

ROY COOPER
Governor

DIONNE DELLI-GATTI
Secretary

MICHAEL ABRACZINSKAS
Director



Date

T. Pratt Summers
Vice President, Operations
CTI of North Carolina, Inc.
PO Box 576
Savannah, Georgia 31402

SUBJECT: Air Quality Permit No. 05870T19
Facility ID: 6500261
CTI of North Carolina, Inc.
Wilmington, NC
New Hanover County
PSD Status: Minor
Fee Class: Title V

Dear Mr. Summers:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received June 5, 2018, we are forwarding herewith Air Quality Permit No. 05870T19 to CTI of North Carolina, Inc. 1002 Front Street, Wilmington, North Carolina, North Carolina 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 listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. 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 request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



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

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the 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 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

New Hanover County has triggered increment tracking under PSD for particulate matter 10 (PM₁₀), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂). However, this renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from **(Enter Permit Issuance Date)** until December 31, 2025, 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 J'manda Dunston at Jmanda.Dunston@ncdenr.gov or (919) 796-7238.

Sincerely yours,

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

Enclosure

c: Michael Sparks, EPA Region 4
Brad Newland, Supervisor, Wilmington Regional Office
Connie Horne (Cover page only)
Central Files

ATTACHMENT to Permit No. 05870T19

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IES1	Fixed roof storage tanks 118, 127, and 128
IES2	Ethanol in-line enclosed blending system
IES3	55 gallons storage drums
IES4	Ethanol blending Methanol Tank (2,000 gallon capacity)
IES5	Ethanol Blending Various Totes of 300 to 500 gallon capacity and a total in-line tank capacity of approximately 4,000 gallons
IES6	Temporary Material Storage Tank (Tank 200)
IES9	Fixed roof storage tank 114 (constructed in 2010)
IES201	Fixed roof castor oil storage tank 201 (30,000 gallons)
IES202	Fixed roof castor oil storage tank 202 (1,503,096 gallons)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement 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."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the CTI of North Carolina, Inc. – Wilmington, Air Permit No. 05870T18:

Page No.	Section	Description of Changes
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers.
Throughout	Throughout	Added noncompliance statements. Updated using current permit shell language.
3	Insignificant Activities List	Added fixed roof castor oil storage tanks 201 and 201 (ID Nos. IES201 & IES202). Moved floating roof ethanol storage tank 226 (ID No. IES8) from insignificant activities list to the Section 1 Table of Emission Sources as an internal floating roof tank (ID No. 226).
4	Table of Emissions Sources	Added internal floating roof tank 226 (ID No. 226).
5	2.1.A	Updated 15A NCAC 02D .1111 to 15A NCAC 02Q .0317: Avoidance Condition for 15A NCAC 02D .1111: Maximum Achievable Control Technology to the table for boilers (ES-ID Nos. WIL1 & WIL2)
6	2.1.A.5	Updated 15A NCAC 02D .1111 to 15A NCAC 02Q .0317: Avoidance Condition for 15A NCAC 02D .1111: Maximum Achievable Control Technology
7	2.1.B	Added tanks 117 and 226 to the internal floating roof list and to the applicable conditions in the table.
7-10	2.1.B.1	Added tank 226 to applicable conditions.
7-10	2.1.B.1	Update NSPS rule to the most recent revision of the rule.
11	2.1.B.4	Added most recent revision of condition 15A NCAC 02D .0927.
12	2.1.C	Added TLR2 and RLR to condition 15A NCAC 02D .0927 in the table.
12	2.1.C.1	Added TLR2 and RLR to condition 15A NCAC 02D .0927.
13	2.1.C.2	Update condition 15A NCAC 02D .0932 to the most recent revision of rule.
18	2.2.A.3.c-d	Updated the conditions with the most recent revisions.
19	2.2A.3.h	Added additional regulation for scrubber (ID No. SC01).
23-25	2.2.A.5	Added 15A NCAC 02D .0614.



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

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
05870T19	05870T18	XXXX	XXXX

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 Permittees 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: **CTI of North Carolina, Inc.**
Facility ID: **6500261**

Facility Site Location: **1002 South Front Street**
City, County, State, Zip: **Wilmington, New Hanover County, North Carolina 28401**

Mailing Address: **PO Box 576**
City, State, Zip: **Savannah, Georgia, 31402**

Application Number: **6500261.18A**
Complete Application Date: **June 5, 2018**

Primary SIC Code: **4226**
Division of Air Quality, **Wilmington Regional Office**
Regional Office Address: **127 Cardinal Drive Extension**
Wilmington, North Carolina, 28405

Permit issued this the XX day of XXXXXX, XXXX

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

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

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 Permit Shield for Non-applicable Requirements

