



NORTH CAROLINA
Environmental Quality

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

MICHAEL ABRACZINSKAS

Director

xx

Mr. Craig Redshaw
Plant Manager
Daimler Trucks North America LLC
11550 Statesville Boulevard
Cleveland, North Carolina 27013

SUBJECT: Air Quality Permit No. 04625T38
Facility ID: 8000045
Daimler Trucks North America LLC
Cleveland, Rowan County, North Carolina
Fee Class: Title V
PSD Status: Major

Dear Mr. Redshaw:

In accordance with your completed Air Quality Permit Application for a Significant Modification of your Title V permit received February 2, 2021, we are forwarding herewith Air Quality Permit No. 04625T38 authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS



North Carolina Department of Environmental Quality | Division of Air Quality
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641
919.707.8400

Mr. Craig Redshaw

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143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Rowan County has triggered increment tracking under PSD for PM₁₀, SO₂, NO_x, and PM_{2.5} emissions. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from xx and shall expire on the April 30, 2026, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Rahul P. Thaker, P.E., QEP at (919) 707-8740 or rahul.thaker@ncdenr.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

cc: Michael Sparks, EPA Region 4 (Permit and Review)
Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

**NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT
DECISION**

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality’s decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division’s decision on the application is final and is not subject to review. The filing of a petition will stay the Division’s decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division’s decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division’s decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at <https://www.oah.nc.gov/hearings-division/filing/hearing-forms>. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at <https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case>. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

Summary of Changes to Permit

The following changes were made to the Daimler Trucks North America LLC – Cleveland, Air Permit No. 04625T37:*

Old Page Air Quality Permit No. 04625T37	Old Section Air Quality Permit No. 04625T37	New Page Air Quality Permit No. 04625T38	New Section Air Quality Permit No. 04625T38	Description of Change(s)
				<p>Cover letter, insignificant activity attachment, and first page of permit</p> <p>Revised both the cover letter and the 1st page of the permit as per DAQ’s Title V Shell template. Regarding the cover letter, separated out the permit-contesting requirements as an attachment, as approved by the NC AG’s office. Included the NAICS code (in addition to SIC code) for the facility and a reminder for the renewal due date in the cover page.</p> <p>Removed the insignificant activity (IAs) list as an attachment to the cover letter per DAQ’s template and relocated it to Section 3 of the permit. Amended permit numbers and dates.</p>
2	Table of Contents	2	Table of Contents	Included both acronyms and IAs.
55	List of Acronyms	3	List of Acronyms	Relocated and revised per DAQ’s template.
6	Section 2.1 A Table	7	Section 2.1 A Table	Included applicable requirement under 02D .0530 for PALs for the pollutants VOC, NOx, and GHGs.
12	Section 2.1 B Table	12	Section 2.1 B table	Included applicable requirement under 02D .0530 for PALs for the pollutants VOC, NOx, and GHGs.
13	Section 2.1 B.4.f	14	Section 2.1 B.4.b	Renumbered this section and the remaining sections in this condition.
17	Section 2.1 D Table	17	Section 2.1 D Table	Included the state-enforceable only requirement in 02Q .0711.
19	Section 2.1 E Table	19	Section 2.1 E Table	Included the state-enforceable only requirement in 02Q .0711.
24	Section 2.2 B	23	Section 2.2 B	Included the missing source of “one pretreatment line” for the state-only air toxics requirement under 02Q .0711
37	Section 2.3 A.1	35	Section 2.3 A.1	Included the missing sources, fire pumps (IES-FP1 and IES-FP2) and emergency generator (IES-EG), in the VOC PAL permit.
39	Section 2.3 A.10	37	Section 2.3 A.10	Included new recordkeeping requirements for the operating hours for the fire pumps (ID Nos. IES-FP1 and IES-FP2) and the emergency generator (ID No. IES-EG).
39	Section 2.3 A.12	37	Section 2.3 A.12	Revised the formula to monitor VOC emissions from all natural gas and fuel-oil fired emissions sources.

Old Page Air Quality Permit No. 04625T37	Old Section Air Quality Permit No. 04625T37	New Page Air Quality Permit No. 04625T38	New Section Air Quality Permit No. 04625T38	Description of Change(s)
-	-	38	Section 2.3 A.19 and 20	Included reporting requirements for both deviations and results of revalidation of scientific data.
41	Section 2.3 B.1	38	Section 2.3 B.1	Included the missing sources in the NO _x PAL permit: fire pumps (IES-FP1 and IES-FP2), emergency generator (IES-EG), and three dynamometers (IES-DYNA1, IES-DYNA2, and IES-DYNA3).
42	Section 2.3 B.9	39	Section 2.3 B.9	Included recordkeeping requirements for the operating hours for the fire pumps (ID Nos. IES-FP1 and IES-FP2) and the emergency generator (ID No. IES-EG).
42	Section 2.3 B.10	39	Section 2.3 B.10	Revised the formula to monitor NO _x emissions from all natural gas and fuel oil-fired emissions sources.
-	-	40	Section 2.3 B.11	Included this new section for the NO _x default emission factor (1.0 tons per rolling 12-month period) for three dynamometers combined.
-	-	40, 41	Section 2.3 B.17 and 18	Included new reporting requirements for both deviations and results of revalidation of scientific data.
43	Section 2.3 C.1	41	Section 2.3 C.1	Revised the GHGs PAL to state 61,262 tons per rolling 12-months period. Included the missing sources: three dynamometers (IES-DYNA1, IES-DYNA2, and IES-DYNA3).
43	Section 2.3 C.4	41	Section 2.3 C.4	Revised the GHGs PAL to state 61,262 tons per rolling 12-months period.
44	Section 2.3 C.10	42	Section 2.3 C.10	Revised the GHGs emissions factors and the GWP as per the application for all natural gas and fuel oil-fired sources.
-	-	42	Section 2.3 C.11	Included this new section for the GHGs default emission factor (3,078 tons per rolling 12-month period) for three dynamometers combined.
-	-	43	Section 2.3 C.17 and 18	Included new reporting requirements for both deviations and results of revalidation of scientific data.
37 through 45	Sections 2.3 A through C	35 through 43	Sections 2.3 A through C	Removed statements on violation of NSR throughout these PALs conditions for VOC, NO _x , and GHGs.
-	-	44	Section 3	Relocated IA list from the cove letter attachment to this section.
46 through 54	Section 3	45 through 53	Section 4	Revised the General Conditions as per DAQ's Title V Shell.

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
04625T38	04625T37	xx*	April 30, 2026**

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than October 31, 2025.

*, ** Effective and expiration dates for the Actuals Plantwide Applicability Limitations (Actuals PAL) portion of this permit may differ from these dates.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	Daimler Trucks North America LLC
Facility ID:	8000045
Primary SIC Code:	3711
NAICS Code:	33612
Facility Site Location:	11550 Statesville Boulevard
City, County, State, Zip:	Cleveland, Rowan County, North Carolina 27013
Mailing Address:	11550 Statesville Boulevard
City, State, Zip:	Cleveland, North Carolina 27013
Application Number:	8000045.21B
Complete Application Date:	February 2, 2021
Division of Air Quality, Regional Office Address:	Mooreville Regional Office 610 East Center Avenue, Suite 301 Mooreville, North Carolina 28115

Permit issued this the xx.

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM_{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-BLR-1 MACT DDDDD	Boiler No. 1 – Office Boiler, natural gas-fired (0.94 million Btu per hour maximum heat input)	NA	NA
ES-BLR-3 MACT DDDDD	Boiler No. 3 – Boiler Room 400A, natural gas-fired (8.37 million Btu per hour maximum heat input)	NA	NA
ES-BLR-4 MACT DDDDD	Boiler No. 4 – Hood Paint Center, natural gas-fired (5.14 million Btu per hour maximum heat input)	NA	NA
ES-BLR-5 NSPS Dc MACT DDDDD	Boiler No. 5 – Main Boiler, Mechanical Room, natural gas-fired (33.6 million Btu per hour maximum heat input)	NA	NA
ES-SCAO PSD BACT MACT MMMM MACT PPPP	<p>Spray Coating and Assembly Operations consisting of:</p> <ul style="list-style-type: none"> - Twenty five paint spray booths: <ul style="list-style-type: none"> - chassis booth A (ES-1), - chassis booth B (ES-2), - Tennessee booth (ES-39), - Western star booth (ES-39C), - paint booth #1 (ES-38), - hood paint center robot booth (ES-HPC-PB), - hood paint center clear coat booth (ES-HPC-CCB), - 6 offline paint booths (ES-29 through ES-34), - small parts booth (ES-44), - seam seal caulk booth (ES-3), - primer paint booth (ES-4), - foam booth (ES-5), - 5 paint spray booths (ES-7 through ES-11), - paint booth #6 (ES-25), - paint booth #7 (ES-26), and - future pre-fab booth (ES-59)* 	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-SCAO PSD BACT MACT MMMM MACT PPPP	<ul style="list-style-type: none"> - Twelve Paint Drying Ovens: <ul style="list-style-type: none"> - chassis booth A oven (ES-1A), - chassis booth B oven (ES-2A), - Tennessee dry off oven (ES-39B), - paint booth #1 oven (ES-38A), - hood paint center dry off oven (ES-HPC-PDO), - primer booth oven (ES-4B), - topcoat oven east (ES-19), - topcoat oven west (ES-20), - paint booth #6 and #7 oven (ES-27), - cab adhesive oven (ES-AO-1), - cab adhesive oven (ES-AO-2), and - pre-fab oven (ES-59O)* - Five flash off areas <ul style="list-style-type: none"> - Tennessee Flash Off booth (ES-39A), - Primer Booth Flash Off booth (ES-4A), - Flash off area (ES-17), - Hood Paint Center Paint booth and Flash Off area (ES-HPC-FO), and - Paint Booth #6 and 7 Flash Off area (ES-25-26FO) - Four sanding booths: <ul style="list-style-type: none"> - Hood Paint Center Spot Sanding Booth (ES-HPC-SSB), - Hood Paint Center Sanding Booth (ES-HPC-SB), - Cab Sanding Booth Upstairs (ES57), and - Cab Primer Sanding Booth (ES-58) - Five tack booths (ES-47 through ES-51) - One paint mix room (ES-PMR) - Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent - Other non-coating sources of VOC (ES-VOC) 	NA	NA
ES-PT MACT MMMM MACT PPPP	One pretreatment line	NA	NA
ES-FTW	One fuel tank welding operation	CD-BH1	One bagfilter (12,060 square feet of filter area)
ES-FTG	One fuel tank grinding operation	CD-VSBH1	One bagfilter (1024 square feet of filter area)
ES-CR1	One CNC router (No. 1)	CD-CY2 CD-BH2	One cyclone (30 inches in diameter) One bagfilter (383 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-CR2	One CNC router (No. 2)	CD-CY4 CD-BH4	One cyclone (30 inches in diameter) One bagfilter (314.5 square feet of filter area)
ES-5WW	5 th wheel welding operations	NA	NA
ES-DRYICE	One dry ice cleaning system	NA	NA

