NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: March 24, 2025

Region: Mooresville Regional Office
County: Gaston
NC Facility ID: 3600153
Inspector's Name: Ashley McCreary
Date of Last Inspection: 03/01/2024
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Daimler Truck North America, LLC

Facility Address:
Daimler Truck North America, LLC – Mt. Holly Plant
1800 North Street
Mount Holly, NC 28120

SIC: 3711 / Motor Vehicles And Car Bodies
NAICS: 336120 / Heavy Duty Truck Manufacturing

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0503, .0515, .0516, .0521, .0524, .0530, .0952, .0958, .1111, .1806 and 15A NCAC 02Q .0513
NSPS: 40 CFR 60 Subparts Dc, JJJJ
NESHAP: 40 CFR 63 Subparts MMMM, PPPP, ZZZZ, and DDDDD
PSD: Actuals PAL for VOC, NOx, and GHG emissions
PSD Avoidance: NA
NC Toxics: NA
112(r): NA
Other: NA

Contact Data

Facility Contact

Michael Kedenburg
Environmental
Sustainability Engineer
(704) 675-1385
1800 North Main Street
Mount Holly, NC 28120

Authorized Contact

Joanna Cooper
Plant Manager
(704) 822-7413
1800 North Main Street
Mount Holly, NC 28120

Technical Contact

Michael Kedenburg
Environmental
Sustainability Engineer
(704) 675-1385
1800 North Main Street
Mount Holly, NC 28120

Application Data

Application Number: 3600153.24A
Date Received: 06/26/2024
Application Type: Renewal
Application Schedule: TV-Renewal

Existing Permit Data
Existing Permit Number: 03926/T49
Existing Permit Issue Date: 02/29/2024
Existing Permit Expiration Date: 12/31/2024

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2023	0.0400	5.75	157.09	4.77	2.11	3.30	1.25 [Toluene]
2022	0.0500	6.94	163.96	6.01	2.13	4.28	2.50 [Toluene]
2021	0.0600	5.60	175.33	5.16	1.98	4.02	2.44 [Toluene]
2020	0.0400	3.42	122.85	3.25	1.75	4.16	2.73 [Toluene]
2019	0.0500	5.06	175.22	4.81	2.25	1.85	0.6824 [Xylene (mixed isomers)]

Review Engineer: Luke Mayer

Review Engineer's Signature: **Date:** March 24, 2025

Comments / Recommendations:

Issue 03926/T50
Permit Issue Date: March 24, 2025
Permit Expiration Date: February 28, 2030

1. Purpose of Application

Daimler Truck North America, LLC currently holds Title V Permit No. 03926T50 with an expiration date of December 31, 2024 for a truck manufacturing facility in Mount Holly, Gaston County, North Carolina. This permit application is for a permit renewal without modification. The renewal application was received on June 26, 2024, or 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. This permit application will update the permit language to remove insignificant source IES-15 at the request of the permittee, as the equipment is no longer at the facility. This permit application will also update the permit to include insignificant sources IES-ITGEN and IES-AUTOGEN at the request of the permittee. These two new sources have already been approved by the DEQ in a 2021 applicability determination.

2. Facility Description

This facility manufactures smaller single cab and dual cab box truck, diesel and natural gas fired trucks. The facility operates two shifts per day, six days per week. They have added a third shift, but no production occurs during that shift. Every year the facility shuts down towards the end of December for repairs and maintenance. About 1,650 people currently work at the facility. The facility assembles approximately 110 trucks per day.

Spray coating and assembly operations are conducted using the following units:

- Spray coating and assembly operations **(ID No. ES-SCAO)**
- Paint spray booth **(ID No. ES-SCAO-Chassis)**
- Paint spray booth **(ID No. ES-SCAO-Seamseal-B)**
- Paint spray booth **(ID No. ES-SCAO-Shipping)**
- Paint spray booth **(ID No. ES-SCAO-Prep Lane)**
- Paint spray booth **(ID No. ES-SCAO-Ecoat booth)**
- Paint spray booth **(ID No. ES-SCAO-Offline 1)**
- Paint spray booth **(ID No. ES-SCAO-Offline 2)**
- Paint spray booth **(ID No. ES-SCAO-Offline Comb)**
- Paint spray booth **(ID No. ES-SCAO-CRC Booth)**
- Paint spray booth **(ID No. ES-SCAO-Wheel Booth)**
- Paint spray booth **(ID No. ES-SCAO-Topcoat-B1)**
- Paint spray booth **(ID No. ES-SCAO-Topcoat-B2)**
- Paint spray booth **(ID No. ES-SCAO-Topcoat-B3)**
- Paint spray booth **(ID No. ES-SCAO-Topcoat-B4)**
- Paint spray booth **(ID No. ES-SCAO-Pit Exhaust)**
- Paint drying oven **(ID No. ES-SCAO-Chassis-oven)**
- Paint drying oven **(ID No. ES-SCAO-Seamseal-O)**
- Paint drying oven **(ID No. ES-SCAO-ES-Ecoat)**
- Paint drying oven **(ID No. ES-SCAO-Topcoat-O1)**
- Paint drying oven **(ID No. ES-SCAO-Topcoat-O2)**
- One flashoff area **(ID No. ES-SCAO-Flashoff)**
- Sanding booth **(ID No. ES-SCAO-Hood Prep)**
- Sanding booth **(ID No. ES-SCAO-Blowoff)**
- Spray Coating and Assembly Operation: One sanding booth for Western Star truck line **(ID No. ES-SCAO-WSTSan)**

