

The Permittee shall keep to a minimum the amount of SMC and BMC exposed to the air before processing in the presses. Only one SMC/BMC charge shall be uncovered, unwrapped or exposed per mold press cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.

Since the last Title V permit renewal Permit No. 04667/T19 issued May 23, 2019 for Teijin Automotive Technologies North Carolina Composites, LLC, there were two amendments of the Reinforced Plastic Composites Production NESHAP, 40 CFR part 63, subpart WWWW. The permit conditions related to these two amendments have been evaluated with this permit renewal review as following:

(1) The amendments at 85 FR 15975, Mar. 20, 2020 include amending provisions addressing emissions during periods of SSM; amending provisions regarding electronic reporting of performance test and performance evaluation results and semiannual reports; and an amendment to clarify that mixers that route to a capture and control device system with at least 95-percent efficiency overall are not required to have covers.

The summary report conditions in the current permit No. 04667/T20 include the reporting periods of SSM requirements per Table 14 to Subpart WWWW of Part 63—Requirements for Reports as amended 85 FR 15975, Mar. 20, 2020. The summary report conditions are accurate and no revision is required. The EPA is finalizing electronic reporting requirements that apply to owners and operators of facilities subject to the Plastic Composites Production NESHAP. Owners and operations are required to submit electronic copies of performance test reports and performance evaluation reports and semiannual reports through the EPA’s Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI). The performance test and performance evaluation do not apply to this facility. For semiannual reports, the EPA final rule requires that owners and operators use the appropriate spreadsheet template to submit information to CEDRI. The electronic semiannual reporting requirements will be added to the permit with this Title V permit renewal revision.

The Seventeen SMC thermosetting presses (ID Nos. 101 - 105, 107, 110 - 116 and 119 - 122) do not have control devices. So the amendment regarding mixers with a capture and control device does not apply to these sources, and the permit conditions of Work Practice Standards [40 CFR 63.5805(b) and Table 4 of MACT Subpart WWWW] are accurate and no revision is required.

(2) The amendments at 85 FR 73911, Nov. 19, 2020 implement the plain language reading of the “major source” and “area source” definitions of section 112 of the Clean Air Act (CAA) and provide that a major source can be reclassified to area source status at any time upon reducing its potential to emit (PTE) hazardous air pollutants (HAP) to below the major source thresholds (MST) of 10 tons per year (tpy) of any single HAP and 25 tpy of any combination of HAP. The facility did not request any source reclassification in the application of Title V permit renewal without modification. Therefore, the amendments 85 FR 73911, Nov. 19, 2020 do not change any permit conditions and no revision is required.

According to the previous permit review T20, “SMC is provided to the facility in sheets layered within a top and bottom coating of plastic. Slitter table remove the plastic coating from the SMC for processing. A slitter table is located at each press processing SMC and provides only one charge per cycle.” In the most recent inspection report dated March 26, 2024, Mr. Ballard indicated that “During a previous inspection, the question was raised as to if waste SMC/BMC should be stored in closed containers. This question has been asked by other facilities and addressed through a series of emails (see the 07/19/2011 inspection report). The consensus of the emails was that an “in-process” container does not have to be covered while a “storage” container does have to be covered.”

Weekly inspections for SMC and BMC are mandated by the permit to ensure compliance with the MACT work practice requirements. Semi-annual MACT compliance reports shall be submitted by 01/30 and 07/30 of each year. Based on Mr. Ballard’s most recent inspection report, “These records were observed and appeared adequate.” The most recent semi-annual MACT compliance reports were received on January 30, 2024. The reports were reviewed by Patrick Ballard on February 1, 2024 and appeared to show compliance. Continued compliance is anticipated.

C. Three plastic parts sanding/drilling/etching operations (ID Nos. ES-2, ES-3, and ES-4) and associated bagfilters (ID Nos. CD-2, CD-3, and CD-4)

1. 15A NCAC 02D .0515 - Particulates from Miscellaneous Industrial Processes

This rule is applicable to the particulate emissions from the plant and limits them as described below.

$$E \leq 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons per hour}$$

$$E \leq 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons per hour}$$

Where: P = the process rate in tons per hour
 E = the allowable emission rate of PM in pounds per hour

The plastic parts sanding/drilling/etching operations are subject to 02D .0515. Particulate matter emissions from the plastic parts sanding/drilling/etching operations (ID Nos. ES-2, ES-3, and ES-4) shall be controlled by their associated bagfilters (ID Nos. CD-2, CD-3, and CD-4). According to the previous Title V permit modification application 1400101.21A received on November 19, 2021, the facility processed 5,390,815 pounds per year of SMC on 7560 operating hours per year. The following calculations demonstrate the compliance with the 02D .515 allowable emission rate.