*Booth (ES-59) and oven (ES-59O) is a combination booth and oven.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Device(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Boiler No. 1 – Office Boiler, natural gas-fired (0.94 million Btu per hour maximum heat input) (ID No. ES-BLR-1)

Boiler No. 3 – Boiler Room 400A, natural gas-fired (8.37 million Btu per hour maximum heat input) (ID No. ES-BLR-3)

Boiler No. 4 – Hood Paint Center, natural gas-fired (5.14 million Btu per hour maximum heat input) (ID No. ES-BLR-4)

Boiler No. 5 – Main Boiler; Mechanical Room, natural gas-fired (33.6 million Btu per hour maximum heat input) (ID No. ES-BLR-5)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<u>Affected Source: ES-BLR-5</u> 0.39 pounds per million Btu heat input <u>Affected Sources: ES-BLR-1, ES-BLR-3, and ES-BLR-4</u> 0.38 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NA	<u>Affected Source: ES-BLR-5</u> Record monthly fuel usage	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Hazardous Air Pollutants	40 CFR 63 Subpart DDDDD Best Combustion Practices	15A NCAC 02D .1111 (40 CFR 63 Subpart DDDDD)
Volatile Organic Compounds	See Section 2.3 A	15A NCAC 02D .0530 (Actuals PAL)
Nitrogen Oxides	See Section 2.3 B	15A NCAC 02D .0530 (Actuals PAL)
GHGs	See Section 2.3 C	15A NCAC 02D .0530 (Actuals PAL)

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source (ID No. ES-BLR-5) into the atmosphere shall not exceed 0.39 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources (ID Nos. ES-BLR-1, ES-BLR-3, and ES-BLR-4) into the atmosphere shall not exceed 0.38 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- c. 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 Section 2.1 A.1.a or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these combustion sources (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these combustion sources (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas.

4. 15A NCAC 02D .0524: NSPS 40 CFR 60, Subpart Dc

- a. The Permittee shall comply with all applicable provisions for the affected boiler (**ID No. ES-BLR-5**), including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards (NSPS)", as promulgated in 40 CFR 60, Subpart Dc, including Subpart A, "General Provisions."

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. 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 natural gas fired in the affected boiler (**ID No. ES-BLR-5**) during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

5. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 63.7490(d), 63.7499(l)]

- a. For the existing boiler (**ID No. ES-BLR-1**) 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."
- b. For these existing boilers (**ID Nos. ES-BLR-3 and ES-BLR-4**) designed to burn gas 1 fuels with a heat input capacity greater than 5 million Btu per hour and less than 10 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."

- c. For the existing boiler (**ID No. ES-BLR-5**) designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 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."

Definitions and Nomenclature [40 CFR 63.7575]

- d. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

- e. 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.

Compliance Date [40 CFR 63.7510(e), 63.56(b)]

- f. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. *These requirements have been met.*

Notifications [40 CFR 63.7545(e)(8), 63.7530(e),(f)]

- g. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and submitted by July 19, 2019. *This requirement has been met.*

Work Practice Standards [15A NCAC 02Q .0508(f)]

- h. i. The Permittee shall conduct a tune-up of the source(s) as specified below:
 - (A) For boiler ES-BLR-1, conduct a tune-up every five years and as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months. (**ID No. ES-BLR-1**));
 - (B) For boilers ES-BLR-3 and ES-BLR-4, conduct a tune-up every two years and as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown (**ID Nos. ES-BLR-3 and ES-BLR-4**));
 - (C) For boiler ES-BLR-5, conduct a tune-up annually and as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown (**ID No. ES-BLR-5**));
 - (D) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (E) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
 - (F) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; and
 - (G) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR 63.7500(a), (e), 63.7540(a)(10)]
- ii. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up (**ID No. ES-BLR-1**). [40 CFR 63.7515(d)]
- iii. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up (**ID Nos. ES-BLR-3 and ES-BLR-4**). [40 CFR 63.7515(d)]
- iv. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up (**ID No. ES-BLR-5**). [40 CFR 63.7515(d)]
- v. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]

- vi. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]
- vii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 A.5.h are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

- i. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. [40 CFR 63.7500(a)(1), Table 3] *This requirement has been met.*

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- j. The Permittee shall:
 - i. 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 (ID No. **ES-BLR-1**), biennial (ID Nos. **ES-BLR-3 and ES-BLR-4**), semiannual (ID No. **ES-BLR-5**) compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
 - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;
 - (B) a description of any corrective actions taken as a part of the tune-up; and
 - (C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
 - iii. the associated records for Sections 2.1 A.5.h through i.
 - iv. keep:
 - (A) maintain records in a form suitable and readily available for expeditious review;
 - (B) keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - (C) keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
[40 CFR 63.7560, 63.10(b)(1)]
 - v. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained pursuant to Section 2.1 A.5.j.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- k. i. The Permittee shall submit compliance reports to the DAQ on a 5-year (ID No. **ES-BLR-1**), 2-year basis (ID Nos. **ES-BLR-3 and ES-BLR-4**), and an annual (ID No. **ES-BLR-5**) basis. The first report shall cover the period beginning on the May 20, 2019 and ending on December 31, 2019. The first report shall be postmarked on or before January 30, 2020. Subsequent annual reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance report postmarked on or before January 30 for the preceding reporting period. [40 CFR 63.7550(a), (b)]
- ii. This report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- iii. The compliance report must contain the following information:
 - (A) company name and address;
 - (B) process unit information, emissions limitations, and operating parameter limitations;
 - (C) date of report and beginning and ending dates of the reporting period;

- (D) include the date of the most recent tune-up for each unit required according to Section 2.1 A.5.h. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
 - (E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
[40 CFR 63.7550(a) and (c), Table 9]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 A.5.k are not met.

B. Spray Coating and Assembly Operations (ES-SCAO) consisting of:

Twenty-five paint spray booths;

- chassis booth A (ES-1),
- chassis booth B (ES-2),
- Tennessee booth (ES-39),
- Western star booth (ES-39C),
- paint booth #1 (ES-38),
- hood paint center robot booth (ES-HPC-PB),
- hood paint center clear coat booth (ES-HPC-CCB),
- 6 offline paint booths (ES-29 through ES-34),
- small parts booth (ES-44),
- seam seal caulk booth (ES-3),
- primer paint booth (ES-4),
- foam booth (ES-5),
- 5 paint spray booths (ES-7 through ES-11),
- paint booth #6 (ES-25),
- paint booth #7 (ES-26), and
- future pre-fab booth (ES-59)

Twelve paint drying ovens:

- chassis booth A oven (ES-1A),
- chassis booth B oven (ES-2A),
- Tennessee dry off oven (ES-39B),
- paint booth #1 oven (ES-38A),
- hood paint center dry off oven (ES-HPC-PDO),
- primer booth oven (ES-4B),
- topcoat oven east (ES-19),
- topcoat oven west (ES-20),
- paint booth #6 and #7 oven (ES-27),
- cab adhesive oven (ES-AO-1),
- cab adhesive oven (ES-AO-2), and
- pre-fab oven (ES-59O)

Five flash off areas:

- Tennessee Flash Off booth (ES-39A),
- Primer Booth Flash Off booth (ES-4A),
- Flash off area (ES-17),
- Hood Paint Center Paint booth and Flash Off area (ES-HPC-FO), and
- Paint Booth #6 and 7 Flash Off area (ES-25-26FO)

Four sanding booths:

- Hood Paint Center Spot Sanding Booth (ES-HPC-SSB),
- Hood Paint Center Sanding Booth (ES-HPC-SB),

- Cab Sanding Booth Upstairs (ES57), and
- Cab Primer Sanding Booth (ES-58)

**Five tack booths (ES-47 through ES-51);
One paint mix room (ES-PMR); and
Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and
Other non-coating sources of VOC (ES-VOC)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ (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) Where E=allowable emission rate in pounds per hour P=process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	Meet prevention of significant deterioration BACT limits: 3.5 pounds VOC per gallon calendar monthly average as applied 1405 tons per year	15A NCAC 02D .0530
	Petition for Alternative to RACT See 2.2 A	15A NCAC 02D .0952 for 15A NCAC 02D .0967
	Work practice standards	15A NCAC 02D .0958
Toxic air pollutants	State-enforceable only See Section 2.2 B	15A NCAC 02Q .0711
Hazardous air pollutants	40 CFR 63 Subpart PPPP - See Section 2.2 C.1 40 CFR 63 Subpart MMMM - See Section 2.2 C.2	15A NCAC 02D .1111
Volatile Organic Compounds	See Section 2.3 A	15A NCAC 02D .0530 (Actuals PAL)
Nitrogen Oxides	See Section 2.3 B	15A NCAC 02D .0530 (Actuals PAL)
GHGs	See Section 2.3 C	15A NCAC 02D .0530 (Actuals PAL)

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the spray coating and assembly operations (**ID No. ES-SCAO**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad (\text{for process rates less than or equal to 30 tons per hour}), \text{ or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad (\text{for process rates greater than 30 tons per hour})$$

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

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from the spray coating and assembly operation (ID No. ES-SCAO).