- One Ecoat operations, consisting of the following equipment: Two 12,000 gallon RO Storage tanks, Two 12,000 gallon RO rinse tanks, One 22,000 gallon E-coat tank, Two 11,000 gallon E-coat transfer tanks, One 12,000 gallon permeate waste transfer tank, and One 6,000 gallon fresh resin storage tank (part of spray coating and assembly operation) **(ID No. ES-SCAO-Ecoat)**
- Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (part of a spray coating and assembly operation) **(ID No. ES-SCAO-ES-1)**
- One paint mix room/storage area (part of a spray coating and assembly operation) **(ID No. ES-SCAO-PMR1)**
- One paint mix room/storage area (part of a spray coating and assembly operation) **(ID No. ES-SCAO-PMR2)**
- One spot repair booth **(ID No. ES-SCAO-Stripe)**

Welding operations are conducted using the following units:

- 5th wheel welding with in-line duct filters **(ID No. ES-WE-2)**
- Fuel tank welding with in-line duct filters **(ID No. ES-WE-5)**

The facility operates four boilers, listed below:

- one (1) natural gas/propane/No. 2 fuel oil fired boiler (33.6 million Btu per hour maximum heat input) **(ID No. ES-BLR-02)**
- one (1) natural gas/propane/No. 2 fuel oil fired boiler (33.6 million Btu per hour maximum heat input) **(ID No. ES-BLR-05)**
- one (1) natural gas fired hot water boiler (0.75 million Btu per hour maximum heat input) **(ID No. ES-ECoat-Boiler2)**
- one (1) natural gas fired hot water boiler (0.75 million Btu per hour maximum heat input) **(ID No. ES-ECoat-Boiler3)**

Finally, there are several insignificant sources at the facility, listed below:

- 10,000 gallon antifreeze tank **(ID No. IES-1)**
- one 10,000 gallon diesel fuel tank **(ID No. IES-2)**
- one 10,000 gallon diesel fuel tank **(ID No. IES-3)**
- one 10,000 gallon purge solvent tank **(ID No. IES-4)**
- one 10,000 gallon purge solvent tank **(ID No. IES-5)**
- one 10,000 gallon purge solvent tank **(ID No. IES-6)**
- miscellaneous combustion sources (except BLR-02 and BLR-05, and all paint drying ovens) **(ID No. IES-7)**
- one distillation unit with exhaust **(ID No. IES-8)**
- Two Propane Vaporizers (1.440 million Btu per hour and 0.833 million Btu per hour maximum heat input each) **(ID No. IES-9)**
- Four (4) Cooling Towers (Total circulation rate 24,000 gpm) **(ID No. IES-10)**
- Multiple Parts Washers **(ID No. IES-11)**
- Two dynamometers for truck diagnostics checking **(ID No. IES-12)**
- Truck tail pipe exhaust are for truck diagnostics checking **(ID No. IES-13)**
- 10,000 gallon antifreeze tank **(ID No. IES-14)**
- 10,000 gallon virgin gasoline tank **(ID No. IES-16)**
- Tote farm 750 gallon gasoline tank **(ID No. IES-17)**

- One Cab Pretreatment Line consisting of: spray pre-clean/degrease, immersion pre-clean/degrease, spray rinse, immersion rinse, immersion DI rinse with re-circulated DI water, spray DI rinse with fresh DI water **(ID No. IES-EC-3A)**
- emergency fire pump with diesel fired engine with a rating of 182 hp **(ID No. IESFP1)**
- emergency fire pump with diesel fired engine with a rating of 240 hp **(ID No. IESFP2)**
- emergency fire pump with diesel fired engine with a rating of 240 hp **(ID No. IESFP3)**
- Natural gas fired emergency generator (131.4 hp) **(ID No. IES-GEN)**
- Gasoline Filling Station, 24 liters/vehicle **(ID No. IES-GASFIL)**

Daimler Truck North America, LLC has requested that the Division of Air Quality consider the removal of one insignificant source, Western Star welding operations **(ID No. IES-15)**, from the permit as those operations are closed and no longer occur at the facility. This removal shall be granted as this source is decommissioned and or no longer active at the facility. This source will be removed from the permit language as a result. The applicant has also requested the addition of two new insignificant activities to the permit, listed below:

- Natural gas-fired emergency generator (127.6 hp) **(ID No. IES-ITGEN)**
- Natural gas-fired emergency generator (97.9 hp) **(ID No. IES-AUTOGEN)**

The facility submitted these two sources for approval in a letter received by the DAQ on August 3, 2021. DAQ personnel reviewed this submission and determined that the two sources qualify as insignificant activities and will comply with applicable federal standards as they were purchased as certified engines by the manufacturers. See DAQ engineer Gautam Patnaik's applicability determination, dated September 8, 2021. The potential emissions based on 500 hours per consecutive 12-month period and applicable emissions factors (NSPS) for both engines are less than the thresholds in 15A NCAC 02Q .0503(8) for insignificant activities, including for hazardous air pollutants (HAPs). The addition of emissions from these activities will not cause the facility to violate any applicable emission standards.

The facility is a Title V facility because potential emissions of volatile organic compounds (VOCs) exceed 100 tons per year. The facility also has potential emissions of an individual hazardous air pollutant (HAP) greater than the individual HAP limit of 10 tons per year.