- The process rate in tons per hour $P = 5390815 \text{ lb/year} \div 7560 \text{ hours/year} \div 2000 \text{ lb/ton} = 0.36 \text{ ton/hour}$.
- The allowable emission rate of PM in pounds per hour $E = 4.10 (0.36)^{0.67} = 2.07 \text{ lb/hour}$
- The total estimated after control dust emissions from the bagfilters (ID Nos. CD-2, CD-3, and CD-4) are: $0.54 \text{ tons/year} \times 2000 \text{ lb/ton} \div 7560 \text{ hours/year} = 0.14 \text{ lb/hour} < 2.07 \text{ lb/hour}$

The facility has to conduct monthly external visible inspections and annual internal inspections of the bagfilters (ID Nos. CD-2, CD-3, and CD-4) to ensure compliance with this rule. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. This permit renewal does not affect this status.

In the most recent compliance inspection report, Mr. Ballard stated that “Records reviewed and appeared adequate” and the records showed that the annual inspection of the baghouses were performed in 2023, indicated compliance. The most recent semi-annual reports of 2023 were received on January 30, 2024. The reports were reviewed by Patrick Ballard and appeared to show compliance. Continued compliance is expected.

2. 15A NCAC 02D .0521 – Control of Visible Emissions

Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Visible emissions from the plastic parts sanding/drilling/etching operations (ID Nos. ES-2, ES-3, and ES-4) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

In the emails received on June 26 & 28, 2024, Mr. Matheny stated that “Monitoring, Section 2.1 C.2.c, we are conduct monthly inspections of our emission sources and have established normal visual emissions” and “ We started our monthly inspection for ES-4 in December 2021”. Therefore, the requirements that “The Permittee shall establish “normal” for this source (ID No. ES-4) in the first 30 days following the beginning of operations.” will be removed from the Section 2.1 C 2.c of the current permit 04667/T21 with this renewal revision

Regarding the monthly observations of visible emissions required under 2D .0521, Mr. Ballard stated that “Records reviewed and appeared adequate” in his most recent compliance inspection report. Continued compliance is anticipated.

D. Liquefied petroleum gas – fired emergency generator, 30 horsepower maximum rated power output (ID No. MA-16)

1. 15A NCAC 02D .0516 – Sulfur Dioxide Emissions from Combustion Sources

The emergency generator (ID No. MA-16) is subject to 02D .0516. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Using AP-42 emission factors (LPG – Table 1.5-1, rev. 07/08), the actual emissions rates are calculated as follows and compliance is demonstrated:

$$\begin{aligned} E_{\text{actual}}(\text{LPG}) &= 0.09 \times 15 \text{ gr}/100 \text{ ft}^3 \text{ Sulfur in propane} \\ &= 1.35 \text{ lb of SO}_2/10^3 \text{ gal propane burned} \div 91.5 \text{ MMBtu}/10^3 \text{ gallons} \\ &= 0.015 \text{ lb SO}_2/\text{MMBtu} \\ \underline{0.015 \text{ lb SO}_2/\text{MMBtu}} &< \underline{2.3 \text{ lb SO}_2/\text{MMBtu}} \end{aligned}$$

The SO₂ emissions from the Liquefied Petroleum Gas (LPG) – fired emergency generator would be negligible. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of LPG in this emergency generator (ID No. MA-16). This permit renewal does not affect this status. Continued compliance is expected.

2. 15A NCAC 02D .0521 – Control of Visible Emissions

Visible emissions from this emergency generator (ID No. MA-16) shall not be more than 20 percent opacity when averaged over a six-minute period. The emissions of PM (visible emissions) and SO₂ by the LPG-fired emergency generator, 30 horsepower maximum rated power output are low. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of LPG in this emergency generator (ID No. MA-16).

3. 15A NCAC 02D .1111 – Maximum Achievable Control Technology (40 CFR 63, Subparts ZZZZ)

There is no time limit on the use of emergency stationary RICE in emergency situations. The Permittee may operate the emergency generator (ID No. MA-16) for any combination of the purposes for a maximum of 100 hours per calendar year.