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, and ES-590**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in the paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, and ES-590**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this spray coating and assembly operations (**ID No. ES-SCAO**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, semiannually, the Permittee shall observe the emission points of the spray coating and assembly operations (**ID No. ES-SCAO**) for any visible emissions above normal. The semiannual observation must be made for each six month period of the calendar year to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a above.The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required semiannual observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. 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 logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and

iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 B.3.c and d above 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.

4. 15A NCAC 02D .0530: BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REQUIREMENTS

- a. In order to comply with this regulation, the above PSD designated emission sources shall discharge into the atmosphere no more than 1405 tons per year of volatile organic compounds per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. None

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure compliance with the above limitation, the following restrictions shall apply:
- i. the VOC content of the coatings used at the facility shall not exceed 3.5 pounds per gallon as applied on a calendar monthly average basis,
 - ii. the coating usage shall be recorded daily,
 - iii. all coatings used in each calendar month shall be used to determine compliance with this limit and the annual limit in 2.1 B.4.a above,
 - iv. VOC emissions from cleanup solvent, caulks, glues, seamseals, and other non-coating sources of VOC are subject to a BACT workplace standard and are not subject to the 3.5 pounds of VOC per gallon calendar monthly average spray coating BACT limit in 2.1 B.4.c.i. VOC emissions from the cleanup solvent, caulks, glues, seamseals, and other non-coating sources of VOC shall be included and must comply with the annual 12-month rolling average limit in 2.1 B.4. a, and
 - v. calculations verifying the above restrictions shall be provided by the Permittee using records of actual solvent usage and shall be maintained in a log on a monthly basis.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if requirements in Sections 2.1 B.4.a and b are not met.

Reporting [15A NCAC 02Q .0508(f)]

- d. For compliance purposes, the Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Section 2.1 B.4.c above 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. The report shall contain the following:
- i. the calendar monthly average coatings content of VOC for each month in the reporting period, and
 - ii. the monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

All instances of deviations from the requirements of this permit must be clearly identified.

- e. Combustion by-product VOC emissions from the spray coating and assembly operations are excluded from the VOC BACT emissions limits listed above.
- f. VOC emissions from the storage of all fluids, solvents, etc., at the facility are excluded from the VOC BACT emissions limits listed above.

5. 15A NCAC 02D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

- a. For all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture VOCs, or emit VOCs as a product of chemical reactions, the Permittee shall:
- i. store all material, including waste material, containing VOCs in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
 - ii. clean up spills of VOCs as soon as possible following proper safety procedures,
 - iii. store wipe rags containing VOCs in closed containers,
 - iv. not clean sponges, fabric, wood, paper, products, and other absorbent materials with VOCs,

- v. transfer solvents containing VOCs used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under Section 402 of the Clean Water Act.
- iv. clean mixing, blending, and manufacturing vats and containers containing VOCs by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act.
- b. When cleaning parts with a solvent containing a VOC, the Permittee shall:
 - i. flush parts in the freeboard area,
 - ii. take precautions to reduce the pooling of solvent on and in the parts,
 - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
 - iv. not fill cleaning machines above the fill line,
 - v. not agitate solvent to the point of causing splashing.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance with Sections 2.1 B.5.a and b above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing VOCs. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the inspections shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each inspection; and
 - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
 If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.5.c and d above 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.

C. One Pretreatment Line (ID No. ES-PT)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ (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) Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	State-enforceable only See Section 2.2 B	15A NCAC 02D .0711
Hazardous air pollutants	40 CFR 63 Subpart PPPP - See Section 2.2 C.1. 40 CFR 63 Subpart MMMM - See Section 2.2 C.2.	15A NCAC 02D .1111

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the pretreatment line (**ID No. ES-PT**) shall not exceed an allowable emission rate as calculated by the following equation:

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

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

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from the pretreatment line (**ID No. ES-PT**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the pretreatment line (**ID No. ES-PT**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, semiannually, the Permittee shall observe the emission points of the pretreatment line (**ID No. ES-PT**) for any visible emissions above normal. The semiannual observation must be made for each six month period of the calendar year to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required semiannual observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. 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 logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 C.2.c and d above 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.

D. Fuel Tank Welding Operation (ID No. ES-FTW) and associated bagfilter (ID No. CD-BH1) and the Fuel Tank Grinding Operation (ID No. ES-FTG), and associated bagfilter (ID No. CD-VSBH1)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ (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) Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	State-enforceable only See Section 2.2 B	15A NCAC 02D .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the fuel tank welding and grinding operations (**ID Nos. ES-FTW and ES-FTG**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad (\text{for process rates less than or equal to 30 tons per hour), or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad (\text{for process rates greater than 30 tons per hour})$$

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

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the fuel tank welding and grinding operations (**ID Nos. ES-FTW and ES-FTG**) shall be controlled by the bagfilters (**ID Nos. CD-BH1 and CD-VSBH1**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer’s inspection and maintenance recommendations, or if there are no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter’s structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.
- d. 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 logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and

- iv. any variance from manufacturer's recommendations, if any, and corrections made.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 D.1.c and d above 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.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the fuel tank welding and grinding operations (**ID Nos. ES-FTW and ES-FTG**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of the fuel tank and grinding operations (**ID Nos. ES-FTW and ES-FTG**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a above.The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. 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 logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 D.2.c and d above 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.

E. Two CNC Routers (ID Nos. ES-CR1 and ES-CR2) and associated cyclones (ID Nos. CD-CY2 and CD-CY4), each in series with bagfilters (ID Nos. CD-BH2 and CD-BH4)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ (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) Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	State-enforceable only See Section 2.2 B	15A NCAC 02D .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the two CNC routers (**ID Nos. ES-CR1 and ES-CR2**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad (\text{for process rates less than or equal to 30 tons per hour}), \text{ or}$$

$$E = 55.0 \times P^{0.11} - 40 \quad (\text{for process rates greater than 30 tons per hour})$$

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

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the two CNC routers (**ID Nos. ES-CR1 and ES-CR2**) shall be controlled by the cyclones (**ID Nos. CD-CY2 and CD-CY4**) and bagfilters (**ID Nos. CD-BH2 and CD-BH4**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer’s inspection and maintenance recommendations, or if there are no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters’ structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, bagfilters, and cyclones are not inspected and maintained.

- d. 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 logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters and cyclones; and
 - iv. any variance from manufacturer’s recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters and cyclones within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 E.1.c and d above 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.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the two CNC routers (**ID Nos. ES-CR1 and ES-CR2**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.2.a above.
 The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required daily observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. 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 logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 E.2.c and d above 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.

F. 5th Wheel Welding Operations (ID No. ES-5WW)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ (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) Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the 5th wheel welding operations (**ID No. ES-5WW**) shall not exceed an allowable emission rate as calculated by the following equation:

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

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

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from the 5th wheel welding operations (**ID No. ES-5WW**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the 5th wheel welding operations (**ID No. ES-5WW**) 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.

Testing [15A NCAC 02Q .0508(f)]

- b. 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 Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission point of the 5th wheel welding operations (**ID No. ES-5WW**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.2.a above.
- The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. 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 logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 F.2.c and d above 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.

2.2 – Multiple Emission Source(s) Specific Limitations and Conditions

A. Spray Coating and Assembly Operations (ES-SCAO) consisting of:

- **Twenty-five paint spray booths;**
 - chassis booth A (ES-1),
 - chassis booth B (ES-2),
 - Tennessee booth (ES-39),
 - Western star booth (ES-39C),
 - paint booth #1 (ES-38),
 - hood paint center robot booth (ES-HPC-PB),
 - hood paint center clear coat booth (ES-HPC-CCB),
 - 6 offline paint booths (ES-29 through ES-34),
 - small parts booth (ES-44),
 - seam seal caulk booth (ES-3),
 - primer paint booth (ES-4),
 - foam booth (ES-5),
 - 5 paint spray booths (ES-7 through ES-11),
 - paint booth #6 (ES-25),
 - paint booth #7 (ES-26), and
 - future pre-fab booth (ES-59)
- **Twelve paint drying ovens;**
 - chassis booth A oven (ES-1A),
 - chassis booth B oven (ES-2A),
 - Tennessee dry off oven (ES-39B),
 - paint booth #1 oven (ES-38A),
 - hood paint center dry off oven (ES-HPC-PDO),
 - primer booth oven (ES-4B),
 - topcoat oven east (ES-19),
 - topcoat oven west (ES-20),
 - paint booth #6 and #7 oven (ES-27),
 - cab adhesive oven (ES-AO-1),
 - cab adhesive oven (ES-AO-2) and
 - pre-fab oven (ES-59O)
- **Five flash off areas;**
 - Tennessee Flash Off booth (ES-39A),
 - Primer Booth Flash Off booth (ES-4A),
 - Flash off area (ES-17),
 - Hood Paint Center Paint booth and Flash Off area (ES-HPC-FO), and
 - Paint Booth #6 and 7 Flash Off area (ES-25-26FO)
- **Four sanding booths;**
 - Hood Paint Center Spot Sanding Booth (ES-HPC-SSB),
 - Hood Paint Center Sanding Booth (ES-HPC-SB),
 - Cab Sanding Booth Upstairs (ES57), and
 - Cab Primer Sanding Booth (ES-58)