3. History/Background/Application Chronology

<u>History/Background</u>

January 14, 2020	TV permit renewal issued. Air Permit No. 03926T47 was issued on January 14, 2020, with an expiration date of December 31, 2024. *(See Gautam Patnaik's TV review for permit No. 03926T47, dated January 14, 2020.)*
February 25, 2021	Air Permit No. 03926T48 was issued for a minor modification to include one new sanding booth for Western Star truck line sanding operations **(ID No. ES-SCAO-WSTSan)** and to convert the status of an existing sanding booth into that of a spot repair booth **(ID No. ES-SCAO-Stripe)**. *(See Gautam Patnaik's TV review for permit No. 03926T48, dated February 25, 2021.)*
February 29, 2024	Air Permit No. 03926T49 was issued for a minor modification to accommodate a production change where the plant will begin production of trucks that run on gasoline instead of diesel. This included new insignificant sources related to the facility's plans. These insignificant sources include Gasoline Filling Station, 25

liters/vehicle **(ID No. IES-GASFIL)**, 10,000 gallon virgin gasoline storage tank **(ID No. IES-16)**, and Tote farm 750 gallon gasoline tank **(ID No. IES-17)**. *(See Gautam Patnaik's TV review for permit No. 03926T49, dated February 29, 2024.)*

Application Chronology

June 26, 2024	Received permit application 3600153.24A for renewal.
July 5, 2024	Sent acknowledgment letter indicating that the application for permit renewal was complete, effective June 26, 2024.
July 15, 2024	Sent request to facility contacts for additional clarification about the addition of insignificant sources **IES-ITGEN** and **IES-AUTOGEN**, and clarification on the legal entity name of Daimler Truck North America.
July 18, 2024	Received response from facility technical contact Michael Kedenburg, Environmental Sustainability Engineer. Mr. Kedenburg replied that the two insignificant sources had already been approved by the DAQ in 2021, and that the legal entity name should be "Daimler Truck North America."
July 18, 2024	Sent request to facility contacts for revised A and E5 forms to reflect correct legal entity name.
August 8, 2024	Sent request to facility contacts for process rate data from sources subject to 15A NCAC 02D .0515.
August 9, 2024	Received revised A and E5 forms with corrected legal entity name.
August 28, 2024	Sent request to facility contacts for data on 1-bromopropane usage and emissions at the facility.
August 30, 2024	Met with facility technical contact Michael Kedenburg and two environmental consultants associated with the facility over the phone. Mr. Kedenburg provided process rate data for the facility and confirmed that no 1-bromopropane is used, stored, or emitted at the Mount Holly facility.
September 13, 2024	Received written confirmation from facility technical contact Michael Kedenburg of the matters discussed on August 30, 2024.
September 30, 2024	Draft permit and review forwarded to supervisor Rahul Thaker for comments.
November 3, 2024	Comments received from supervisor. Editorial changes needed.
December 11, 2024	Draft permit and review forwarded to applicant, SSCB, and regional office for comments.
December 17, 2024	Samir Parekh of the SSCB indicated by email that he had no comments on the draft permit or permit review.

December 17, 2024	Technical contact Michael Kedenburg indicated via email that they had comments on the draft documents. The emission rate limit set in the draft issuance under 15A NCAC 02D .0503 was corrected as a result of comments. Concerns about the expiration of the facility's PALs (Plantwide Applicability Limitations) were raised but will be handled as part of the renewal of the PAL, which is a separate application (3600153.22A) being processed by DAQ engineer Gautam Patnaik and is still underway. The two new insignificant sources IES-ITGEN and IES-AUTOGEN will be added to the PALs without changes to existing monitoring, recordkeeping, and reporting requirements.
January 16, 2024	Technical contact Michael Kedenburg provided updated emissions factors that will be used when adding insignificant sources IES-ITGEN and IES-AUTOGEN to the VOC, NO_x, and GHG PALs. No changes have been made to the monitoring, recordkeeping, or reporting.
January 17, 2024	Technical contact Michael Kedenburg indicated via email that they had no comments on the draft permit or permit review.
January 21, 2024	Engineer Ashley McCreary from the Mooresville Regional Office indicated via email that they had no comments on the draft permit or permit review.
January 27, 2025	Draft permit and permit review forwarded to public notice via DAQ website.
February 26, 2025	Public comment period ends. No comments were received.
March 13, 2025	EPA comment period ends. No comments were received.
March 24, 2025	Permit issued.

4. Permit Modifications/Changes and TVEE Discussion

The following table describes the modifications 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(s)	Section	Description of Changes
Cover Letter and throughout permit	--	• Updated all dates and permit revision numbers • Reformatted permit in accordance with current TV permitting shell • Corrected "Daimler Trucks" to "Daimler Truck" where necessary to accurately reflect the name of the permittee legal entity
Throughout permit	--	• Changed the name of emission source "ES-ECoat Boiler2" to "ES-ECoat-Boiler2" • Changed the name of emission source "ECoat Boiler3" to "ES-ECoat-Boiler3"
5	2.1 A.1.a	• Updated allowable emission limits for ES-ECoat-Boiler2 and ES-ECoat-Boiler3 from 0.37 pounds per million to 0.364 pounds per million Btu
10	2.1 B	• Updated references to location in permit language of applicable regulations (15A NCAC 02D .0952 and .0958) in Section 2.1 B table
12	2.1 B.4.a.ii	• Updated references to location in permit language of applicable regulations (40 CFR 60 Subpart PPPP and MMMM) in Section 2.1 B.4 language

Page(s)	Section	Description of Changes
29	2.3 A	• Added insignificant sources IES-ITGEN and IES-AUTOGEN to the PAL as requested by applicant
33	2.3 B	• Added insignificant sources IES-ITGEN and IES-AUTOGEN to the PAL as requested by applicant
35	2.3 C	• Added insignificant sources IES-ITGEN and IES-AUTOGEN to the PAL as requested by applicant
37	3	• Removed insignificant source IES-15 from Section 3 table as requested by permittee, as the source is no longer active at the facility • Added insignificant sources IES-ITGEN and IES-AUTOGEN to Section 3 table as requested by applicant
38	4	• Updated General Conditions with most recent current version (Version 8.0 dated 07/10/2024)

This permit renewal is being processed without modification. The only significant changes will be to add the two new insignificant sources **(ID Nos. IES-ITGEN** and **IES-AUTOGEN)** and to remove the insignificant source associated with Western Star welding operations **(ID No. IES-15)**. Additionally, the names of two sources have been slightly changed to adhere to current formatting guidelines. "**ES-ECoat Boiler2**" has been changed to "**ES-ECoat-Boiler2**", and "**ECoat Boiler 3**" has been changed to **ES-ECoat-Boiler3**."