The emergency generator (ID No. MA-16) may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. The emergency generator (ID No. MA-16) requires annual maintenance and inspection.

Please noted that per the last revised §60.4243 as amended 87 FR 48606, Aug. 10, 2022, the “emergency demand response” on the paragraphs (d)(2)(ii) and (iii) has been vacated, therefore, the operation for emergency demand response is no longer allowed for emergency engines. The permit conditions of Operating and Maintenance Requirements in the Section 2.1 D.3.m.ii.(B) and (C) in the current permit 04667T20 have been removed with this Title V renewal revision.

In the most recent inspection report, it indicated that “Engine MA-16 was initially installed for emergency lighting. However, the facility has since switched to battery powered LED emergency lighting.” and the last maintenance and inspection was conducted on 12/10/2023. Continued compliance is anticipated.

E. Natural gas – fired emergency generator, 35 horsepower maximum rated power output (ID No. MA-100)

1. 15A NCAC 02D .0516 – Sulfur Dioxide Emissions from Combustion Sources

The natural gas-fired emergency generator (ID No. MA-100) is subject to 02D .0516. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. As previous discussed, the sulfur dioxide emission rate is equal to 0.00059 pounds per million Btu when combusting natural gas, per the calculation based on an emission factor from AP-42. Natural gas is inherently low enough in sulfur to always be in compliance with this rule. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in emergency generator (ID No. MA-100). This permit renewal does not affect this status. Continued compliance is expected.

2. 15A NCAC 02D .0521 – Control of Visible Emissions

Visible emissions from this emergency generator (ID No. MA-100) shall not be more than 20 percent opacity when averaged over a six-minute period. Natural gas is inherently cleaner fuel and the emissions of PM (visible emissions) are low. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this emergency generator (ID No. MA-100).

3. 15A NCAC 02D .1111 – Maximum Achievable Control Technology (40 CFR 63, Subparts ZZZZ)

This source (ID No. MA-100) must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR part 60 subpart JJJJ. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A. Compliance with Subpart ZZZZ is established by compliance with NSPS, Subpart JJJJ. Continued compliance is anticipated.

4. 15A NCAC 02D .0524, New Source Performance Standards (40 CFR 60, Subpart JJJJ)

The Permittee shall comply with the emission standards in condition c. by purchasing an engine certified to the emission standards in condition c. for the appropriate model year. Because engine (ID No. MA-100) is an NSPS, Subpart JJJJ, certified engine, it does not have the annual maintenance and inspection requirements.

There is no time limit on the use of emergency stationary ICE in emergency situations. The Permittee may operate the emergency generator (ID No. MA-100) for any combination of the purposes specified in the conditions below for a maximum of 100 hours per calendar year. The emergency generator may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response.

As previously discussed, the “emergency demand response” on the paragraphs (d)(2)(ii) and (iii) has been vacated per the last revised §60.4243 as amended 87 FR 48606, Aug. 10, 2022. Therefore, the operation for emergency demand response is no longer allowed for emergency engines, and the Compliance Requirements in the Section 2.1 E.4.i.ii.(B) and (C) in the current permit 04667T20 have been removed with this Title V renewal revision.

The most recent inspection report recorded the engine’s non-resettable hour meter readings, indicating compliance. Continued compliance is anticipated.

F. Facility-Wide

1. 15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions (State-Enforceable only)

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

In the most recent compliance inspection report, Mr. Ballard stated that “Styrene odors were not detected beyond the facility’s boundary during this inspection.” There was no odor complaint in IBEAM. Continued compliance is anticipated.

VI. NSPS, NESHAPS/MACT, NSR/PSD, 112(r), ATTAINMENT STATUS, CAM

NSPS

The facility is currently subject to New Source Performance Standard (NSPS) 40 CFR 60, Subpart JJJJ “Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.” The permit includes the detailed requirements for the natural gas-fired emergency generator (ID No. MA-100). As previously discussed under 15A NCAC 02D .0524, the operation for emergency demand response is no longer allowed for emergency engines due to vacated provisions of §60.4243 as amended 87 FR 48606, Aug. 10, 2022. The Compliance Requirements in the Section 2.1 E.4.i.ii.(B) and (C) in the current permit 04667T20 have been removed with this Title V renewal revision. This permit renewal does not affect this status. Continued compliance with this regulation is expected.