- **Five tack booths (ES-47 through ES-51);**
- **One paint mix room (ES-PMR); and**
- **Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-VOC)**

1. 15A NCAC 02D .0952: PETITION FOR ALTERNATIVE CONTROLS FOR RACT for 15A NCAC 02D .0967 MISCELLANEOUS METAL AND PLASTIC PARTS COATINGS

- a. This Rule applies to miscellaneous metal and plastic parts surface coating units whose volatile organic compounds emissions exceed the threshold established in 15A NCAC 02D .0902 (b) for coating of automotive or transportation equipment. [15A NCAC 02D .0967(b)(1)]
- b. The Permittee has demonstrated that compliance with 15A NCAC 02D .0967 would be technologically or economically infeasible and has petitioned the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. [15A NCAC 02D .0952(c)]
- c. The Director has approved controls different than the appropriate emission standards in 15A NCAC 02D .0967, as allowed under 15A NCAC 02D .0952(d). The alternative controls are as follows:
 - i. The Permittee has “installed and operates reasonable available control technology (RACT),” as the NESHAP for Miscellaneous Metal Parts and Products Surface Coating, 40 CFR Part 63 Subpart MMMM, and the NESHAP for Plastic Parts and Products Surface Coating , 40 CFR Part 63 Subpart PPPP, meeting the requirements of RACT¹.
 - ii. Final compliance was demonstrated for existing source RACT no later than **April 1, 2009** [15A NCAC 02D .0909(d)(1)(c)]
- d. The Permittee shall comply with the applicable standards in Sections 2.2 C.1 and 2.2 C.2 below, including all emissions limits and work practice standards contained therein.
- e. If the Permittee does not comply with the applicable MACT standards in Sections 2.2 C.1 and 2.2 C.2 below, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0967.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall follow monitoring, recordkeeping and reporting requirements required by 40 CFR Part 63 Subpart PPPP and 40 CFR Part 63 Subpart MMMM as found in Sections 2.2 C.1 and 2.2.C.2, respectively.
- g. If the Permittee does not comply with the monitoring and recordkeeping requirements as found in Sections 2.2 C.1 and 2.2 C.2 below, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0967.

B. One Pretreatment Line (ID No. ES-PT)

Fuel tank welding operation (ID No. ES-FTW)

5th Wheel Welding Operations (ID No. ES-5WW)

Miscellaneous Combustion sources (air handling units) (ID No. IES-12)

Storage Tanks (ID Nos. IES-1 through IES-9)

Multiple Parts Washers (ID No. IES-MPW)

State-Enforceable Only

1. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

Pursuant to 15A NCAC 02Q .0711, for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that actual emissions from the above emission sources do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711.

- a. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the toxic air pollutant emissions do not exceed the TPERs as listed below.

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

- b. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPER.
- c. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100, "Control of Toxic Air Pollutants."

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde				6.8
Acrolein				0.02
Ammonia				0.68
Benzene	8.1			
Benzo(a)pyrene	2.2			
Formaldehyde				0.04
Methyl Ethyl Ketone		78		22.4
Manganese		0.63		
n-Hexane		23		
Toluene		98		14.4
Xylene		57		16.4

C. Sources subjected to National Emission Standards for Hazardous Air Pollutants for Miscellaneous Metal Parts and Products Surface Coating (40 CFR Part 63 Subpart M) and Plastic Parts and Products Surface Coating (40 CFR Part 63 Subpart P)

Spray Coating and Assembly Operations (ES-SCAO) consisting of:

- **Twenty-five paint spray booths;**
 - chassis booth A (ES-1),
 - chassis booth B (ES-2),
 - Tennessee booth (ES-39),
 - Western star booth (ES-39C),
 - paint booth #1 (ES-38),
 - hood paint center robot booth (ES-HPC-PB),
 - hood paint center clear coat booth (ES-HPC-CCB),
 - 6 offline paint booths (ES-29 through ES-34),
 - small parts booth (ES-44),
 - seam seal caulk booth (ES-3),
 - primer paint booth (ES-4),
 - foam booth (ES-5),
 - 5 paint spray booths (ES-7 through ES-11),
 - paint booth #6 (ES-25),
 - paint booth #7 (ES-26), and
 - future pre-fab booth (ES-59)
- **Twelve paint drying ovens;**
 - chassis booth A oven (ES-1A),
 - chassis booth B oven (ES-2A),
 - Tennessee dry off oven (ES-39B),
 - paint booth #1 oven (ES-38A),
 - hood paint center dry off oven (ES-HPC-PDO),
 - primer booth oven (ES-4B),
 - topcoat oven east (ES-19),

- topcoat oven west (ES-20),
- paint booth #6 and #7 oven (ES-27),
- cab adhesive oven (ES-AO-1),
- cab adhesive oven (ES-AO-2) and
- pre-fab oven (ES-59O)

- **Five flash off areas:**

- Tennessee Flash Off booth (ES-39A),
- Primer Booth Flash Off booth (ES-4A),
- Flash off area (ES-17),
- Hood Paint Center Paint booth and Flash Off area (ES-HPC-FO), and
- Paint Booth #6 and 7 Flash Off area (ES-25-26FO)

- **Four sanding booths;**

- Hood Paint Center Spot Sanding Booth (ES-HPC-SSB),
- Hood Paint Center Sanding Booth (ES-HPC-SB),
- Cab Sanding Booth Upstairs (ES57), and
- Cab Primer Sanding Booth (ES-58)

- **Five tack booths (ES-47 through ES-51);**

- **One paint mix room (ES-PMR); and**

- **Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-VOC)**

1. 15A NCAC 02D .1111, Maximum Achievable Control Technology-40 CFR 63, Subpart PPPP

- a. The Permittee demonstrated compliance with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart PPPP, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products", by April 19, 2007 for the above existing sources.

Emission Limits [40 CFR 63.4490]

- b. For each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

Compliance Options [40 CFR 63.4491]

- c. The Permittee shall include all coatings, thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Section 2.2 C.1.b above. To make this determination, the Permittee shall use at least one of the following two compliance options. The Permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The Permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The Permittee may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, the Permittee may not use different compliance options at the same time on the same coating operation. If the Permittee switches between compliance options for any coating operation or group of coating operations, he shall document this switch as required by Section 2.2 C.1.g.iii below, and shall report it in the next semiannual compliance report required in Section 2.2 C.1.h below.
- i. **Compliant material option.** Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2 C.1.b above, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The Permittee shall meet all of the following requirements to demonstrate compliance with the applicable emission limit using this option:
- (A) The Permittee completed the initial compliance demonstration for the initial compliance period ending **April 30, 2008**, according to the requirements in Section 2.2 C.1.c.i.(B) below. The demonstration included the calculations and supporting documentation showing that during the initial compliance period, the Permittee used no coating with an organic HAP content that exceeded the applicable emission limit in Section 2.2 C.1.b above, and that no thinners and/or other additives, or cleaning materials that contained organic HAP were used.

- (B) The Permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the emission rate without add-on controls option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in Section 2.2 C.1.b above and must use no thinner and/or other additive, or cleaning material that contains organic HAP. The Permittee shall use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. The Permittee does not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if the Permittee has documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.
- (1) Determine the mass fraction of organic HAP for each material used. The Permittee shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following options:
- (a) Method 311 (appendix A to 40 CFR part 63). The Permittee may use Method 311 for determining the mass fraction of organic HAP by using the following procedures:
- (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, the Permittee does not have to count it. Express the mass fraction of each organic HAP for which the Permittee counts, as a value truncated to four places after the decimal point (e.g., 0.3791)
- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).
- (b) Method 24 (appendix A to 40 CFR part 60). For coatings, the Permittee may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. The Permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.
- (c) Alternative method. The Permittee may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The Permittee shall follow the procedure in 63.7(f) to submit an alternative test method for approval.
- (d) Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in Section 2.2 C.1.c.i.(B)(1)(a) through (c) above, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, the Permittee does not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Section 2.2 C.1.c.i.(B)(1)(a) through (c) above, then the test method results will take precedence unless, after consultation, the Permittee demonstrates to the satisfaction of DAQ that the formulation data are correct.
- (e) Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP, which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the Permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this Subpart. If the Permittee uses the tables, he shall use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and may use Table 4 only if the solvent

blends in the materials do not match any of the solvent blends in Table 3 and he knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, he demonstrates to the satisfaction of DAQ that the formulation data are correct.

- (2) Determine the mass fraction of coating solids for each coating. The Permittee shall determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in Section 2.2.C.1.c.i.(B)(2)(a) through (c) below.
 - (a) Method 24 (appendix A to 40 CFR part 60). The Permittee may use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, the Permittee may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.
 - (b) Alternative method. The Permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. The Permittee must follow the procedure in Sec. 63.7(f) to submit an alternative test method for approval.
 - (c) Information from the supplier or manufacturer of the material. The Permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the DAQ that the formulation data are correct.
- (3) Calculate the organic HAP content of each coating. The Permittee may determine the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using the following equation:

$$H_c = \frac{W_c}{S_c} \quad (\text{Eq. 1})$$

Where: H_c = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

W_c = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to Section 2.2 B.1.c.i.(B)(1) above.

S_c = Mass fraction of coating solids, kg coating solids per kg coating, determined according to Section 2.2 B.1.c.i.(B)(2) above.