The Title V Equipment Editor (TVEE) for this application was reviewed and approved by Connie Horne on March 21, 2025.

5. Regulatory Review

Daimler Truck North America, LLC's Mt. Holly facility is subject to the following regulations. The facility's equipment and operations have not changed since the last renewal in 2020. The permit was updated to reflect the most current stipulations for all applicable regulations, where necessary.

15A NCAC 02D .0503: Particulates from Fuel Burning Indirect Heat Exchangers – The DTNA facility operates four boilers **(ID Nos. ES-BLR-02**, **ES-BLR-05**, **ES-Ecoat-Boiler2**, and **ES-Ecoat-Boiler3)**, two of which have a maximum heat input rate of 33.6 million Btu per hour and two of which have a maximum heat input rate of 0.75 million Btu per hour. This rule applies to all four boilers.

The particulate matter limits for two of the boilers under 15A NCAC 02D .0503 will be updated during this permit renewal. The formula used for calculating emission limits for fuel-burning indirect heat exchangers is given by

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

Where

E = allowable emission limit [lb/million Btu]
Q = maximum heat input [million Btu/hr]

Summing the maximum heat inputs from the four boilers,

$$Q = 33.6 + 33.6 + 0.75 + 0.75 = 68.7 \text{ million Btu/hr}$$

With this total maximum heat input known,

$E = 1.090 \times (68.7)^{-0.2594} = 0.364$ lb/million Btu

The two larger boilers **(ID Nos. ES-BLR-02** and **05)** have a particulate matter emission rate limit of 0.336 lb/million Btu, which was set prior to the removal of Boiler 4. Boiler 4 had a maximum heat input rate of 26.5 million Btu per hour, and the total site heat input at the time was 93.7 million Btu per hour. Their emission rate limit will remain at 0.336 lb/million Btu as of this permit renewal. The two smaller boilers **(ID Nos. ES-ECoat-Boiler2** and **Boiler3)** are newer and were installed after the removal of Boiler 4, so they will be subject to the new particulate matter emission rate limit of 0.364 lb/million Btu. These boilers were installed in 2018 to replace a previous boiler, and Boiler 4 was removed in 2008, and was addressed in Air Permit No. 03926T36. This new limit will replace the two smaller boilers' previous emission rate limit of 0.37 lb/million Btu.

No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in the affected sources. While the larger two boilers can be fired on propane and No. 2 fuel oil, only natural gas is used during normal operation. No. 2 fuel oil will be used in case of emergency. It should be noted that the two large boilers are not always in operation due to certain conditions – for example, they are not used as frequently during warmer weather. The smaller of the two boilers are only fired on natural gas. The emissions inventory and most recent inspection report indicate that actual emissions are far below the limit set by this regulation. PTE calculations support this conclusion (see below). Continued compliance is expected.

Source Group	Actual PM Emissions CY2023 (tpy)	Potential PM Emissions (tpy)	Allowable Limit (tpy)
ES-BLR-02 and **ES-BLR-05**	0.01	0.01	53.57 (each)
ES-ECoat-Boiler2 and **ES-ECoat-Boiler3**	0.01	0.01	1.2154 (each)

15A NCAC 02D .0515: Particulates from Miscellaneous Industrial Processes – The DTNA facility's main operations and associated equipment **(ID No. ES-SCAO)**, including fifteen paint spray booths, five pain drying ovens, flashoff area, three sanding booths, three miscellaneous booths, nine tanks, two mixing rooms, other various operations, and one spot repair booth, as well as the facility's welding operations **(ID Nos. ES-WE-2** and **ES-WE-5)** are considered miscellaneous industrial processes. This rule applies to all of the above operations/equipment/units based on process rate in tons per hour. Emission limits are to be calculated for each applicable unit of equipment using the following formula:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

E = allowable emission rate [lb/hr]
P = process rate [tons/hr]

If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515. Calculations suggest that actual emissions for the entire facility are well below the applicable emissions limit for each single source. Based on an expected

average process rate for the facility of 4.68 tons per hour given by technical contact Michael Kedenburg, each source will have an emission limit of 11.53 pounds per hour or 50.50 tons per year. Actual PM emissions for the entire facility are around 4.1 tons per year, or 0.936 lb/hr. Continued compliance is expected.

15A NCAC 02D .0516: Sulfur Dioxide Emissions from Combustion Sources – The DTNA Mt. Holly facility operates four boilers **(ID Nos. ES-BLR-02**, **ES-BLR-05**, **ES-ECoat-Boiler2**, and **ES-ECoat-Boiler3)** and 5 drying ovens **(ID Nos. ES-SCAO-Chassis-Oven**, **ES-SCAO-Seamseal-O**, **ES-SCAO-ES-Ecoat**, and **ES-SCAO-Topcoat-O1** and **O2)**. These units can be considered combustion sources and a flat emission limit of 2.3 pounds per million Btu is placed on these units regardless of size, process rate, or maximum heat input rate.