NESHAP/MACT

The facility is an existing major source for HAPs (hazardous air pollutants) and is currently subject to the following NESHAP/MACT requirements.

1. 15A NCAC 02D .1111 – Maximum Achievable Control Technology 40 CFR 63, Subpart DDDDD
For natural gas-fired Boilers (ID Nos. B-1 and B-2) with a heat input capacity equal to or less than 10 million Btu per hour, the Permittee shall comply with all applicable provisions, including monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 “Maximum Achievable Control Technology” (MACT) as promulgated in 40 CFR 63, Subpart DDDDD “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” and Subpart A “General Provisions.” As previously discussed under Section V A.4 of this review, the Permittee shall be subject to the requirements of this standard starting **May 20, 2019**. See Section V A.4 discussions under 02D .1111 40 CFR 63, Subpart DDDDD applicability in details. This permit renewal does not affect this status.
2. 15A NCAC 02D .1111 – Maximum Achievable Control Technology 40 CFR Part 63, Subpart WWWW for Reinforced Plastics Composite Production
The compression molding presses (e.g. seventeen thermosetting presses) are subject to this regulation. See Section V B.1 discussions under 02D .1111 40 CFR Part 63, Subpart WWWW applicability in details. This permit renewal does not affect this status.

3. 15A NCAC 02D .1111 – Maximum Achievable Control Technology 40 CFR Part 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines

The liquid propane gas-fired emergency generator (ID No. MA-16) and the natural gas-fired emergency generator (ID No. MA-100) are subject to this regulation. See Sections of V D.3 and V E.3 discussions under 02D .1111 40 CFR Part 63, Subpart ZZZZ applicability in details. As previously discussed, the “emergency demand response” on the paragraphs (d)(2)(ii) and (iii) has been vacated per the last revised §60.4243 as amended 87 FR 48606, Aug. 10, 2022. Therefore, the operation for emergency demand response is no longer allowed for emergency engines, and the Compliance Requirements in the Section 2.1 D.3.m.ii.(B) and (C) in the current permit 04667T20 have been removed with this Title V renewal revision.

Finally, it needs to be noted here that EPA has added a new HAP, 1-bromopropane, to the CAA §112(b) list. According to the email received on June 26, 2024, Mr. Matheny stated that “Teijin Automotive Technologies in Lenoir, NC does not emit 1-bromopropane.”

Attainment Status

Caldwell County is currently designated as “attainment” or “unclassifiable” with respect to the National Ambient Air Quality Standards (NAAQS) for PM₁₀, PM_{2.5}, sulfur dioxide, ozone, nitrogen dioxide, carbon monoxide and lead. Caldwell County airshed is not triggered for PSD increment tracking purposes for any pollutant: PM₁₀, PM_{2.5}, SO₂, and NO_x.

NSR/PSD

This facility is currently classified as a minor source for PSD purposes. There is NO actual or potential emissions increase in any NSR regulated pollutants above the major source threshold under this permit renewal without modification.

112(r)

The facility is not currently subject to the 112(r) “Prevention of Accidental Releases” requirements because no chemicals are stored in amounts greater than the applicability threshold of the regulation. This permit renewal does not affect this status.

CAM

The requirements in 15A NCAC 02D .0614 “Compliance Assurance Monitoring” (CAM) shall apply to any pollutant-specific emission unit, located at a facility required to obtain a Title V permit, if the following three conditions are met:

- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- the unit’s pre-control potential emission rate exceeds either 100 tpy (for criteria pollutants) or 10/25 tpy (for HAP’s).

Only sanding/drilling/etching operations (ID Nos. ES-2, ES-3 and ES-4)’s emissions are controlled by dedicated control devices (bagfilters ID Nos. CD-2, CD-3, and CD-4). Each of these sources does not have an uncontrolled potential to emit greater than 100 tons per year of PM. Therefore, CAM is not applicable to this facility. This permit renewal does not affect this status.

VII. Facility Wide Air Toxics

Per the facility’s request and reviewed by DAQ to determine compliance with all procedures and requirements, the state-only air toxics requirements for styrene (15A NCAC 02D .1100 “Control of Toxic Air Pollutants”) were removed with the Air Permit 04667T18 issued on June 29, 2016.