- (4) Compliance demonstration. The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in Section 2.2 C.1.b. above; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to Section 2.2 C.1.c.i.(B)(1) above. The Permittee shall keep all records required by Section 2.2 C.1.g below. As part of the notification of compliance status required in Section 2.2 C.1.f below, the Permittee shall identify the coating operation(s) for which he used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2 C.1.b. above, and he used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in Section 2.2 C.1.c.i.(B)(1) above.
- (C) (1) For each compliance period to demonstrate continuous compliance, the Permittee shall use no coating for which the organic HAP content (determined using Equation 1 of Section 2.2 C.1.c.i.(B)(3) above) exceeds the applicable emission limit in Section 2.2 C.1.b. above, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to Section 2.2 C.1.c.i.(B)(1) above. A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in Section 2.2 C.1.c.i.(A) above, is the end of a compliance period consisting of that month and the preceding 11 months.
 - (2) If the Permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in Section 2.2 C.1.c.i.(C)(1) above is a deviation from the emission limitations that must be reported as specified in Section 2.2 C.1.f.vi below and/or Section 2.2 C.1.h.ix below.

- (3) As part of each semiannual compliance report required by Section 2.2 C.1.h below, the Permittee shall identify the coating operation(s) for which it used the compliant material option. If there were no deviations from the applicable emission limit in Section 2.2 C.1.b. above, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2 C.1.b. above, and he used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to Section 2.2 C.1.c.i.(B)(1) above.
 - (4) The Permittee shall maintain records as specified in Section 2.2 C 1.g below.
- ii. Emission rate without add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2 C.1.b. above, calculated as a rolling 12-month emission rate and determined on a monthly basis. The Permittee shall meet all of the following requirements to demonstrate compliance with the emission limit using this option.
- (A) The Permittee completed the initial compliance demonstration for the initial compliance period ending on **April 30, 2008**, according to the requirements of Section 2.2 C.1.c.ii.(B) below. The Permittee determined the mass of organic HAP emissions and mass of coating solids used each month and then calculated an organic HAP emission rate at the end of the initial compliance period. The demonstration included the calculations according to Section 2.2 C.1.c.ii.(B) below and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Section 2.2 C.1.b. above.
 - (B) The Permittee may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the compliant material option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in Section 2.2 C 1.b. above. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option. The Permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if the Permittee has documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the emission rate without add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.
 - (1) Determine the mass fraction of organic HAP for each material. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Section 2.2 C.1.c.i.(B)(1) above.
 - (2) Determine the mass fraction of coating solids. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in Section 2.2 C.1.c.i.(B)(2) above.
 - (3) Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of DAQ that the formulation data are correct. If the Permittee purchases materials or monitor consumption by weight instead of volume, the Permittee does not need to determine material density. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 below.
 - (4) Determine the volume of each material used. Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If the Permittee purchases materials or monitors consumption by weight instead of volume, he does not need to determine the volume of each material used. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C and 2 below.

- (5) Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \quad (\text{Eq. 1})$$

Where: H_e = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Section 2.2 B.1.c.ii.B.5.d below. (The Permittee may assign a value of zero to R_w if he does not wish to use this allowance.)

- (a) Calculate the kg of organic HAP in the coatings used during the month using Equation 1A below:

$$A = \sum_{i=1}^m (\text{Vol}_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 1A})$$

Where: A = Total mass of organic HAP in the coatings used during the month, kg

$\text{Vol}_{c,i}$ = Total volume of coating, i , used during the month, liters.

$D_{c,i}$ = Density of coating, i , kg coating per liter coating.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i , kg organic HAP per kg coating. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used during the month.

- (b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^n (\text{Vol}_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Eq. 1B})$$

Where: B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

$\text{Vol}_{t,j}$ = Total volume of thinner and/or other additive, j , used during the month, liters.

$D_{t,j}$ = Density of thinner and/or other additive, j , kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j , kg organic HAP per kg thinner and/or other additive. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used during the month.

- (c) Calculate the kg of organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^p (\text{Vol}_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 1C})$$

Where: C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$\text{Vol}_{s,k}$ = Total volume of cleaning material, k , used during the month, liters.

$D_{s,k}$ = Density of cleaning material, k , kg per liter.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k , kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

(d) If the Permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then he shall determine the mass according to the procedures in 40 CFR 63.4551 (e)(4).

(6) Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^m (Vol_{c,i}) (D_{c,i}) (M_{s,i}) \quad (\text{Eq. 2})$$

Where: M_{st} = Total mass of coating solids used during the month, kg.
 $Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.
 $D_{c,i}$ = Density of coating, i, kgs per liter coating, determined according to Section 2.2C.1.d.ii.(B)(3) above
 $M_{s,i}$ = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to Section 2.2 C.1.d.i.(B)(2) above
 m = Number of coatings used during the month.

(7) Calculate the organic HAP emission rate. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n M_{st}} \quad (\text{Eq. 3})$$

Where: H_{yr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.
 H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.
 M_{st} = Total mass of coating solids used during month, y, kg, as calculated by Equation 2 of this section.
 y = Identifier for months.
 n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(8) Compliance demonstration. The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the emission limit in Section 2.2 C.1.b. above. The Permittee shall keep all records as required by Section 2.2 C.1.g below. As part of the notification of compliance status required by Section 2.2 C.1.f below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Section 2.2 C.1.b. above, determined according to the procedures in this section.

(C) (1) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to Section 2.2 C.1.c.ii.(B)(1) through (7) above, must be less than or equal to the applicable emission limit in Section 2.2 C.1.b above. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Section 2.2 C.1.c.ii.(A) above is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee shall perform the calculations in Section 2.2 C.1.c.ii.(B)(1) through (7) above on a monthly basis using data from the previous 12 months of operation.

- (2) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Section 2.2 C.1.b. above, this is a deviation from the emission limitation for that compliance period and must be reported as specified in Sections 2.2 C.1.f.vi and 2.2 C.1.h.x below.
- (3) As part of each semiannual compliance report required by Section 2.2 C.1.h below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the Permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Section 2.2 C.1.b above, determined according to Section 2.2 C.1.c.ii.(B)(1) through (7) above.
- (4). The Permittee shall maintain records as specified in Section 2.2 C.1.g below.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if it does not conduct a monthly compliance demonstration as required above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2 C.1.b above.

Operating Limits/Work Practice Standards [63.4492 and 63.4493]

- d. For the above existing sources on which the Permittee uses the compliant material option in Section 2.2 C.1.c.i above or the emission rate without add-on controls option in Section 2.2 C.1.c.ii above, the Permittee is not required to meet any operating limits or work practice standards.

Notifications [63.4510]

- e. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to it by the dates specified in those sections, except as provided in Section 2.2 C.1.f below.
- f. The Permittee has submitted the notification of compliance status required by 63.9(h) by **May 30, 2008**. The notification of compliance status contained the following information and the information in 63.9(h).
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of the report and beginning and ending dates of the reporting period;
 - iv. Identification of the compliance option or options specified in Section 2.2 C.1.c above that the Permittee used on each coating operation during the initial compliance period;
 - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period;
 - vi. If the Permittee had a deviation, include the following information:
 - (A) A description and statement of the cause of the deviation; and
 - (B) If the Permittee failed to meet the applicable emission limit in Section 2.2 C.1.b above, include all the calculations used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. The Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports;
 - vii. For each of the following data items that are required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sections 2.2 C.1.c.i.(B)(1), (2) or (3) above. The Permittee does not need to submit copies of any test reports.
 - (A) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material;
 - (B) Mass fraction of coating solids for one coating;
 - (C) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required; and
 - (D) The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of Section 2.2 C.1.c.ii.(B)(5) above;
 - viii. The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified below:
 - (A) For the compliant material option, an example calculation of the organic HAP content for one coating, using Equation 1 of Section 2.2 C.1.c.i.(B)(3) above; and
 - (B) For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the

calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sections 2.2 C.1.c.ii.(B)(5) through (7) above;

Recordkeeping [63.4530]

- g. The Permittee shall collect and keep records of the data and information specified below. Failure to collect and keep these records is a deviation from the applicable standard.
- i. A copy of each notification and report submitted to comply with this subpart, and the documentation supporting each notification and report;
 - ii. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, he shall keep a copy of the complete test report. If the Permittee uses information provided by the manufacturer or supplier of the material that was based on testing, he shall keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier;
 - iii. For each compliance period, the records specified below:
 - (A) A record of the coating operations on which the Permittee used each compliance option and the time periods (beginning and ending dates and times) for each option;
 - (B) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of Section 2.2 C.1.c.i.(B)(3) above; and
 - (C) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of Sections 2.2 C.1.c.ii.(B)(5) through (7) above; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2 C.1.c.ii.(B)(5)(d) above; the calculation of the total mass of coating solids used each month using Equation 2 of Section 2.2 C.1.c.ii.(B)(6) above; and the calculation of each 12-month organic HAP emission rate using Equation 3 of Section 2.2 C.1.c.ii.(B)(7) above.
 - iv. A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the Permittee is using the compliant material option for all coatings at the source, he may maintain purchase records for each material used rather than a record of the mass used;
 - v. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period;
 - vi. A record of the mass fraction of coating solids for each coating used during each compliance period;
 - vii. If the Permittee uses an allowance in Equation 1 of Section 2.2 C.1.c.ii.(B)(5) above for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF), he shall keep records in accordance with 40 CFR 63.4350(g).
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the above records are not maintained.

Reporting [63.4520]

- h. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.2 C.1.c through g above 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. The report shall contain the following information:
- i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. Identification of the compliance option or options specified in Section 2.2 C.1.c above that the Permittee used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting period, he shall report the beginning and ending dates for each option used;
 - v. If the Permittee used the emission rate without add-on controls compliance option (Section 2.2 C.1.c.ii above), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period
 - viii. If there were no deviations from the emission limitations in Section 2.2 C.1.b above that apply, a statement that there were no deviations from the emission limitations during the reporting period

- ix. If the Permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in Section 2.2 C.1.b above, the following information:
 - (A) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used;
 - (B) The calculation of the organic HAP content (using Equation 1 of Section 2.2 C.1.c.i.(B)(3) above) for each coating identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports);
 - (C) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports); and
 - (D) A statement of the cause of each deviation; and
- x. If the Permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Section 2.2 C.1.b above, the following information:
 - (A) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in Section 2.2 C.1.b above;
 - (B) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The Permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of Sections 2.2 C.1.c.ii.(B)(5) through (7) above; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2 C.1.c.ii.(B)(5) above. The Permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports); and
 - (C) A statement of the cause of each deviation.