If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test are above the limit given above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516. No monitoring/recordkeeping/reporting is required as the boilers onsite fire natural gas. PTE calculations and recent annual emissions inventory reporting suggest that sulfur dioxide emissions are far below allowable limits. Using the DAQ's "Natural Gas Combustion, Rev. N (01/05/2017)" emissions estimations spreadsheet, estimated SO_2 emissions for **ES-BLR-02** and **ES-BLR-05** are 0.09 tpy each, and estimated SO_2 emissions for **ES-ECoat-Boiler2** and **ES-ECoat-Boiler3** are negligible. By comparison, an emission limit of 2.3 pounds per million Btu translates to 338.49 tons per year for **ES-BLR-02** and **ES-BLR-05**, and 7.56 tons per year for **ES-ECoat-Boiler2** and **ES-ECoat-Boiler3** respectively. Actual SO_2 emissions were 0.05 tons for the entire facility in 2023. Continued compliance is expected.

15A NCAC 02D .0521: Control of Visible Emissions – The Mt. Holly facility's boilers **(ID Nos. ES-BLR-02**, **ES-BLR-05**, **ES-ECoat-Boiler2**, and **ES-ECoat-Boiler3)**, SCAO operations **(ID Nos. ES-SCAO** and associated operations/equipment/units**)**, and welding operations **(ID Nos. ES-WE-2** and **5)** can be expected to have visible emissions. All sources appear to have been constructed after July 1, 1971, and are therefore subject to an opacity limit of 20%.

If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in the rule, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521. For sources that fire natural gas (all four boilers), no monitoring, recordkeeping, or reporting is required. For the spray coating and assembly operations and associated sources, semiannual monitoring is required. For welding operations, monthly monitoring is required. The results of these monitoring activities shall be maintained in a logbook and made available to DAQ representatives upon request, and a summary report detailing these activities shall be submitted semiannually. The most recent inspection reports indicate past compliance with opacity limits and with monitoring/recordkeeping/reporting requirements. Continued compliance is expected.

15A NCAC 02D .0524: New Source Performance Standards – The Mt. Holly facility has several sources subject to New Source Performance Standards. The larger two of the facility's boilers **(ID Nos. ES-BLR-02** and **05)** are subject to 40 CFR 60 Dc. These two boilers are fired by natural gas, propane, or No. 2 fuel oil. Note that the other two boilers in use at the facility **(ID Nos. ES-ECoat-Boiler2** and **Boiler3)** have maximum heat input rates below the applicability limit for 40 CFR 60 Dc and thus are not subject to that standard. Three emergency generators in use at the facility, one existing insignificant source **(ID No. IES-GEN)**, and two requested insignificant source additions **(ID Nos. IES-ITGEN** and **AUTOGEN)** are subject to 40 CFR 60 JJJJ. Where applicable, the New Source Performance Standards must be followed at the Mt. Holly facility. See the regulatory review

for each New Source Performance Standard for these engines below for more detailed information. Continued compliance is expected.

15A NCAC 02D .0530: Prevention of Significant Deterioration – The Mt. Holly facility is considered a major stationary source under PSD due to potential to emit over 250 tons per year of VOCs, the threshold for this industrial source as it is not one of the listed category sources under PSD. Thus, this rule applies. The current permit includes BACT (Best Available Control Technology) for VOCs as 750 tons per consecutive 12-month period and 3.5 lb per gallon as applied as a monthly average.

The facility is required to record daily coating usage, and VOC content of coating is limited to 3.5 lb per gallon. The total VOC emissions at the facility are required to be less than 750 tons per year (tpy) to maintain compliance with the facility's PSD avoidance condition. According to the most recent inspection report, the facility has maintained compliance with monitoring/recordkeeping/reporting requirements for the PSD avoidance condition. The annual emissions inventory supports this conclusion. Continued compliance is expected.

As part of the facility's avoidance condition (2.1 B.4.a.ii), the facility's spray coating and assembly operations (**ID No. ES-SCAO)** and associated equipment are also required to comply with MACT PPPP and MACT MMMM. See the regulatory review for these two standards for more detailed information. Continued compliance is expected.

It is noted that the facility is separately required to comply with the actuals PALs (Plantwide Applicability Limitation) for VOCs as 750 tons per consecutive 12-month period. The applicable PAL was granted with an effective period starting January 25, 2018, and do not require revisitation until December 31, 2027, or unless requested by the permittee. PAL permits were also issued for NO_x and greenhouse gases in 2013, which expired in 2023. Daimler Truck North America submitted a PAL renewal application in September 2022 that is currently under review at DAQ as part of Application No. 3600153.22A for a significant modification.

The status of the facility's compliance with PSD is not expected to change because of the changes in this permit renewal.

15A NCAC 02D .0952: Petition for Alternative Controls for RACT for 15A NCAC 02D .0967: Miscellaneous Metal and Plastic Parts Coatings – The Mt. Holly facility has petitioned to have alternate emissions limits placed on certain operations, and the Division of Air Quality has granted the option to use MACT MMMM and PPPP limits in place of RACT limits from 15A NCAC 02D .0967. The Permittee has "installed and operates reasonably available control technology" as specified in MACT MMMM and PPPP that meets the requirements of RACT[1]. Compliance with these standards was demonstrated by April 1, 2009, as required. Continued compliance is expected.