According to the previous permit modification review T18, “The facility emits a toxic air pollutant (styrene) from the thermosetting presses that are also subject to a MACT requirement (40 CFR 63 Subpart WWWW). The facility has demonstrated emissions of toxic air pollutants on a facility-wide basis (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") are either below their respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 - "Emission Rates Requiring a Permit" or are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described in the permit. That demonstration (Reference Dispersion Modeling Review Memo from Mr. Jerry Freeman, Meteorologist, dated November 19, 2007) was optimized to 93% of their Acceptable Ambient Levels (AAL), and included monitoring/recordkeeping/ reporting of the amount of sheet molding compound (SMC) processed and the associated hourly styrene emissions was required to ensure compliance. Since the styrene emission limits were optimized to 93% of respective AAL, the removal of the TAP conditions appeared to be straightforward; however, the specific condition 2.2 A.1.a.iv. does include a restriction on the tons of SMC processed through the sanding/ drilling/etching operations (ID Nos. ES-2 and ES-3) that are not subject to MACT Subpart WWWW.” This permit renewal without modification does not affect this status.

Compliance with House Bill 952

There is no expected increase in toxics for this renewal application without modification and will 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).

VIII. Facility Emissions Review

The facility-wide potential emissions have not changed because of this TV permit renewal without modification. Actual emissions for criteria pollutants and HAPs for the previous five years reporting periods (2018 to 2022) are provided in the header of this permit review.

IX. Compliance Status

The facility was inspected by Patrick Ballard on March 26, 2024. Based on his observations the facility appeared to be in compliance with their Title V permit requirements. No violations have been documented at this facility during the past five years. On the Form E5 submitted with the Title V renewal application, the facility stated that “The facility is in compliance with all applicable requirements.” The most recent Annual Compliance Certification received January 30, 2024 was reviewed by Mr. Ballard on February 1, 2024, and indicated compliance with all applicable requirements in 2023.

X. Other Regulatory Considerations

Professional Engineer Seal

As per NCAC 02Q .0112, "Applications Requiring Professional Engineer Seal" - a professional engineer’s seal (PE Seal) is required to seal technical portions of air permit applications for new sources and modifications of existing sources as defined in Rule .0103 of this Section. A professional engineer’s seal (PE Seal) is not required for this renewal application without modification.

Consistency Determination

A zoning consistency determination is NOT required for this renewal application without modification.

Application Type

This application will be processed as a Title V permit renewal without modification, i.e., it will be subject to a 30-day public notice and 45-day EPA review. A permit fee is NOT required for this renewal application without modification.

EPA Rule Promulgation

EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions¹. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses² and will harmonize the EPA's treatment of affirmative defenses across different CAA programs.

As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), it will be necessary for states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised.

Regarding NCDAQ, it has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition (GC) J.

Per EPA, DAQ is required to promptly remove such impermissible provisions, as stated above, from individual Title V permits, after August 21, 2023, through normal course of permit issuance. Accordingly, through this permit renewal, DAQ will remove the GC J from the facility permit that contains the emergency affirmative defense provisions, as discussed above.

XI. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. DAQ voluntarily provides notice to each bordering State (Virginia, Tennessee, Georgia, and South Carolina).

- The Public Notice and EPA Review periods began on XXXX
- The Public Notice period ended on XXXX
- The EPA Review period ended on XXXX

Public Comments/EPA Comments summary here.

XII. Recommendations

The permit renewal application for Teijin Automotive Technologies NC Composites, LLC has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 04667/T21 to Teijin Automotive Technologies NC Composites, LLC.

¹ NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).

² In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 (July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).

XIII. Summary of Attachment

1. Email Correspondence with Mr. Jeff Matheney.
2. Facility's answers of the DAQ's PFAS questionnaire

Attachment 1

Xiao, Chengqing

From: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Sent: Tuesday, August 13, 2024 11:06 AM
To: Xiao, Chengqing
Cc: Tracy Gray
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir
Attachments: DEQ_DAQ PFAS Screening Questions and Disclosure Permit Condition 8-12-24.docx

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Chengqing,

Attached is the DEQ_DAQ PFAS questionnaire.

Please let me know if you have any questions.