2. 15A NCAC 02D .1111, Maximum Achievable Control Technology-40 CFR 63, Subpart MMMM

- a. The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart MMMM, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products", by January 2, 2007 for the above existing source(s).

Emission Limits [63.3890]

- b. For each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

Compliance Options [40 CFR 63.3891]

As of the compliance date stated in section 2.2 C.2.a, the Permittee shall demonstrate compliance with 40 CFR 63, Subpart MMMM by demonstrating compliance with 40 CFR 63, Subpart PPPP as detailed in Section 2.2. C.1 above. c.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if it does not conduct a monthly compliance demonstration as required by Section 2.2.C.1.c above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2 C.1.b above.

Notifications [63.3910]

- d. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to it by the dates specified in those sections, except as provided in Section 2.2.C.2.e below.
- e. The Permittee submitted the notification of compliance status required by 63.9(h) by **March 1, 2008**. The notification of compliance status contained the following information and the information in 63.9(h).
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of the report and beginning and ending dates of the reporting period;
 - iv. Identification of the compliance option or options specified in Section 2.2.C.1.c above that the Permittee used on each coating operation during the initial compliance period;
 - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period;
 - vi. If the Permittee had a deviation, include the following information:
 - (A) A description and statement of the cause of the deviation; and
 - (B) If the Permittee failed to meet the applicable emission limit in Section 2.2.C.1.b above, include all the calculations used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. The

- Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports;
- vii. For each of the following data items that are required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sections 2.2 C.1.c.i.(B)(1), (2) or (3) above. The Permittee does not need to submit copies of any test reports.
 - (A) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material;
 - (B) Mass fraction of coating solids for one coating;
 - (C) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required; and
 - (D) The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of Section 2.2 C.1.c.ii.(B)(5) above;
 - viii. The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified below:
 - (A) For the compliant material option, an example calculation of the organic HAP content for one coating, using Equation 1 of Section 2.2 C.1.c.i.(B)(3) above; and
 - (B) For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sections 2.2 C.1.c.ii.(B)(5) through (7) above.

Recordkeeping [63.3930]

- f. The Permittee shall collect and keep records of the data and information as specified in Section 2.2 C.1.g above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained as required by Section 2.2 C.1.g above.

Reporting [63.3920]

- g. The Permittee shall submit report as specified in Section 2.2 C.1.h above.

D. Facility-Wide

State-Enforceable Only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. 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.

2.3 Actuals PAL Permit Requirements

A. Actuals PAL for VOC

1. The Actuals Plantwide Applicability Limitations (Actuals PAL) of **1406.4 tons per year of VOC** emissions per rolling 12-month period shall not be exceeded from the following PAL Emissions Units:
 - a. Combustion Sources:
 - Boiler No. 1 – Office Boiler, natural gas-fired (0.94 million Btu per hour maximum heat input, ID No. ES-BLR-1),
 - Boiler No. 3 – natural gas-fired (8.37 million Btu per hour maximum heat input, ID No. ES-BLR-3),
 - Boiler No. 4 – natural gas-fired (5.14 million Btu per hour maximum heat input, ID No. ES-BLR-4),
 - Boiler No. 5 – natural gas-fired (33.6 million Btu per hour maximum heat input, ID No. ES-BLR-5), and
 - Miscellaneous combustion sources (ID No. IES-12)
 - b. Spray Coating and Assembly Operations (ES-SCAO) consisting of:
Twenty-five paint spray booths
 - chassis booth A (ES-1),
 - chassis booth B (ES-2),
 - Tennessee booth (ES-39),
 - Western star booth (ES-39C),
 - paint booth #1 (ES-38),
 - hood paint center robot booth (ES-HPC-PB),
 - hood paint center clear coat booth (ES-HPC-CCB),
 - 6 offline paint booths (ES-29 through ES-34),
 - small parts booth (ES-44),
 - seam seal caulk booth (ES-3),
 - primer paint booth (ES-4),
 - foam booth (ES-5),
 - 5 paint spray booths (ES-7 through ES-11),
 - paint booth #6 (ES-25),
 - paint booth #7 (ES-26), and
 - future pre-fab booth (ES-59)
 - c. Twelve paint drying ovens consisting of:
 - chassis booth A oven (ES-1A),
 - chassis booth B oven (ES-2A),
 - Tennessee dry off oven (ES-39B),
 - paint booth #1 oven (ES-38A),
 - hood paint center dry off oven (ES-HPC-PDO),
 - primer booth oven (ES-4B),
 - topcoat oven east (ES-19),
 - topcoat oven west (ES-20),
 - paint booth #6 and #7 oven (ES-27),
 - cab adhesive oven (ES-AO-1),
 - cab adhesive oven (ES-AO-2), and
 - pre-fab oven (ES-59O)
 - d. Five flash off areas consisting of:
 - Tennessee Flash Off booth (ES-39A),
 - Primer Booth Flash Off booth (ES-4A),
 - Flash off area (ES-17),
 - Hood Paint Center Paint booth and Flash Off area (ES-HPC-FO), and
 - Paint Booth #6 and 7 Flash Off area (ES-25-26FO)

- e. Four sanding booths consisting of:
 - Hood Paint Center Spot Sanding Booth (ES-HPC-SSB),
 - Hood Paint Center Sanding Booth (ES-HPC-SB),
 - Cab Sanding Booth Upstairs (ES57), and
 - Cab Primer Sanding Booth (ES-58)
- f. Five tack booths (ES-47 through ES-51)
- g. One paint mix room (ES-PMR)
- h. Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-VOC)
- i. Various Storage Tanks consisting of:
 - One 10,000 gallon antifreeze tank (IES-1),
 - Three 10,000 gallon diesel fuel tanks (IES-2, IES-3, and IES-4),
 - One 4,000 gallon butanol tank (IES-5), and
 - Four 10,000 gallon purge tanks (IES-6, IES-7, IES-8, and IES-9)
- j. Other Sources:
 - Two distillation units (IES-10 and IES-11),
 - Five (125 gallon) bulk tanks for new mix room (IES-14), and
 - Two (55 gallon) piggable tanks for new mix room (IES-15)
- k. Fire pumps (IES-FP1 and IES-FP2)
- l. Emergency generator (IES-EG)
- m. Three dynamometers (IES-DYNA1, IES-DYNA2, and IES-DYNA3)

Effective and Expiration Date

- 2. The Effective Date for this PAL shall be on **November 8, 2016**.
- 3. The Expiration Date for this PAL shall be on **October 31, 2026**.
- 4. The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 A.1 above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified below and the plant-wide actual VOC emissions will remain less than 1406.4 tons per rolling 12 months. (Note: This PAL provision does not relieve the Permittee from applying for and receiving a revised construction and operating permit as required by 15A NCAC 2Q .0101.)
- 5. If the Permittee applies to renew the PAL permit in accordance with 40 CFR § 51.166(w)(10) before the end of the PAL effective period in Section 2.3. A. 3 above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR § 51.166(w)(7)(iii)]
- 6. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR § 51.166(w)(9)(i) through (v). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR § 51.166(w)(9)]

Testing [15A NCAC 02Q .0508(f)]

- 7. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the VOC emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3 A.1 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- 8. The Permittee shall revalidate the emission factors and any other data used in Sections 2.3 A.11 through 14 below for calculations of VOC emissions through performance testing or other scientifically valid means approved by the DAQ. The Permittee shall perform such revalidation once every **five years** after the issuance of the PAL permit. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530. If any emission factors included in Section 2.3 A are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR § 51.166(w)(12)(ix) and 40 CFR § 51.166(w)(14)(iii)]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- 9. The Permittee shall record on a monthly basis all VOC containing materials used in the spray coating and assembly operations (ES-SCAO). The coating usage and the coating waste percentage shall be monitored and recorded daily. The usage of cleanup solvent, caulks, glues, seamseals, and other non-coating sources of VOCs shall be monitored and

recorded monthly. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not maintained.