15A NCAC 02D .0958: Work Practices for Sources of Volatile Organic Compounds – On November 1, 2016, amendments to 15A NCAC 02D .0902 were finalized to narrow applicability of work practice standards in 15A NCAC 02D .0958 from statewide to the maintenance area for the 1997 8-hour ozone standard. This change is being made primarily because the abundance of biogenic VOC emissions in North Carolina results in ozone formation being limited by the amount of available nitrogen oxides (NOx) emissions. Provisions of the Clean Air Act require VOC requirements previously implemented in an ozone nonattainment area prior to redesignation remain in place. However, facilities outside the maintenance area counties for the 1997 8-hour ozone standard would

[1] See *Federal Register*/Volume 70, No. 288/Tuesday, November 29, 2005/Rules and Regulations/ 71653-71655

no longer be required to comply with the work practice standards in 15A NCAC 02D .0958. As of November 1, 2016, only the following counties/regions are subject to 15A NCAC 02D .0958: Cabarrus County, Gaston County, Lincoln County, Mecklenburg County, Rowan County, Union County, and Davidson Township and Coddle Creek Township in Iredell County. As the DTNA facility is within Gaston County, 15A NCAC 02D .0958 remains applicable. Therefore, the permit condition for 15A NCAC 02D .0958 will be retained under this permit renewal.

The facility is required to perform monthly inspections of operations and processes that use VOCs during normal operating conditions, maintain the results of these inspections in a logbook (either physical or electronic format), and make said results available to authorized representatives upon request. The most recent inspection report indicates compliance with these monitoring/recordkeeping/recording requirements. Continued compliance is expected.

15A NCAC 02D .0967: Miscellaneous Metal and Plastic Coatings – The Mt. Holly facility's main operations **(ID No ES-SCAO)** and associated equipment involve surface coatings of metal and/or plastic parts. However, pursuant to 15A NCAC 02D .0952, alternative limits to those set in this regulation have been granted. See the regulatory review for 15A NCAC 02D .0952 for more information as above. Thus, this regulation in 02D .0967 does not apply to the DTNA Mount Holly facility. Continued compliance is expected.

15A NCAC 02D .1111: Maximum Achievable Control Technology – The Mt. Holly facility carries out operations and operates equipment that are subject to NESHAPs, including insignificant activities. SCAO operations **(ID No. ES-SCAO)** and associated equipment are subject to MACT MMMM and PPPP as they involve surface coating of metal parts and plastic parts respectively. One cab pretreatment line **(ID No. IES-EC-3A)** is also subject to MACT MMMM and PPPP. The two largest boilers **(ID Nos. ES-BLR-02** and **05)** are subject to MACT DDDDD. Note that the other two small boilers **(ID Nos. ES-ECoat-Boiler2** and **Boiler3)** are not subject to MACT DDDDD as they are considered hot water heaters due to their low maximum heat input rate (see § 63.7491(d) and § 63.7575). Finally, three emergency fire pumps **(ID Nos. IESFP1**, **2**, and **3)** as well as 3 emergency generators **(ID Nos. IES-GEN**, **ITGEN**, and **AUTOGEN)** are subject to MACT ZZZZ. See the regulatory review for MACT MMMM, PPPP, ZZZZ, and DDDDD for more detailed information. Continued compliance is expected.

15A NCAC 02D .1806: Control and Prohibition of Odorous Emissions – The Mt. Holly facility, its operations, and its equipment can be reasonably expected to generate odorous emissions. The facility is expected to implement management practices that prevent odorous emissions at the facility from creating or contributing to objectionable odors beyond the facility boundaries. The most recent inspection report indicates that odors are not detectable outside the facility boundary and the facility does not have a history of odor complaints to the DAQ from neighbors or other citizens. Continued compliance is expected. Note that this condition is **state-enforceable only**.

6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS

The facility is currently subject to two New Source Performance Standards: NSPS Dc and JJJJ. This permit renewal does not change the facility's NSPS status. Permit terms have been reviewed as necessary to reflect the current version of the standard. It has been determined that no updates to the permit language are needed for New Source Performance Standards.

40 CFR 60 Subpart Dc

The Mt. Holly facility operates two boilers **(ID Nos. ES-BLR-02** and **05)** with maximum heat input rates of 33.6 million Btu/hr each. NSPS Dc regulates steam generating units with maximum heat input rates between 10 million and 100 million Btu/hr, so the two boilers are subject to this standard. Continued compliance is expected.

With respect to specific limits, 40 CFR 60 Subpart Dc applies for sulfur content and for visible emissions. These limits apply specifically to **ES-BLR-02** and **05** since they can be fired with No. 2 fuel oil. Natural gas and propane emission limits do not appear to be included in 40 CFR 60 Subpart Dc. If fired with oil, 40 CFR 60 Subpart Dc limits the sulfur content of the fuel oil to less than 0.5 percent, and the opacity of visible emissions to 20 percent. As mentioned above, these boilers generally fire natural gas and will only fire No. 2 fuel oil in case of emergency. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. NSPS Dc was first promulgated on June 13, 2007, but has been updated on October 10, 2020. This change to the regulation did not modify anything relevant to this facility or its operations, so no changes will be needed because of the update to the legislation.

In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired in the source **(ID No. ESB3)** during each month. The Permittee shall retain a copy of the fuel supplier certification for any No. 2 fuel oil fired at the affected boilers. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained. The most recent inspection report indicates no issues in the past. Continued compliance is expected.