Thank you,

Jeff Matheney
Environmental, Health and Safety Manager
TEIJIN AUTOMOTIVE TECHNOLOGIES
NORTH CAROLINA COMPOSITES, LLC
601 Hibriten Drive SW
Lenoir NC 28645
Office: 828-757-8308
Mobile: 704-842-2544
Email: jeff.matheney@teijinautomotive.com

From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Sent: Wednesday, August 7, 2024 2:09 PM
To: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

Good afternoon Mr. Matheney,

I almost finish the technical review. For the permit renewal application, the facility shall be sent a DAQ's PFAS questionnaire.

Please provide the facility response to the attached DEQ questionnaire on fluorinated compounds (e.g., PFAS) uses and emissions for your facility. Please note that DAQ will proceed on public participation with

the Title V renewal application only after we receive a response on the requested information on fluorinated compounds.

Please feel free to contact me if you have any questions.

Thanks,

Chengqing

Chengqing Xiao (he/him/his)
Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality
Office: (919) 707-8476
Chengqing.xiao@deq.nc.gov



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From: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Sent: Friday, June 28, 2024 11:59 AM
To: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Chengqing,

We started our monthly inspection for ES-4 in December 2021.

Thank you,

Jeff

From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Sent: Wednesday, June 26, 2024 11:32 AM
To: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

Thanks Mr. Matheney for sending me the technical additional information!

Regarding the Monitoring, Section 2.1C.2c requirements - **The Permittee shall establish “normal” for this source (ID No. ES-4) in the first 30 days following the beginning of operations**, you stated that “we are conduct monthly inspections of our emission sources and have established normal visual emissions”. Please provide a compliance date when the facility established “normal” for the source (ID No. ES-4). So, this clause can be removed from the proposed permit.

Chengqing

Chengqing Xiao (he/him/his)
Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality
Office: (919) 707-8476
Chengqing.xiao@deq.nc.gov



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From: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Sent: Wednesday, June 26, 2024 10:30 AM
To: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Hello,

Monitoring, Section 2.1C.2c, we are conduct monthly inspections of our emission sources and have established normal visual emissions.

Pertaining to Section 2.1 A5.d and g, I have attached our energy assessment and initial tune up.

Teijin Automotive Technologies in Lenoir, NC does not emit 1-bromopropane.

Please keep our gas fired boilers on our permit.

Thank you,

Jeff Matheney
Environmental, Health and Safety Manager
TEIJIN AUTOMOTIVE TECHNOLOGIES
NORTH CAROLINA COMPOSITES, LLC
601 Hibriten Drive SW
Lenoir NC 28645
Office: 828-757-8308

Mobile: 704-842-2544

Email: jeff.matheney@teijinautomotive.com

From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>

Sent: Tuesday, June 18, 2024 11:48 AM

To: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>

Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>

Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

Good morning Mr. Matheney,

I have some questions when working on the technical review, please help to verify the following via email as soon as you can.

1. Attached is the current permit 04667/T20. On page 6 and page 7 highlighted in yellow in Section 2.1 A.5.d and g, "The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019." If the facility has completed this requirement, please confirm and provide the compliance date.
2. On page 10 highlighted in yellow under **Monitoring** in Section 2.1 C.2.c, "The Permittee shall establish "normal" for this source (ID No. ES-4) in the first 30 days following the beginning of operations." If the facility has completed this requirement, please confirm and provide the compliance date. Then, this language can be removed with this permit renewal revision.
3. EPA has added 1-bromopropane (CAS 106-94-5) to the HAP list on January 5, 2022. Please provide the information whether Teijin Automotive Technologies NC Composites, LLC - Lenoir emits the HAP 1-bromopropane. If it does, please provide the emissions rates including both on actual and PTE basis.
4. Based on the estimation using the spreadsheets of DAQ Natural Gas Combustion emissions calculator, the potential emissions of NOx from the two natural gas-fired boilers (ID Nos. B-1 and B-2, 3.4 million Btu per hour maximum heat input rate each) are 2.92 tons/year. The two boilers may be eligible for insignificant activities per 15A NCAC 02Q .0503(8) "*Insignificant activities because of size or production rate*" means any activity whose emissions would not violate any applicable emissions standard and whose potential emission of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, are each no more than five tons per year and whose potential emissions of hazardous air pollutants before air pollution control devices, are each below 1000 pounds per year." Do you still want to consider the boilers as permitted sources, or do you want to list them onto the Insignificant Activities on permit? Please let me know your thoughts.