10. The Permittee shall record monthly the natural gas burned in the boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), and paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-59O**). The Permittee shall record monthly hours of operation for the fire pumps (**ID Nos. IES-FP1 and IES-FP2**) and the emergency generator (**ID No. IES-EG**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of natural gas burned is not recorded or the hours of operation of diesel-fired engines (fire pumps and emergency generator) are not recorded.
11. The Permittee shall calculate the monthly VOC emissions from the spray-coating and assembly operations (**ID No. ES-SCAO**) determined by a mass balance assuming all VOC-containing purchased materials in a month, minus the amount collected in waste drums, are used that month. This is calculated by multiplying VOC-containing materials usage by their VOC content. [40 CFR §51.166(w) (12)(iii)]
12. The Permittee shall calculate the monthly VOC emissions from the natural gas-fired boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-59O**), fire pumps (**ID Nos. IES-FP1 and IES-FP2**), and emergency generator (**ID No. IES-EG**) using the following equation:

$$\text{VOC emissions (tons/month)} = \{ \{ 5.5 \text{ lb}/10^6 \text{ scf} * C \text{ scf/month} \} + \{ 0.00247 \text{ lb}/\text{hp-hr} * 225 \text{ hp} * D \text{ hrs/month} \} + \{ 0.00247 \text{ lb}/\text{hp-hr} * 225 \text{ hp} * E \text{ hrs/month} \} + \{ 0.000434 \text{ lb}/\text{hp-hr} * 480 \text{ hp} * F \text{ hrs/month} \} \} / [2000 \text{ lbs/ton}]$$

Where,

C = natural gas usage in standard cubic feet per month for all the boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-59O**)

D = hours of operation per month (**ID No. IES-FP1**)

E = hours of operation per month (**ID No. IES-FP2**)

F = hours of operation per month (**ID No. IES-EG**)

[40 CFR §51.166(w)(12)(vi)]

13. The Permittee shall use an estimate of 1 ton per rolling 12-Month period (0.083 tons per calendar month) of VOC emissions for these sources, combined:
 - One 10,000 gallon antifreeze tank (**ID No. IES-1**),
 - Three 10,000 gallon diesel fuel tanks (**ID Nos. IES-2, IES-3, and IES-4**),
 - One 4,000 gallon butanol tank (**ID No. IES-5**),
 - Four 10,000 gallon purge tanks (**ID Nos. IES-6, IES-7, IES-8, and IES-9**),
 - Two distillation units (**ID Nos. IES-10 and IES-11**),
 - Five (125 gallon) bulk tanks for new mix room (**ID No. IES-14**), and
 - Two (55 gallon) piggable tanks for new mix room (**ID No. IES-15**).
14. The Permittee shall use an estimate of 0.2 tons per rolling 12-month period (0.017 tons per calendar month) of VOC emissions from the three dynamometers combined. [40 CFR §51.166(w)(12)(vi)]
15. The Permittee shall determine facility wide VOC emissions per month using the emissions calculations in Sections 2.3 A 11 through 14 above. Calculations and the total amount of facility wide VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling facility wide VOC emissions exceed the limit in Section 2.3 A.1 above or the facility wide VOC emissions are not recorded.
16. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained. [40 CFR §51.166(w)(13)(i)]
17. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
 - a. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - b. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in Section 2.3 A.

- c. The records may be retained in electronic format.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained.
[40 CFR §51.166(w)(13)(ii)]

Reporting [15A NCAC 02Q .0508(f), and 40 CFR §51.166(w)(7)(ix) and 40 CFR §51.166(w)(14)]

18. The Permittee shall submit semiannual report to the Regional Air Quality Supervisor 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 report shall contain the following information:
- a. The identification of Permittee and the permit number.
 - b. Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.166(w)(13)(i).
 - c. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - d. A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
 - e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - f. A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR §51.166 (w)(12)(vii).
 - g. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
[40 CFR §51.166(w)(14)]
19. Deviation report. The Permittee shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing §70.6(a)(3)(iii)(B) of 40 CFR. The reports shall contain the following information:
- a. The identification of owner and operator and the permit number;
 - b. The PAL requirement that experienced the deviation or that was exceeded;
 - c. Emissions resulting from the deviation or the exceedance; and
 - d. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
20. Re-validation results. The Permittee shall submit to the Regional Air Quality Supervisor the results of any re-validation within three months after completion of such revalidation.

B. Actuals PAL for NO_x

1. The Actuals Plantwide Applicability Limitations (Actuals PAL) of **52.5 tons per year of NO_x** emissions per rolling 12-month period shall not be exceeded from the following PAL Emissions Units:
- a. Combustion Sources:
 - Boiler No. 1 – Office Boiler, natural gas-fired (0.94 million Btu per hour maximum heat input, ID No. ES-BLR-1),
 - Boiler No. 3 – natural gas-fired (8.37 million Btu per hour maximum heat input, ID No. ES-BLR-3),
 - Boiler No. 4 – natural gas-fired (5.14 million Btu per hour maximum heat input, ID No. ES-BLR-4),
 - Boiler No. 5 – natural gas-fired (33.6 million Btu per hour maximum heat input, ID No. ES-BLR-5), and
 - Miscellaneous combustion sources (ID No. IES-12);
 - b. Twelve paint drying ovens:
 - chassis booth A oven (ES-1A),
 - chassis booth B oven (ES-2A),
 - Tennessee dry off oven (ES-39B),
 - paint booth #1 oven (ES-38A),
 - hood paint center dry off oven (ES-HPC-PDO),
 - primer booth oven (ES-4B),

- topcoat oven east (ES-19),
 - topcoat oven west (ES-20),
 - paint booth #6 and #7 oven (ES-27),
 - cab adhesive oven (ES-AO-1),
 - cab adhesive oven (ES-AO-2), and
 - prefab oven (ES-590)
- c. Fire pumps (IES-FP1 and IES-FP2)
- d. Emergency generator (IES-EG)
- e. Three dynamometers (IES-DYNA1, IES-DYNA2, and IES-DYNA3)

Effective and Expiration Date

2. The Effective Date for this PAL shall be on xx.
3. The Expiration Date for this PAL shall be on xx.
4. The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 B.1 above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified below and the plant-wide actual NO_x emissions will remain less than 52.5 tons per rolling 12 months. (Note: This PAL provision does not relieve the Permittee from applying for and receiving a revised construction and operating permit as required by 15A NCAC 02Q .0101.)
5. If the Permittee applies to renew the PAL permit in accordance with 40 CFR §51.166(w)(10) before the end of the PAL effective period in Section 2.3 B.3 above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by DAQ. [40 CFR §51.166(w)(7)(iii)]
6. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR §51.166(w)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR §51.166(w)(7)(v)]

Testing [15A NCAC 02Q .0508(f)]

7. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the NO_x emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3 B.1 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
8. The Permittee shall revalidate the emission factors and any other data used in Sections 2.3 B.10 and 11 below for calculations of NO_x emissions through performance testing or other scientifically valid means approved by the DAQ. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530. If any emission factors included in Section 2.3 B are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR §51.166(w)(12)(ix)]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

9. The Permittee shall record monthly the natural gas burned in the boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), and paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-590**). The Permittee shall record monthly hours of operation for the fire pumps (**ID Nos. IES-FP1 and IES-FP2**) and the emergency generator (**ID No. IES-EG**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of natural gas burned is not recorded or the hours of operation of diesel-fired engines (fire pumps and emergency generator) are not recorded.
10. The Permittee shall calculate the monthly NO_x emissions from the natural gas-fired boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-590**), fire pumps (**ID Nos. IES-FP1 and IES-FP2**), and emergency generator (**ID No. IES-EG**), using the following equation:

$$\text{NOx emissions (tons/month)} = \left[\{100.0 \text{ lb}/10^6 \text{ scf} * C \text{ scf/month} \} + \{0.031 \text{ lb}/\text{hp-hr} * 225 \text{ hp} * D \text{ hrs/month} \} \right. \\ \left. + \{0.031 \text{ lb}/\text{hp-hr} * 225 \text{ hp} * E \text{ hrs/month} \} + \{0.0061 \text{ lb}/\text{hp-hr} * 480 \text{ hp} * F \text{ hrs/month} \} \right] / \\ [2000 \text{ lbs/ton}]$$

Where,

C = natural gas usage in standard cubic feet per month for all the boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-590**).

D = hours of operation per month (**ID No. IES-FP1**)

E = hours of operation per month (**ID No. IES-FP2**)

F = hours of operation per month (**ID No. IES-EG**)

[40 CFR §51.166(w)(12)(vi)]

11. The Permittee shall use an estimate of 1.0 tons per rolling 12-month period (0.09 tons per calendar month) of NO_x emissions for the three dynamometers combined. [40 CFR §51.166(w)(12)(vi)]
12. The Permittee shall determine facility wide NO_x emissions per month using the emissions calculations in Sections 2.3 B.10 and 11 above. Calculations and the total amount of facility wide NO_x emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling facility wide NO_x emissions exceed the limit in Section 2.3 B.1 above or the facility wide NO_x emissions are not recorded.
13. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained. [40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(i)]
14. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
 - a. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - b. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in Section 2.3 B.
 - c. The records may be retained in electronic format.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained. [40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(ii)]

Reporting [15A NCAC 02Q .0508(f), and 40 CFR §51.166(w)(7)(ix) and 40 CFR §51.166(w)(14)]

15. The Permittee shall submit semiannual monitoring reports to DAQ in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR §51.166(w)(14)(i) through (iii).
16. The Permittee shall submit semiannual report to the Regional Air Quality Supervisor 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 report shall contain the following information:
 - a. The identification of Permittee and the permit number.
 - b. Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.166(w)(13)(i).
 - c. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - d. A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
 - e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - f. A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR §51.166(w) (12)(vii).
 - g. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
17. Deviation report. The Permittee shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing §70.6(a)(3)(iii)(B) of 40 CFR. The reports shall contain the following information:
 - a. The identification of owner and operator and the permit number;

- b. The PAL requirement that experienced the deviation or that was exceeded;
 - c. Emissions resulting from the deviation or the exceedance; and
 - d. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
18. Re-validation results. The Permittee shall submit to the Regional Air Quality Supervisor the results of any re-validation within three months after completion of such revalidation.