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

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 and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5	WIL1 WIL2 GACT JJJJJ	Two natural gas/No.2 fuel oil-fired boilers (14.7 and 1.7 million Btu per hour maximum heat input capacity, respectively)	NA	NA
7	117	One fixed roof storage tank storing any organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.1 psia at 84.1 degrees F (2,024,316 gallons)	NA	NA
7	203 204 205 207 208 209 210 211	Eight internal floating roof storage tanks storing any material listed in Section 2.2.A.1 Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.1 psia at 84.1 degrees F (357,336 gallons; 2,007,516 gallons; 363,720 gallons; 544,320 gallons; 579,054 gallons; 1,446,396 gallons; 1,515,192 gallons; and 1,502,214 gallons, respectively)	NA	NA
7	212 NSPS Kb ^π	One internal floating roof storage tanks storing any organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.1 psia at 84.1 degrees F (2,310,000 gallons)	NA	NA
7	213 214 215 225 226 NSPS Kb ^π	Five internal floating roof storage tanks storing any material listed in Section 2.2A.1 Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.1 psia at 84.1 degrees F (1,957,200 gallons; 498,246 gallons; 487,704 gallons; 223,000 gallons; and 1,006,278 gallons, respectively)	NA	NA
7	216 217 218 222 223 224 NSPS Kb ^π	Six fixed roof storage tanks storing any material listed in Section 2.2.A.1 Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 4.00 psia at 84.1 degrees F* (39,750 gallons; 39,750 gallons; 39,750 gallons; 38,430 gallons; 38,430 gallons; and 38,262 gallons, respectively) *Any organic/inorganic material with a vapor pressure equal to or greater than 4.00 psia but less than 11.1 psia at 84.1 degrees F may also be stored after the tank is equipped with an internal floating roof.	NA	NA

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7	219 220 NSPS Kb^π	Two internal floating roof storage tanks storing any material listed in Section 2.2.A.1 Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.1 psia at 84.1 degrees F (36,456 gallons, each)	NA	NA
7	221	One fixed roof storage tank storing any material listed in Section 2.2.A.1 Table 1 or any other organic/inorganic material not classified as a TAP (9,240 gallons)	NA	NA
12	TRL1 RLR	One tank truck loading rack utilizing a submerged-boom loading arm (the submerged-boom loading arm shall be used when loading any TAP listed in Table 1) One railcar loading rack utilizing a submerged-boom loading arm	ZTOF01	One vapor combustion unit
12	TLR2	One tank truck loading rack utilizing a submerged-boom loading arm	NA	NA
	MLR	One marine loading rack	SC01	One packed bed scrubber (5 gallons per minute single pass water injection rate)

^πApplies only if storing an organic liquid with maximum true vapor pressure greater than 0.5 psi in a tank with capacity of 39,889 gallons or more; or if storing an organic liquid with maximum true vapor pressure greater than 2.17 psi in a tank with capacity greater than 19,120 gallons but less than 39,889 gallons.

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 (ID No. WIL1), firing natural gas and/or No. 2 fuel oil with a maximum heat input capacity of 14.7 million Btu per hour; and
Boiler No. 2 (ID No. WIL2), firing natural gas and/or No. 2 fuel oil with a maximum heat input capacity of 1.7 million Btu per hour**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Oxides	Fuel oil combusted shall not contain greater than 500 ppmsulfur, by weight.	15A NCAC 02D .0402
Particulate Matter	0.54 pounds per million Btu heat input (ID No. WIL1) 0.60 pounds per million Btu heat input (ID No. WIL2)	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
Hazardous Air Pollutants	Only gaseous fuel not combined with any solid fuels burned in the boilers. Periodic testing, maintenance, and operator training on liquid fuel not to exceed 48 hours per calendar year.	15A NCAC 02Q .0317 (MACT Avoidance)

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

- Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from Boiler No. 1 (**ID No. WIL1**) into the atmosphere shall not exceed 0.54 pounds per million Btu heat input.
- Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil that are discharged from Boiler No. 2 (**ID No. WIL2**) into the atmosphere shall not exceed 0.60 pounds per million Btu heat input.

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

- 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 and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

- No monitoring/recordkeeping/reporting is required for particulate emissions from firing of natural gas and/or No. 2 fuel oil in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**).

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

- Emissions of sulfur dioxide from Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**) 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)]

- 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 and/or No. 2 fuel oil in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**).

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

- a. Visible emissions from Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**) 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 firing of natural gas and/or No. 2 fuel oil in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**).

4. 15A NCAC 02D.0402: SULFUR OXIDES

- a. The fuel oil combusted in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**) shall not contain greater than 500 ppm sulfur, by 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 Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402.

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

- c. The Permittee shall maintain records of each shipment of fuel oil received indicating the sulfur content of the fuel oil combusted in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402 if these records are not maintained.

**5. 15A NCAC 02Q.0317: AVOIDANCE CONDITIONS for
15A NCAC 02D.1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

- a. The National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources as promulgated in 40 CFR Part 63, Subpart JJJJJ and 15A NCAC 02D .1111 are not applicable to Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**) because the Boilers are gas-fired boilers, as defined in 40 CFR 63.11237, provided the following criteria are met:
 - i. The Boiler burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel.
 - ii. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- b. The Permittee shall maintain the records of the total number of hours per calendar year No. 2 fuel oil is burned in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**) during periodic testing, maintenance, or operator training. These records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- c. The Permittee shall submit a notification to the Regional Office within 10 days of exceeding 48 hours of burning No. 2 fuel oil in Boilers Nos. 1 and 2 (**ID Nos. WIL1 and WIL2**). The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if these records are not maintained.