Please feel free to contact me if you have any questions.

Thank you!

Chengqing

Chengqing Xiao (he/him/his)
Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality

Office: (919) 707-8476
Chengqing.xiao@deq.nc.gov



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From: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Sent: Monday, June 10, 2024 11:45 AM
To: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Chengqing,

Please keep the one form-in-place gasket operation on the permit please.

Thank you,

Jeff

From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Sent: Monday, June 10, 2024 11:43 AM
To: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

Do you want to keep the "one form-in-place gasket operation (ID No. IAD-1)" in permit as well or do you want to remove it? Please verify.

Chengqing

Chengqing Xiao (he/him/his)
Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality
Office: (919) 707-8476
Chengqing.xiao@deq.nc.gov



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From: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Sent: Monday, June 10, 2024 11:33 AM
To: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Chengqing,

I would like to keep presses 114 and 116 and the ink stamp process on the permit.

Michelle Adkins is no longer with Teijin, and I am the technical contact for the facility. Please let me know if you have any further questions.

I apologize for the delayed response.

Jeff Matheney
Environmental, Health and Safety Manager
TEIJIN AUTOMOTIVE TECHNOLOGIES
NORTH CAROLINA COMPOSITES, LLC
601 Hibriten Drive SW
Lenoir NC 28645
Office: 828-757-8308
Mobile: 704-842-2544
Email: jeff.matheney@teijinautomotive.com

From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Sent: Monday, June 10, 2024 11:27 AM
To: Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Cc: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Subject: RE: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

Good morning Mr. Matheney,

I hope this email finds you well. I'm following up on the previous email below sent May 31, 2024. Please send me an email to let me know your opinion regarding the equipment changes mentioned in my question (1).

Thank you.

Chengqing

Chengqing Xiao (he/him/his)
Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality
Office: (919) 707-8476
Chengqing.xiao@deq.nc.gov



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From: Tracy Gray <Tracy.Gray@teijinautomotive.com>
Sent: Friday, May 31, 2024 11:14 AM
To: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>; Jeff Matheney <Jeff.Matheney@teijinautomotive.com>
Subject: [External] RE: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Good morning Chengqing,

Jeff Matheney will be the correct Facility/Inspection and Permit/Technical Contact for this location.

Jeff is on vacation today, and he will confirm your other questions when he returns next week. Thank you and have a great weekend.

Tracy Gray
Plant Manager, Lenoir NC Operations
Teijin Automotive Systems
Email: Tracy.Gray@TeijinAutomotive.com
Office: 828-757-8344

TEIJIN TEIJIN AUTOMOTIVE TECHNOLOGIES



From: Xiao, Chengqing <chengqing.xiao@deq.nc.gov>
Sent: Friday, May 31, 2024 10:17 AM
To: Tracy Gray <Tracy.Gray@teijinautomotive.com>

Subject: External: Title V air permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir

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Good morning Mr. Gray,

My name is Chengqing Xiao from Division of Air Quality (DAQ). I joined the DAQ Title V permitting group in Raleigh Central Office (RCO) in April 2024. The Title V permit renewal application (1400101.23A) for Teijin Automotive Technologies NC Composites, LLC - Lenoir has been reassigned to me. I am currently working on the technical review for this application and have some questions below.

- 1) The most recent compliance inspection was conducted on March 26, 2024 by Patrick Ballard of DAQ Asheville Regional Office. In the inspection report, Mr. Ballard indicated the following equipment changes:
 - Currently there are only fifteen presses onsite and Press Nos. 114 and 116 have been removed from the facility. In the current permit 04667/T20, seventeen thermosetting presses (ID Nos. 101-105, 107, 110-116, and 119 – 122) including press release and cleaning activities are listed as permitted sources. Do you want to still keep the 17 thermosetting presses or do you want to remove the Press Nos. 114 & 116 from the proposed permit?
 - One form-in-place gasket operation (ID No. IAD-1) and the Ink Stamp Process (ID No. ILEN-PAD-P01A) were removed from the facility. Do you want to keep them or do you want to remove them from the proposed permit?
- 2) Ms. Michelle Adins is listed as the Facility and Technical Contact in the Form A submitted in the air permit renewal application received on August 3, 2023. However, Mr. Jeff Matheney , EHS Manager, is listed as the Facility and Technical Contact in our database system. Please verify who shall be responsible for the Facility/Inspection and Permit/Technical Contact.