40 CFR 60 Subpart JJJJ

The Mt. Holly facility has three emergency generators **(ID Nos. IES-GEN**, **ITGEN**, and **AUTOGEN)** with spark ignition internal combustion engines. **IES-GEN** combusts natural gas and has an output of 131.4 horsepower. **IES-ITGEN** combusts natural gas and propane and has an output of 127.6 horsepower. **IES-AUTOGEN** combusts propane and has an output of 97.9 horsepower. All engines appear to have been constructed after January 1, 2009. Note that all sources subject to NSPS JJJJ are listed in the permit as insignificant sources, and limits on their operation, as well as monitoring/recordkeeping/reporting requirements, are to be discussed in lesser detail than significant sources. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. NSPS JJJJ was first promulgated on January 18, 2008, but has been updated nine times since the last renewal: on October 7, 2020; on December 4, 2020; on December 7, 2020; on January 1, 2021; on June 29, 2021; on July 29, 2021; on August 10, 2022; on January 24, 2023; and on March 27, 2023. As all NSPS JJJJ-applicable sources are permitted as insignificant, language for NSPS JJJJ in the permit is very minimal if not nonexistent. No updates are needed to the permit language to reflect the nine recent changes.

NESHAP/MACT

The Mt. Holly facility is classified as a major source for HAPs. The facility is currently subject to four Maximum Achievable Control Technology standards: MACT MMMM, PPPP, ZZZZ, and DDDDD. This permit renewal does not change the facility's MACT status. Language has been reviewed and updated as necessary to reflect the current version of the permit.

It is also noted that as of January 5, 2022, the US EPA has added 1-bromopropane to its list of regulated hazardous air pollutants (HAPs). The facility has confirmed that 1-bromopropane is not a component of any substances used there and that no emissions of 1-bromopropane are expected.

40 CFR 63 Subpart MMMM

The Mt. Holly facility's main operations **(ID No. ES-SCAO)** and associated emissions sources involve applying coatings to miscellaneous metal components. These sources are therefore subject to MACT MMMM: National Emissions Standards for Hazardous Air Pollutants for Surface Coating Operations of Metal Parts and Products. The facility demonstrates compliance with MACT MMMM by demonstrating compliance with MACT PPPP. See the regulatory review for MACT PPPP below for more information. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. MACT MMMM was first promulgated on January 2, 2004, but has been updated four times since the renewal: on July 8, 2020; on November 19, 2020; on January 19, 2021; and on March 8, 2023. None of the changes appear to affect the language that currently exists in the permit, so no updates are needed.

40 CFR 63 Subpart PPPP

The Mt. Holly facility's main operations **(ID No. ES-SCAO)** and associated emissions sources involve applying coatings to miscellaneous plastic components. These sources are therefore subject to MACT PPPP: National Emissions Standards for Hazardous Air Pollutants for Surface Coating Operations of Plastic Parts and Products. Two compliance options are given: compliant material option and emission rate without add-on control option. According to the most recent inspection reports, Daimler uses the compliant material option. It is indicated that the facility has maintained the required records and submitted semi-annual reports as necessary. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. MACT PPPP was first promulgated on April 19, 2004, but has been updated three times since the renewal: on July 8, 2020; on November 19, 2020; and on January 19, 2021. Most of the changes are unsubstantial relative to the permit language, but two changes can be added. An alternative to EPA Method 24, used for determining the mass fraction of nonaqueous volatile matter in coatings, has been introduced. ASTM D2369-10 (Reapproved 2015) has been added as of July 8, 2020. Also, ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," has been replaced with either ASTM D1475-13 or ASTM D2111-10 (Reapproved 2015). These alternatives have been included in the permit language, in Section 2.2 C.1.

40 CFR 63 Subpart ZZZZ

The Mt. Holly facility has three emergency fire pumps **(ID Nos. IESFP1-3)** with diesel-fired engines and three emergency generators **(ID Nos. IES-GEN**, **ITGEN**, and **AUTOGEN)** with natural gas or propane-fired engines. The three fire pumps were constructed before June 12, 2006, and should be considered "existing sources" for the purposes of this standard. The three emergency generators were constructed after June 12, 2006, and should be considered "new sources" for the purposes of this standard. All sources have outputs below 500 horsepower and are intended for emergency use. These engines are subject to MACT ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Note that all sources subject to MACT ZZZZ are listed in the permit as insignificant sources, and limits on their operation, as well as monitoring/recordkeeping/reporting requirements, are to be discussed in lesser detail than standard sources. **IES-ITGEN** and **AUTOGEN** are new and will be added to the permit during this renewal. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. MACT ZZZZ was first promulgated on June 15, 2004, but has been updated seven times since the renewal: on November 19, 2020; on December 4, 2020; on January 1 and 20, 2021; on August 10, 2022; on March 29, 2023; and on May 30, 2023. As all MACT ZZZZ-applicable sources are insignificant, language for MACT ZZZZ is very minimal in the permit if not nonexistent. No updates are needed to reflect the seven recent changes.

40 CFR 63 Subpart DDDDD

The Mt. Holly facility operates four boilers **(ID Nos. ES-BLR-02** and **05**, and **ES-ECoat-Boiler2** and **Boiler3)**. The larger two boilers **(ES-BLR-02** and **05)** are subject to MACT DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, because of their size and because the Mt. Holly facility is considered a major source of HAPs. Note that the smaller of the two boilers **(ES-Ecoat-Boiler2** and **Boiler3)** are considered hot water heaters due to their maximum heat input rate, which is below the 1.6 million Btu/hr threshold set in 40 CFR 63.7575.

The facility is required to conduct tune-ups of the two larger boilers (**ES-BLR-02** and **05)** every 5 years and must operate and maintain them in a manner consistent with good air pollution control practices for minimizing emissions. A one-time energy assessment is also required. The most recent inspection report indicates that the tune-ups were completed on January 17, 2019, and October 16, 2023. The report also indicates that the one-time energy assessment was completed in January 2016 and the results were submitted to DAQ. As described in the January 31, 2024 semi-annual report, a tune-up for Boiler 5 will be completed and the required report will be submitted within 30 days of startup. Continued compliance is expected.