**B. Sixteen internal floating roof storage tanks (ID Nos. 203, 204, 205, 207, 208, 209, 210, 211, 212, 213, 214, 215, 219, 220, 225, and 226) ; and
Eight fixed roof tanks (ID Nos. 117, 216, 217, 218, 221, 222, 223, and 224)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State-enforceable only See Section 2.2 A.1	15A NCAC 02D .1100
Odorous emissions	State-enforceable only See Section 2.2 A.2	15A NCAC 02D .1806
Hazardous air pollutants	See Section 2.2 A.3	15A NCAC 02Q .0317 (MACT Avoidance)
Volatile organic compounds	See Section 2.2 A.4	15A NCAC 02Q .0317 (PSD Avoidance)
<i>During Volatile Organic Liquid Service, Only</i>		
Volatile organic compounds	(ID Nos. 212, 213, 214, 215, 216, 217, 218, 219, 220, 222, 223, 224, 225, and 226 only) Internal floating roof shall be equipped with primary and secondary seals and other VOC abatement requirement when subject to Subpart Kb	15A NCAC 02D .0524 (40 CFR 60, Subpart Kb)
Volatile organic compounds	(ID Nos. 203, 204, 205, 207, 208, 209, 210, 211, 212, 213, 214, 215, 225, and 226 only) Each tank shall be equipped with an internal floating roof as described in condition 2.1.B.2 below	15A NCAC 02D .0949
<i>During Gasoline Service, Only</i>		
Volatile organic compounds	(ID No. 117 only) Internal floating roofs and other VOC abatement requirements when storing gasoline	15A NCAC 02D .0925
Volatile organic compounds	(ID No. 117 only) External floating roof gasoline and other VOC abatement requirements when storing gasoline	15A NCAC 02D .0927
Volatile organic compounds	(ID No. 117 only) No petroleum liquids with a true vapor pressure of 1.52 psia or above shall be stored in these tanks (no applicable after tank is equipped with self-supporting roof per 15A NCAC 02D .0927)	15A NCAC 02Q .0317 (15A NCAC 02D .0933 Avoidance)

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notifications, testing, monitoring, recordkeeping, and reporting requirements for storage vessels with a capacity greater than 20,000 gallons that is used to store volatile organic liquids **(ID Nos. 212, 213, 214, 215, 216, 217, 218, 219, 220, 222, 225, and 226)** contained in Environmental Management Commission Standard 15A NCAC 02D .0524 “New Source Performance Standards” (NSPS) as promulgated in 40 CFR Part 60 Subpart Kb “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984,” including Subpart A “General Provisions.” This subpart does not apply to storage vessels with the following: [40 CFR 60.110b(b)]:
 - i. Capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure less than 0.508 psia; or
 - ii. Capacity greater than or equal to 20,000 gallons but less than 40,000 gallons storing a liquid with a maximum true vapor pressure less than 2.18 psia; or
 - iii. Design capacity less than or equal to 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

Emission Standard

- b. The Permittee shall not store a volatile organic liquid with a maximum true vapor pressure greater than or equal to 11.1 psia in storage vessels with a capacity greater than or equal to 20,000 gallons (**ID Nos. 212, 213, 214, 215, 216, 217, 218, 219, 220, 222, 225, and 226**). [40 CFR 60.112b(b)]
- c. For storage vessels with a capacity greater than or equal to 40,000 gallons containing a volatile organic liquid with an as-stored maximum true vapor pressure equal to or greater than 0.754 psia but less than 11.1 psia (**ID Nos. 212, 213, 214, 215, 225, and 226**), or storage vessels with a capacity greater than or equal to 20,000 gallons but less than 40,000 gallons containing a volatile organic liquid with an as-stored maximum true vapor pressure equal to or greater than 4.00 psia but less than 11.1 psia (**ID Nos. 216, 217, 218, 219, 220, 222, 223, and 224**), the Permittee shall equip each storage vessel with an internal floating roof meeting the following specifications: [40 CFR 60.112b(a)].
 - i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
 - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - A. A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - B. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - C. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
 - iii. Each opening in a noncontact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and the rim space vents, is to provide a projection below the liquid surface.
 - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e. no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
 - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
 - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
 - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
 - vii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
 - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

Testing [40 CFR 60.113b(a)]

- d. The Permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the Permittee shall repair the items before filling the storage vessel.
- e. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the Permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulate on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Permittee shall repair the items or empty and remove the storage vessel

from the service within 45 days. If a failure that is detected during inspections cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the DAQ Regional Office in the inspection report. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- f. For vessels equipped with a double-seal system as specified in Section 2.1 B.1.c.iii.(B), above, the Permittee shall:
 - i. Visually inspect the vessel as specified in Section 2.1 B.1.e below at least every 5 years; or
 - ii. Visually inspect the vessel as specified in Section 2.1 B.1.c above.
- g. The Permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the Permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in Sections 2.1 B.1.c and 2.1 B.1.d.ii above and at intervals no greater than 5 years in the case of vessels specified in Section 2.1 B.1.d.i above.
- h. The Permittee shall notify the DAQ in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required to afford the DAQ the opportunity to have an observer present. If the inspection is not planned and the Permittee could not have known about the inspection 30 days in advance or refilling the tank, the Permittee shall notify the DAQ at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Regional Supervisor at least 7 days prior to the refilling.