C. Actuals PAL for Green House Gases (GHGs)

1. The Actuals Plantwide Applicability Limitations (Actuals PAL) of **61,262 CO₂ equivalent (CO₂e - GHGs) tons** per rolling 12-month period shall not be exceeded from the following PAL Emissions Units:
 - a. Combustion Sources:
 - Boiler No. 1 – Office Boiler, natural gas-fired (0.94 million Btu per hour maximum heat input, ID No. ES-BLR-1);
 - Boiler No. 3 – natural gas-fired (8.37 million Btu per hour maximum heat input, ID No. ES-BLR-3);
 - Boiler No. 4 –natural gas-fired (5.14 million Btu per hour maximum heat input, ID No. ES-BLR-4);
 - Boiler No. 5 –natural gas-fired (33.6 million Btu per hour maximum heat input, ID No. ES-BLR-5);
 - Miscellaneous combustion sources (ID No. IES-12);
 - b. Twelve paint drying ovens;
 - chassis booth A oven (ID No. ES-1A),
 - chassis booth B oven (ID No. ES-2A),
 - Tennessee dry off oven (ID No. ES-39B),
 - paint booth #1 oven (ID No. ES-38A),
 - hood paint center dry off oven (ID No. ES-HPC-PDO),
 - primer booth oven (ID No. ES-4B),
 - topcoat oven east (ID No. ES-19),
 - topcoat oven west (ID No. ES-20),
 - paint booth #6 and #7 oven (ID No. ES-27),
 - cab adhesive oven (ID No. ES-AO-1),
 - cab adhesive oven (ID No. ES-AO-2) and
 - prefab oven (ID No. ES-59O)
 - c. Fire pumps (ID Nos. IES-FP1 and IES-FP2)
 - d. Emergency Generator (ID No. IES-EG)
 - e. Dry Ice Cleaning System (ID No. ES-DRYICE)
 - f. Three dynamometers (IES-DYNA1, IES-DYNA2, and IES-DYNA3)

Effective and Expiration Date

2. The Effective Date for this PAL shall be on xx.
3. The Expiration Date for this PAL shall be on xx.
4. The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 C.1 above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified below and the plant-wide actual CO₂e emissions will remain less than 61,262 tons per rolling 12 months. (Note: This PAL provision does not relieve the Permittee from applying for and receiving a revised construction and operating permit as required by 15A NCAC 02Q .0101.)
5. If the Permittee applies to renew the PAL permit in accordance with 40 CFR §51.166(w)(10) before the end of the PAL effective period in Section 2.3. C.3 above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR §51.166(w)(7)(iii)]
6. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR §51.166(w)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR §51.166(w)(7)(v)]

Testing [15A NCAC 02Q .0508(f)]

7. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the CO_{2e} emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3 C.1 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
8. The Permittee shall revalidate the emission factors and any other data used in Sections 2.3 C.10 and 11 below for calculations of CO_{2e} emissions through performance testing or other scientifically valid means approved by the DAQ. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit, in accordance with General Condition JJ. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530. If any emission factors included in Section 2.3 C are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR §51.166(w)(12)(ix)]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

9. The Permittee shall record monthly the natural gas burned in the boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), and paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-590**). The Permittee shall record monthly hours of operation for the fire pumps (**ID Nos. IES-FP1 and IES-FP2**) and the emergency generator (**ID No. IES-EG**). The Permittee shall record the monthly usage of dry ice for the dry ice cleaning system (**ID No. ES-DRYICE**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of natural gas burned is not recorded or the hours of operation of diesel-fired engines (fire pumps and emergency generator) are not recorded.
10. The Permittee shall calculate the monthly CO_{2e} emissions from the natural gas-fired boilers (**ID Nos. ES-BLR-1, ES-BLR-3, ES-BLR-4 and ES-BLR-5**), miscellaneous combustion source (**ID No. IES-12**), paint drying ovens (**ID Nos. ES-1A, ES-2A, ES-39B, ES-38A, ES-HPC-PDO, ES-4B, ES-19, ES-20, ES-27, ES-AO-1, ES-AO-2, ES-590**), the diesel-fired fire pumps (**ID Nos. IES-FP1 and IES-FP2**), and the emergency generator (**ID No. IES-EG**) and the dry ice cleaning system (**ID No. ES-DRYICE**) with the following equations:

$$\begin{aligned} \text{CO}_2 \text{ (pounds/month)} &= \text{Natural Gas usage (scf/month)} / 8.33 \text{ scf/lb}^2; \\ \text{CH}_4 \text{ (pounds/month)} &= \text{Natural Gas usage (scf/month)} / 442,098 \text{ scf/lb}^3; \\ \text{N}_2\text{O (pounds/month)} &= \text{Natural Gas usage (scf/month)} / 4,420,984 \text{ scf/lb}^4; \\ \text{CO}_{2e} \text{ (pounds/month)} &= [\text{CO}_2 \text{ (pounds/month)}] + [\text{CH}_4 \text{ (pounds/month)} \times 25] + [\text{N}_2\text{O (pounds/month)} \times 298]; \end{aligned}$$

$$\begin{aligned} \text{CO}_2 \text{ (pounds/month)} &= \{ 1.14 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{D hrs/month} \} + \{ 1.14 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{E hrs/month} \} + 1.14 \text{ lb/hp-hr} \\ &\quad \times 480 \text{ hp} \times \text{F hrs/month} \}; \\ \text{CH}_4 \text{ (pounds/month)} &= \{ 0.000046 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{D hrs/month} \} + \{ 0.000046 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{E hrs/month} \} + \\ &\quad \{ 0.000046 \text{ lb/hp-hr} \times 480 \text{ hp} \times \text{F hrs/month} \}; \\ \text{N}_2\text{O (pounds/month)} &= \{ 0.0000093 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{D hrs/month} \} + \{ 0.0000093 \text{ lb/hp-hr} \times 225 \text{ hp} \times \text{E hrs/month} \} + \\ &\quad \{ 0.0000093 \text{ lb/hp-hr} \times 480 \text{ hp} \times \text{F hrs/month} \}; \\ \text{CO}_{2e} \text{ (pounds/month)} &= [\text{CO}_2 \text{ (pounds/month)}] + [\text{CH}_4 \text{ (pounds/month)} \times 25] + [\text{N}_2\text{O (pounds/month)} \times 298]; \end{aligned}$$

$$\text{CO}_2 \text{ (pounds/month)} = \text{Dry ice usage (lbs/month)}$$

and

$$\text{CO}_{2e} \text{ (tons/month)} = [\text{CO}_{2e} \text{ (pounds/month)} \text{ from NG sources} + \text{CO}_{2e} \text{ (pounds/month)} \text{ from diesel sources} + \text{dry ice cleaning system}] / 2000 \text{ lbs/ton}$$

Where:

D = hours of operation per month (**ID No. IES-FP1**)

E = hours of operation per month (**ID No. IES-FP2**)

F = hours of operation per month (**ID No. IES-EG**)

² Based upon the emission factor of 53.06 kg/MMBtu, the high heat value of 1,026 Btu/scf, and the engineering unit conversion of 2.20462 lb/kg.

³ Based upon the emission factor of 1.0E-03 kg/MMBtu, the high heat value of 1,026 Btu/scf, and the engineering unit conversion of 2.20462 lb/kg.

⁴ Based upon the emission factor of 1.0E-04 kg/MMBtu, the high heat value of 1,026 Btu/scf, and the engineering unit conversion of 2.20462 lb/kg.

[40 CFR §51.166(w)(12)(vi)]

11. The Permittee shall use an estimate of 3,078 tons per rolling 12-month period (266 tons per calendar month) of GHGs emissions for the three dynamometers (**ID Nos. IES-DYNA1-3**) combined. [40 CFR §51.166(w)(12)(vi)]
12. The Permittee shall determine facility wide CO₂e emissions per month using the emissions calculations in Sections 2.3 C.10 and 11 above. Calculations and the total amount of facility wide CO₂e emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling facility wide CO₂e emissions exceed the limit in Section 2.3 C.1 above or the facility wide CO₂e emissions are not recorded.
13. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained.
[40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(i)]
14. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
 - a. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - b. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in Section 2.3 C.
 - c. The records may be retained in electronic format.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if these records are not maintained.
[40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(ii)]

Reporting [15A NCAC 02Q .0508(f), and 40 CFR §51.166(w)(7)(ix) and 40 CFR §51.166(w)(14)]

15. The Permittee shall submit semiannual monitoring reports to DAQ in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR §51.166(w)(14)(i) through (iii).
16. The Permittee shall submit semiannual report to the Regional Air Quality Supervisor 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 report shall contain the following information.
 - a. The identification of Permittee and the permit number.
 - b. Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.166 (w)(13)(i).
 - c. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - d. A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
 - e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - f. A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR §51.166(w) (12)(vii).
 - g. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
17. Deviation report. The Permittee shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing §70.6(a)(3)(iii)(B) of 40 CFR. The reports shall contain the following information:
 - a. The identification of owner and operator and the permit number;
 - b. The PAL requirement that experienced the deviation or that was exceeded;
 - c. Emissions resulting from the deviation or the exceedance; and
 - d. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
18. Re-validation results. The Permittee shall submit to the Regional Air Quality Supervisor the results of any re-validation within three months after completion of such revalidation.

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description^{1,2}
IES-1	One 10,000 gallon antifreeze tank
IES-2, IES-3, and IES-4	Three 10,000 gallon diesel fuel tanks
IES-5	One 4,000 gallon butanol tank
IES-6, IES-7, IES-8, and IES-9	Four 10,000 gallon purge tanks
IES-12	Miscellaneous combustion sources (excluding the boilers, the fire pumps, the emergency generator, and all paint drying ovens)
IES-10 and IES-11	Two distillation units
IES-CT1 through IES-CT6	Six cooling towers
IES-MPW	Multiple parts washer
IES-TTP	Truck tail pipe exhausts
IES-DYNA1, IES-DYNA2 and IES-DYNA3	Three dynamometers
IES-FP1 and IES-FP2 MACT ZZZZ	Diesel fuel-fired fire pumps (225 hp, each)
IES-EG NSPS III MACT ZZZZ	Diesel-fired emergency generator (358 kW/480 hp)
IES-14	Five (125 gallon) bulk tanks for new mix room
IES-15	Two (55 gallon) piggable tanks for new mix room

¹ Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

² When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Title V Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements [15A NCAC 02Q .0508(f)]
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. **"Excess Emissions"** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

I.B. Reporting Requirements for Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. **"Permit Deviations"** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.C. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;

- c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;

5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source.

Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
 - a. The written notification shall include:
 - i. a description of the change at the facility;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.

- b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.