The last permit renewal for this facility was issued on January 14, 2020. MACT DDDDD was first promulgated on March 21, 2011, but has been updated five times since the renewal: on November 19, 2020; on December 28, 2020; on January 20, 2021; on October 6, 2022; and on December 5, 2022. None of these five changes necessitate any update to the permit language.

PSD

Please refer to the regulatory review for 15A NCAC 02D .0530 in Section 5 above for details on PSD. The facility is subject to three plantwide applicability limits (PALs) which allow the facility to avoid permitting under PSD. These three PALs are for emissions of VOCs, NO_x, and GHGs and are summarized below.

To ensure compliance with the VOC PAL, the facility is required to keep VOC emissions below 750.6 tons per year (tpy) for any 12 month period. The VOC content of coatings used at the facility must also not exceed 3.5 lb per gallon as applied on a calendar monthly average basis. Coating usage must be recorded daily and all coatings used in each calendar month shall be used to determine compliance with the condition. Furthermore, semi-annual compliance reports must be submitted which include a summary report of monitoring and recordkeeping activities in order to certify continued compliance. The most recent inspection report suggests the facility has had no issues meeting these requirements. Continued compliance is expected.

To ensure compliance with the NO_x PAL, the facility is required to keep NO_x emissions below 56.5 tons per year (tpy) for any rolling 12 month period. The facility shall monitor and keep records of natural gas, propane, No.2 fuel oil, and diesel fuel usage for the external combustion sources and the hours of operation for the fire pumps and emergency generator, calculate the monthly NO_x emissions from the combustion sources listed in 2.3 B.a.i using the latest applicable AP-42 emission factors, and calculate

facility-wide NO_x emissions on a monthly basis. A summary report of these activities shall be submitted on a semi-annual basis.

To ensure compliance with the GHG PAL, the facility is required to keep GHG emissions below 93,463 tons of CO_2 equivalent for any rolling 12-month period. The facility shall monitor and keep records of natural gas, propane, No. 2 fuel oil, and diesel fuel usage for the external combustion sources and the hours of operation for the fire pumps and emergency generator, calculate the monthly CO_{2e} emissions from the combustion sources listed in 2.3 C.a.i using the latest applicable AP-42 emission factors, and calculate facility-wide CO_{2e} emissions on a monthly basis. A summary report of these activities shall be submitted on a semi-annual basis.

Two of the PALs – the NO_x emissions PAL and the greenhouse gas (GHG) emissions PAL – are due for renewal. This process is currently underway as part of a separate application (3600163.22A) and is being handled by DAQ engineer Gautam Patnaik. The VOC emissions PAL will expire on December 31, 2027.

112(r)
The 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 112(r) thresholds. No change with respect to 112(r) is anticipated under this permit renewal.

CAM
The CAM rule (40 CFR 64; 15A NCAC 02D .0614) applies to each pollutant specific emissions unit (PSEU) located at a facility that is required to obtain a Title V permit and that meets all three following criteria:

- 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 has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source (i.e., 100 tons per year for criteria pollutants or 10/25 tons per year for HAPs).

None of the sources present at the facility are subject to a CAM plan. No change with respect to CAM is anticipated under this permit renewal.

7. Facility Wide Air Toxics

This facility is not currently subject to any North Carolina state-wide air toxics programs or requirements. This renewal is not expected to change that status. In the past, the facility has been subject to air toxics requirements, but as of permit issuance 03926T41, dated November 8, 2014, the air toxics conditions for this facility have been removed. See Gautam Patnaik's Title V permit review, dated November 8, 2014, for more information. In summary, following a legislature-mandated review of the state air toxics program, it was determined that removing toxics conditions for this facility would not pose an unacceptable risk to public health. Much of the facility's sources are subject to NSPS/NESHAP requirements and are therefore exempt from permitting under the state air toxics program pursuant to 15A NCAC 02Q .0702(a)(27)(A) and (B).

8. Facility Emissions Review

The facility-wide potential emissions have not changed because of this TV permit renewal. Actual emissions for criteria pollutants and HAPs for the previous five years reporting periods are provided in the header of this permit review.

9. Compliance Status

DAQ has reviewed the compliance status of the DTNA Mt. Holly facility. During the most recent inspection, conducted by Ashley McCreary of the Mooresville Regional Office on March 6, 2024, the facility appeared to be in compliance with all applicable requirements. Further, the facility has had no air quality violations within the last five years. The facility's Annual Compliance Certification was received on March 1, 2024, and indicated compliance with all applicable requirements in 2023, from January 1 of that year through December 31 of that year. Furthermore, the facility owner/operator certified compliance with all applicable requirements through the submittal of an E5 form along with their application for permit renewal.

10. 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. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. 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 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. The facility is in proximity to Buncombe County as well as South Carolina. Regardless of actual distance, all possible affected states and local air quality programs will be notified as per DAQ policy.

Public Notice of the Draft Title V Permit ran from January 27, 2025, to February 26, 2025. No comments were received.

EPA's 45-day review period ran concurrent with the 30-day Public Notice, from January 27, 2025, to March 13, 2025. No comments were received.

11. Other Regulatory Considerations

- A P.E. seal is NOT required for this renewal application.
- A zoning consistency determination is NOT required for this renewal application.
- A permit fee is NOT required for this renewal application.

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 decisions[2]. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions

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

involving affirmative defenses[3] 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.

12. Recommendations

The permit renewal application for the DTNA Mt. Holly facility 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. 03926T50.

[3] 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).