Monitoring of Operations [40 CFR 60.116b]

- i. The Permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the vessel. [40 CFR 60.116b(b)]
 - j. The Permittee shall maintain the following records for at least two years.
 - i. The Permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period. [40 CFR 60.116b(c)]
 - ii. Available data of the storage temperature may be used to determine the maximum true vapor pressure as specified in 40 CFR 60.116b(e). [40 CFR 60.116b(e)]
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Recordkeeping and Reporting [40 CFR 60.115b and 60.116b]

- k. The Permittee shall notify DAQ within 30 days when the maximum true vapor pressure of a liquid exceeds the maximum true vapor pressure values for the following volume ranges: [40 CFR 60.116b(d)]
 - i. Each storage vessel with a design capacity greater than or equal to 40,000 gallons (**ID Nos. 212, 213, 214, 215, 225, and 226**) storing a liquid with a maximum true vapor pressure that is normally less than 0.754 psia; or
 - ii. Each storage vessel with a design capacity greater than or equal to 20,000 gallons but less than 40,000 gallons (**ID Nos. 216, 217, 218, 219, 220, 222, 223, and 224**) storing a liquid with a maximum true vapor pressure that is normally less than 4.00 psia.
- l. The Permittee shall keep a record of each inspection performed as required by Sections 2.1 B.1.b through B.1.e above. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- m. If any of the conditions described in Section 2.1 B.1.c above are detected during the annual visual inspection, the Permittee shall furnish a report to the Regional Supervisor within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

- n. After each inspection required by Section 2.1 B.1.d above that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Section 2.1 B.1.d.ii above, the Permittee shall furnish a report to the Regional Supervisor within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of Sections 2.1 B.1.b or 2.1 B.1.d above and list each repair made.
- o. The Permittee shall keep copies of all records and reports, for at least two years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

2. 15A NCAC 02D .0949: STORAGE OF MISCELLANEOUS VOLATILE ORGANIC COMPOUNDS

- a. The Permittee shall not place, store, or hold in these sources (**ID Nos. 203, 205, 207, 208, 209, 210, 211, 213, 214, 215, 225, and 226**) with capacities greater than 50,000 gallons, any liquid volatile organic compounds that has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, unless:
 - i. The source is designed and equipped with a floating pontoon, double deck type floating roof or internal pan type floating roof equipped with closure seals to enclose any space between the cover's edge and compartment wall;
 - ii. This control equipment shall not be permitted for volatile organic compounds with a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions; and
 - iii. All source gauging or sampling devices shall be gas -tight except when source gauging or sampling is taking place.

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

- b. The Permittee shall maintain records in a logbook (written or electronic format) on-site and made available to the Division of Air Quality personnel upon request. The logbook shall record the following:
 - i. The contents of the source on a monthly basis (at the end of the month),
 - ii. The vapor pressure of the contents of the source on a monthly basis, at average monthly temperature (at the end of the month), and
 - iii. If the contents change during the same month, there shall be two sets of records logged for that month.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0949 if these records are not maintained.

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

- c. No reporting is required for 15A NCAC 02D .0949 for these emission sources.

3. 15A NCAC 02D .0925: PETROLEUM LIQUID STORAGE IN FIXED ROOF TANKS

- a. Gasoline shall not be stored in a storage vessel (**ID No. 117**) unless:
 - i. Each storage vessel has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall;
 - ii. All openings, except stub drains are equipped with covers, lids, or seals such that:
 - A. The cover, lid, or seal is in closed position at all times except when in actual use;
 - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - C. Rim vents, if provided, are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and
 - iii. Each storage vessel is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

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

- b. If gasoline is stored in a storage vessel (**ID No. 117**), the Permittee shall perform inspection and maintenance on this storage vessel as follows:
 - i. Routine visual inspection shall be conducted through roof hatches once per month; and
 - ii. A complete inspection of the floating roof and seal shall be conducted whenever the tank is emptied for maintenance, shell inspection, cleaning, or for other non-operational reasons or whenever excessive vapor leakage is observed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0925 if the tanks are not inspected and maintained.

- c. If gasoline is stored in a storage vessel (**ID No. 117**), the Permittee shall maintain a log (written or electronic format)

of the following records:

- i. Reports of the results of the required inspections;
- ii. The average monthly storage temperature, and true vapor pressures of petroleum liquids stored; and
- iii. The throughput quantities and types of petroleum liquids for each storage vessel.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0925 if these records are not maintained.

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

- d. If gasoline is stored in a storage vessel (**ID No. 117**), the Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 B.2.b and 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. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0927: BULK GASOLINE TERMINALS

[APPLIES ONLY IF GASOLINE IS STORED]

- a. Except as provided in this permit, gasoline shall not be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation.
- b. The Permittee shall paint all tanks used for gasoline white or silver at the next scheduled painting.
- c. The following equipment shall be required on all tanks storing gasoline:
 - i. Rim-mounted secondary seals on all internal floating roof tanks;
 - ii. Gaskets on deck fittings; and
 - iii. Floats in the slotted guide poles with a gasket around the cover of the poles.

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

- d. If gasoline is stored in a tank, to assure compliance, the Permittee shall perform monthly inspections and perform maintenance on the tanks storing gasoline as recommended by the manufacturer. In addition to the manufacturer's inspections and maintenance recommendations, or if there are no manufacturer's inspections and maintenance recommendations, as a minimum, the inspections and maintenance requirement must include a monthly external inspection of the structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0927 if the tanks are not inspected and maintained.
- e. If gasoline is stored in a tank, the Permittee shall maintain a logbook (written or electronic) of the results of the required inspections and any maintenance performed on the tanks.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0927 if these records are not maintained.