Please provide the above information via email as early as you can, and feel free to contact me if you have any questions.

Thank you for your time in helping with this.

Chengqing

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Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties

Attachment 2

DAQ Question 1:

Will your facility use any material or products in your operations that contain fluorinated chemicals? If so, please identify such materials or products and the fluorinated chemicals they contain. [Teijin Automotive Technologies, Lenoir, NC](#), does not use any products in our operations that contain any fluorinated chemicals.

DAQ Question 2:

Will your facility formulate/create products or byproducts (directly or indirectly) that contain fluorinated chemicals (across multiple media)? If so, please identify such products or byproducts and the fluorinated chemicals they contain. [Teijin Automotive Technologies, Lenoir, NC](#), does not formulate or create any products that contain any fluorinated chemicals.

DAQ Question 3:

Will your facility generate solid, liquid, or gaseous related emissions, discharges, or wastes/products containing fluorinated chemicals? If so, please identify such waste streams or materials and the fluorinated chemicals they contain. [Teijin Automotive Technologies, Lenoir, NC](#), does not generate or emit any waste products that contain any fluorinated chemicals.

DAQ Question 4:

Do your facility's processes or operations use equipment, material, or components that contain fluorinated chemicals (e.g., surface coating, clean room applications, solvents, lubricants, fittings, tubing, processing tools, packaging, facility infrastructure, air pollution control units)? Could these processes or operations directly or indirectly (e.g., through leaching, chemical process, heat treatment, pressurization, etc.) result in the release of fluorinated chemicals into the environment? [Teijin Automotive Technologies, Lenoir, NC](#), does not have any fluorinated chemicals in our process, equipment or components.

DAQ Question 5:

List the fluorinated chemicals identified (i.e., through testing or desktop review) above in your response under the appropriate methods/approaches? If one is not, are they on any other known US or International target lists? OTM-45 (air emissions) Methods 533 & 537.1 (drinking water) SW-846: Method 8327 (water) Draft Method 1633 (water, solids, tissue) Total PFAS" Draft Method 1621 for Adsorbable Organic Fluorine (wastewater) Non targeted analytical methods Qualitative approach through suspect screening. [There are no fluorinated chemicals at Teijin Automotive Technologies, Lenoir, NC.](#)

DAQ Question 6:

Are there other facilities or operations in the U.S. or internationally engaged in the same or similar activities involving fluorinated chemicals addressed in your response to the above questions? If so, please provide facility identification information? In addition, are there any ISO (International Organization for Standardization) certification requirements? [Teijin Automotive Technologies does not have any fluorinated chemicals in our process, equipment or components.](#)

DAQ Question 7:

Do you plan to store AFFF on site, use it in fire training at the site, use it for fighting fires at the facility, or include it in a fire fighting system at the site? [There is no AFFF onsite at Teijin Automotive Technologies, Lenoir, NC and there are no plans on using AFFF in the future.](#)

DAQ Question 8:

Are other emerging contaminants (e.g., 1,4-dioxane, bromine, perchlorate, 1,2,3-Trichloropropane) used in some capacity within your facility or operations? Teijin Automotive Technologies does not have any other emerging contaminants (e.g., 1,4-dioxane, bromine, perchlorate, 1,2,3-Trichloropropane) in our process, equipment or components.

DAQ Question 9: Do you need technical assistance to answer the questions above.

Permit condition language

State-enforceable only

Disclosure of Information Relating to Emissions of Fluorinated Chemicals [15A NCAC 02Q.0308(a); 15A NCAC 02Q.0309(b)]

The Permittee shall have an ongoing duty to disclose the presence of materials containing fluorinated chemicals at the facility that have the potential to result in the emission of fluorinated chemicals to the environment. Such disclosures shall be in writing and submitted to the Regional Office Supervisor within thirty days of the Permittee becoming aware of such information, unless such information has already been disclosed to DAQ by the Permittee. The disclosure shall describe the identity, quantity, and use of such material to the extent known. DAQ may require the permittee to conduct analysis or testing of fluorinated chemical emissions as necessary to properly evaluate emissions sources at the facility. As used in this condition, the term “fluorinated chemicals” includes but is not limited to per- and polyfluoroalkyl substances (PFAS).