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

- f. If gasoline is stored in a tank, the Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 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 tank truck loading rack utilizing a submerged-boom loading arm (ID No. TLR1)**
One railcar loading rack utilizing a submerged-boom loading arm (ID No. RLR), with associated vapor combustion unit (ID No. ZTOF01)
One tank truck loading rack utilizing a submerged-boom loading arm (ID No. TLR2)
One marine loading rack (ID No. MLR) with associated packed bed scrubber (ID No. SC01)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	(ID No. TRL1, TRL2, and RLR only, when loading gasoline) Gasoline tank truck loading rack emissions shall not exceed 35 milligrams of VOC per liter of gasoline loaded	15A NCAC 02D .0927
Volatile organic compounds	Gasoline tank truck and vapor collection system specifications	15A NCAC 02D .0932
Volatile organic compounds	(ID Nos. RLR, TLR1, and TLR2 when loading volatile organic compounds other than gasoline) Submerged loading of volatile organic compounds with a vapor pressure of 1.5 pounds per square inch absolute or greater	15A NCAC 02D .0948
Toxic air pollutants	State-enforceable only See Section 2.2 A.1	15A NCAC 02D .1100
Odorous emissions	State-enforceable only See Section 2.2 A.2	15A NCAC 02D .1806
Hazardous air pollutants	See Section 2.2 A.3	15A NCAC 02Q .0317 (MACT Avoidance)
Volatile organic compounds	See Section 2.2 A.4	15A NCAC 02Q .0317 (PSD Avoidance)

1. 15A NCAC 02D.0927: BULK GASOLINE TERMINALS

- a. The Permittee shall not load gasoline into any tank truck or trailer from one tank truck loading rack (**ID No. TLR2**) and the railcar loading rack (**ID No. RLR**). Gasoline shall not be loaded into any tank trucks or trailers from one tank truck loading rack (**ID No. TLR1**) unless the following requirements are met:
 - i. The source shall be equipped with a vapor control system that prevents the emissions of volatile organic compounds from exceeding 35 milligrams per liter of gasoline loaded. The owner or operator shall obtain from the manufacturer and maintain in his records a pre-installation certification stating the vapor control efficiency of the system in use;
 - ii. Displaced vapors and gases shall be vented to the vapor control system or a flare;
 - iii. A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and
 - iv. All loading and vapor lines shall be equipped with fittings which are vapor-tight connections and which are automatically and immediately closed upon disconnection.
- b. The Permittee shall not allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation, or allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.
- c. The Permittee shall not load, or allow to be loaded, gasoline into any tank truck or trailer unless the tank truck or trailer has been certified leak tight in accordance with 15A NCAC 02D .0932(c) within the last 12 months.

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

- d. This tank truck loading rack (**ID No. TLR1**) shall be equipped with a vapor combustion unit (**ID No. ZTOF01**) that prevents VOC emissions from the rack from exceeding 35 milligrams of volatile organic compounds per liter of gasoline loaded. The vapor combustion unit shall be operated and maintained in accordance with 15A NCAC 02D .0932(d) "Gasoline Tanks, Trucks and Vapor Collection Systems."

- e. According to 15A NCAC 02D .0903, the Permittee shall visually inspect the following for leaks each day that the terminal is both manned and open for business. If no leaks are found, Permittee shall record that no leaks were found. If a leak is found, the Permittee shall record the information specified in 2.1.C.1(g) The Permittee shall repair all leaks found according to 2.1.C.1(h).
 - i. the vapor collection system;
 - ii. the vapor combustion unit (**ID No. ZTOF01**); and
 - iii. each lane of the loading rack while a gasoline cargo tank is being loaded.
- f. The Permittee shall inspect the following for leaks on a weekly basis. The weekly inspection shall be done using sight, sound, or smell; a meter used to measure volatile organic compounds; or an explosimeter. An inspection using either a meter used to measure volatile organic compounds or an explosimeter shall be conducted every month. If no leaks are found, the Permittee shall record the date that the inspection was done and that no leaks were found. If a leak is found, the Permittee shall record the information specified in 2.1.C.1(g) The Permittee shall repair all leaks found according to 2.1.C.1(h).
 - i. the vapor collection system;
 - ii. the vapor combustion unit (**ID No. ZTOF01**); and
 - iii. each lane of the loading rack while a gasoline cargo tank is being loaded.
- g. For each leak found under conditions 2.1.C. 1(e) and (f), the Permittee shall record:
 - i. the date of the inspection;
 - ii. the findings detailing the location, nature, and severity of each leak;
 - iii. the corrective action taken;
 - iv. the date when corrective action was completed; and
 - v. any other information that the terminal deems necessary to demonstrate compliance.
- h. The Permittee shall repair all leaks as follows:
 - i. The vapor collection hose that connects to the cargo tank shall be repaired or replaced before the gasoline truck tank is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline truck tank.
 - ii. All other leaks shall be repaired as expeditiously as possible but no later 15 days from their detection. If more than 15 days are required to make the repair, the reasons that the repair cannot be made shall be documented, and the leaking equipment shall not be used after the fifteenth day from when the leak detection was found until the repair is made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0927 if these records are not maintained.

2. 15A NCAC 02D .0932: GASOLINE CARGO TANK AND VAPOR COLLECTION SYSTEMS

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

- a. Gasoline cargo tank and their vapor collection systems shall be tested annually by a cargo tank testing facility. The facility shall test procedure defined by 15A NCAC 02D .2615 to certify the gasoline cargo tank leak tight. The gasoline cargo tank shall not be used unless it is certified leak tight. Each gasoline cargo tank that has been certified leak tight shall display a sticker near the DOT certification plate as required by 49 CFR 180.415.
- b. During gasoline loading/unloading operations there shall be no liquid leaks and no vapor leakage from the cargo tank or vapor collection system that results in a reading equal to or greater than 100 percent of the lower explosive limit at one inch around the perimeter of each potential leak source as detected by a combustible gas detector using the test procedure described in 15A NCAC 02D .2615. If such a leak is detected, the cargo tank, vapor collection system, and/or vapor control systems shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and retested and found to be in compliance with the standard.
- c. The Permittee shall test the vapor collection system, at least once per year according to the procedures provided in 15A NCAC 02D .0912.
- d. The vapor collection system and vapor control systems shall be designed and operated to prevent gauge pressure in the cargo tank from exceeding 18 inches of water and to prevent a vacuum of greater than six inches of water.
- e. The Permittee shall test, according to 15A NCAC 02D .0912, the vapor collection system at least once per year. If after two complete annual checks no more than 10 leaks are found, DAQ shall allow less frequent monitoring. If

more than 20 leaks are found, DAQ shall require the frequency of monitoring be increased.

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

- f. The Permittee shall maintain records of all certification testing and repairs. The records shall identify the gasoline cargo tank, vapor collection system, or vapor control system; the date of the test or repair; and, if applicable, the type of repair and date of retest. The records of leak tests shall include the following:
 - i. The name, address, and telephone number of cargo tank testing facility performing the leak test;
 - ii. The name and signature of the individual performing the leak test;
 - iii. The name and address of the owner of the tank;
 - iv. The identification number of the tank;
 - v. The documentation of tests performed including the date and summary of results;
 - vi. The continued qualification statement and returned to service status; and
 - vii. a list or description of identified corrective repairs to the tank. If none are performed then the report shall state "no corrective repairs performed"

A copy of the most recent leak testing report shall be kept with the cargo tank and a copy of the report shall be filed at the terminal. The records shall be maintained for at least two years after the date of the testing or repair, and copies of such records shall be made available within a reasonable time to DAQ upon written request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0932 if these records are not maintained.

3. 15A NCAC 02D.0948: VOC EMISSIONS FROM TRANSFER OPERATIONS

- a. The Permittee shall not load in any one day more than 20,000 gallons of any volatile organic compounds (not including gasoline) with a vapor pressure of 1.5 psia or greater under actual conditions from the railcar loading rack and the tank truck loading racks (**ID Nos. RLR, TLR1, and TLR2**) into any tank-truck, trailer, or railroad tank car unless the loading operation unless the loading rack use submerged loading through boom loaders that extend down into the compartment being loaded or by other methods that are at least as efficient based on source testing or engineering calculations.

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

- b. No monitoring/recordkeeping/reporting is required.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State-enforceable only See Section 2.2 A.1	15A NCAC 02D .1100
Odororous emissions	State-enforceable only Odororous emissions must be controlled	15A NCAC 02D .1806
Hazardous air pollutants	Less than 10 tons per year any single HAP Less than 25 tons per year combination HAPs	15A NCAC 02Q .0317 (MACT Avoidance)
Volatile organic compounds	Less than 249 tons per year VOC	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile organic compounds	(ID No. TLR1 only, when loading gasoline) Compliance Assurance Monitoring	15A NCAC 02D .0614

State-enforceable only

1. 15A NCAC 02D.1100: CONTROL OF TOXIC AIR POLLUTANTS

To ensure compliance with the air toxics regulations of 15A NCAC 02D .1100, as requested by the Permittee, the following operational limits apply: In order to maintain compliance with the following limits, none of the below listed scenarios may be conducted simultaneously with any other listed scenario.

Table 1: List of Toxic Air Pollutant Materials that may be loaded or stored at CTI of North Carolina

Substance Name	CAS Number	TAP
Acetic Acid	64-19-7	Y
Ethyl Acetate	141-78-6	Y
Ethylenediamine	107-15-3	Y
Glycol Ethers	GLYCOL ETHERS	Y
Hexane	110-54-3	Y
Methyl Ethyl Ketone	78-93-3	Y
Methyl Isobutyl Ketone	108-10-1	Y
Styrene	100-42-5	Y
Sulfuric Acid	7664-93-9	Y
Toluene	108-88-3	Y
Xylene	1330-20-7	Y

- a. Truck Loading Rack No. 1 (**ID No. TLR1**) Maximum Loading Rates (gallons/time). The submerged-boom loading arm shall be used when loading any TAP listed in Table 1.

Substance Name	gallon/1-hour	gallon/24-hours
Acetic Acid	8,525	NA
Ethyl Acetate	35,955	NA
Ethylenediamine	6,096	94,960
Glycol Ethers	33,952	NA
N-Hexane	NA	24,482
Methyl Ethyl Ketone	28,575	155,096
Methyl Isobutyl Ketone	31,945	353,888
Styrene	32,519	NA
Sulfuric Acid	51	797
Toluene	46,199	503,373
Xylene	162,428	875,911

- b. Truck Loading Rack No. 2 (**ID No. TLR2**) Maximum Loading Rates (gallons/time). The submerged-boom loading arm shall be used when loading any TAP listed in Table 1.

Substance Name	1 Hour	24 Hour
Acetic Acid	13,223	NA
Ethyl Acetate	55,767	NA
Ethylenediamine	9,454	165,738
Glycol Ethers	52,659	NA
N-Hexane	NA	42,729
Methyl Ethyl Ketone	44,321	270,695
Methyl Isobutyl Ketone	49,547	617,656
Styrene	50,438	NA
Sulfuric Acid	79	1,391
Toluene	71,655	878,557
Xylene	251,929	1,528,763

- c. Railcar Loading Rack (**ID No. RLR**) Maximum Loading Rates (gallons/time). The submerged-boom loading arm shall be used when loading any TAP listed in Table 1.

Substance Name	1 Hour	24 Hour
Acetic Acid	8,976	NA
Ethyl Acetate	37,857	NA
Ethylenediamine	6,418	145,308
Glycol Ethers	35,747	NA
N-Hexane	NA	37,462
Methyl Ethyl Ketone	30,087	237,327
Methyl Isobutyl Ketone	33,634	541,519
Styrene	34,239	NA
Sulfuric Acid	54	1,220
Toluene	48,643	770,260
Xylene	171,020	1,340,317

- d. Simultaneous operation of Truck Loading Rack No. 1 and Railcar Loading Rack (**ID Nos. TLR1 and RLR**) Maximum Loading Rates (gallons/time). The submerged-boom loading arm shall be used when loading any TAP listed in Table 1.

Substance Name	1 Hour	24 Hour
Acetic Acid	8,525	NA
Ethyl Acetate	35,955	NA
Ethylenediamine	6,096	94,960
Glycol Ethers	33,952	NA
N-Hexane	NA	24,482
Methyl Ethyl Ketone	28,575	155,096
Methyl Isobutyl Ketone	31,945	353,888
Styrene	32,519	NA
Sulfuric Acid	51	797
Toluene	46,199	503,373
Xylene	162,428	875,911

- e. Simultaneous operation of Truck Loading Rack No. 2 and Railcar Loading Rack (**ID Nos. TLR2 and RLR**) Maximum Loading Rates (gallons/time). The submerged-boom loading arm shall be used when loading any TAP listed in Table 1.

Substance Name	1 Hour	24 Hour
Acetic Acid	8,976	NA

Ethyl Acetate	37,857	NA
Ethylenediamine	6,418	145,308
Glycol Ethers	35,747	NA
N-Hexane	NA	37,462
Methyl Ethyl Ketone	30,087	237,327
Methyl Isobutyl Ketone	33,634	541,519
Styrene	34,239	NA
Sulfuric Acid	54	1,220
Toluene	48,643	770,260
Xylene	171,020	1,340,317

- f. Internal Floating Roof Tanks (**ID Nos. 203 through 211, 213, 215, 219 through 220, and 226**) Maximum Filling Rates (Total gallons/time that can be filled. The total gallons/time can be apportioned among the tanks in any amount, but the total gallons/time cannot be exceeded).

Substance Name	1 Hour	24 Hour
Acetic Acid	345,458	NA
Ethyl Acetate	2,296,327	NA
Ethylenediamine	68,681	776,391
Glycol Ethers	39,637	NA
N-Hexane	NA	1,056,129
Methyl Ethyl Ketone	1,834,794	7,226,226
Methyl Isobutyl Ketone	1,898,317	15,259,954
Styrene	1,241,455	NA
Sulfuric Acid	11,412	129,000
Toluene	2,660,797	21,037,167
Xylene	6,574,602	25,726,787

- g. Fixed Tanks (**ID Nos. 216 through 218 and 221 through 224**) Maximum Filling Rates (Total gallons/time that can be filled. The total gallons/time can be apportioned among the tanks in any amount, but the total gallons/time cannot be exceeded).

Substance Name	1 Hour	24 Hour
Acetic Acid	15,228	NA
Ethyl Acetate	64,221	NA
Ethylenediamine	10,887	356,532
Glycol Ethers	60,642	NA
N-Hexane	NA	94,238
Methyl Ethyl Ketone	51,040	597,013
Methyl Isobutyl Ketone	57,058	1,362,227
Styrene	58,084	NA
Sulfuric Acid	91	3,068
Toluene	82,517	1,937,640
Xylene	290,118	3,371,656

Limit

- h. The internal floating roof storage tank (ID No. 212) shall not store any organic/inorganic material containing a TAP.

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

- i. The Permittee shall maintain records of the process operational information necessary to determine compliance with 15A NCAC 02D .1100. Daily records shall be made of the above listed 1-hour and 24-hour loading and filling operations to verify the operational limitations of this requirement. As an alternative, the Permittee may demonstrate that the physical limitations of the system would prevent the above operational limits from being exceeded. The Permittee shall also maintain any other records as necessary to determine compliance with 15A NCAC 02D .1100. All

records of compliance shall be maintained in a logbook and made available for inspection by personnel of the Division of Air Quality.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1100 if these records are not maintained.

State-enforceable only

2. 15A NCAC 02D.1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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.

3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation including 40 CFR 63 Subparts R (Gasoline Distribution) and EEEE (Organic Liquid Distribution), facility emissions shall be less than:
 - i. 10 tons per year of each hazardous air pollutant, and
 - ii. 25 tons per year of all hazardous air pollutants combined.
- b. Hazardous air pollutants emissions from the truck loading rack (**ID No. TLR1**) and the railcar loading rack (**ID No. RLR**) shall be controlled by the vapor combustion unit (**ID No. ZTOF01**) in demonstrating compliance with this MACT avoidance condition.
- c. Methanol emissions from the marine loading rack (**ID No. MLR**) shall be controlled by the packed bed scrubber (**ID No. SC01**) in demonstrating compliance with this MACT avoidance condition. The scrubbers shall use once-through water at a rate of at least 5 gallons per minute until the control efficiency is determined by testing. The packed bed scrubber (**ID No. SC01**) is not required to be used if methanol is not being loaded at the marine loading rack (**ID No. MLR**).
 - i. The marine loading rack is permitted to use scrubber control efficiency in the determination of methanol emissions.
 - ii. Emission calculations may not credit any scrubber control efficiency for the loading of any VOL containing a HAP until a performance test is conducted to determine the control efficiency and scrubber operating parameters (flow rate) for that HAP.
- d. The Permittee shall not load any VOL containing TAPs from the marine loading rack unless an application is made to the DAQ evaluating TAPs from this emissions source in the facility wide assessment.

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

- e. The Permittee shall conduct a destruction efficiency performance test on the vapor combustor (**ID No. ZTOF01**) to determine the percent reduction of hazardous air pollutant emissions within 90 days of modification of the vapor combustor.
 - i. The Permittee shall conduct the testing in accordance with 15A NCAC 02D .2601.
 - ii. All required continuous monitoring systems shall be installed, calibrated and operating when the performance tests are conducted.
 - iii. Results of the performance tests shall be submitted to the Regional Supervisor, DAQ within 60 day after the completion of testing.
 - iv. Overall control efficiency (CE) is 97.7% for the vapor combustion unit (**ID No. ZTOF01**) as a result of the testing completed on **January 31, 2018** and approved by DAQ. This overall control efficiency shall be amended per any required subsequent performance testing and the control efficiency of that most recent test shall be used.
- f. The Permittee shall conduct destruction efficiency performance test on the scrubber (**ID No. SC01**) installed on the marine loading rack (**ID No. MLR**) to determine the percent reduction of hazardous air pollutant emissions within 90 days of modification of the packed bed scrubber.
 - i. The Permittee shall conduct the testing in accordance with 15A NCAC 02D .2601.
 - ii. All required continuous monitoring systems for water injection rate determination shall be installed, calibrated and operating when the performance tests are conducted.
 - iii. Results of the performance tests shall be submitted to the Regional Supervisor, DAQ within 60 days after the completion of testing.

- iv. Overall control efficiency (CE) for methanol is 97.43% for the packed bed scrubber (**ID No. SC01**) as a result of the testing completed on **July 10, 2008** and approved by DAQ. This overall control efficiency shall be amended per any required subsequent performance testing and the control efficiency of that most recent test shall be used.
- v. The Permittee shall conduct subsequent testing of the scrubber, in accordance with the above provisions to determine the control efficiency and scrubber operating parameters for other HAPs that may be loaded at the marine loading rack before any control efficiency may be claimed in demonstrating compliance with this avoidance condition.

If the results of this test are above the limit given in Section 2.2.A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

- g. The Permittee shall install, calibrate, maintain, and operate a device, such as UV beam sensor or thermocouple, to continuously monitor and record the presence of a flame within the combustion chamber of the vapor combustor unit (**ID No. ZTOF01**) and a device to prevent the loading of vapors to the combustion unit when a flame is not detected when control is required.
- h. If the packed bed scrubber (**ID No. SC01**) is taken out of service, the Permittee must inspect the scrubber and ensure that it is in good working condition before putting the scrubber back into service.
- i. The Permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record water flow rate to the packed bed scrubber (**ID No. SC01**).
- j. The Permittee shall use the following equations to determine the total monthly emissions of combined hazardous air pollutants and the total monthly emissions of each listed hazardous air pollutant facility-wide:
 - i. Calculation of monthly HAP emissions from each truck loading rack (**ID Nos. TLR1 and TLR2**), the marine loading rack (**ID No. MLR**), and the railcar loading rack (**ID No. RLR**):

$$HAP_i = \sum_{i=1}^n 0.000347 \times \left(\frac{VP_i}{14.7} \right) \times (SF) \times (MW_i) \times (G_i) \times [1 - (CE \times FC)]$$

Where:

HAP_i = monthly individual HAP emissions from each loading rack (pounds per month)

0.000347 = the conversion factor for gallons to pound moles of volatile organic liquid at 29°C (84°F)

VP_i = vapor pressure for each HAP processed or stored on site (psia) SF = saturation factor for each truck and railcar loading rack shall be 0.55 for loading tanks that are clean, dry and odor free, 1.00 for all other tanks. The value for the marine loading rack shall be 0.75.

MW_i = molecular weight for each HAP processed or stored on site (pounds per pound-mole)

G_i = throughput of HAP liquid for each calendar month for each specific loading rack (gallons)

CE = overall control efficiency of the HAP abatement system for each loading rack (percent/100). CE is considered to be 0% if uncontrolled (e.g., control device(s) not operating, once through water rater of the scrubber (**ID No SC01**) drops below 5 gallons per minute, and/or no flame detected in the combustion unit (**ID No ZTOF01**)). CE will be the value from the most recent performance test performed per Sections 2.2 A.3.e.

FC = control usage calculated for each HAP for each loading rack (**ID Nos TLR1, RLR, MLR**) determined by the gallons of HAP processed through the loading rack during periods of control and non-control calculated on a monthly basis (e.g., if the control device was used for 50% of the HAP loaded, then $FC = 0.5$)

n = number of HAPs loaded at the rack

- ii. Calculation of monthly individual HAP emissions from each internal and external floating roof tank and each fixed-roof tank.

$$HAP_j = (Ef_j) \times (G_j)$$

Where:

HAP_j = Monthly individual HAP (j) emissions from each storage tank (pounds per month)
 Ef_j = Emission factor based upon TANKS 4.09D modeling (with meteorological data included in the TANKS 4.09D model) specific to each storage tank (pounds of HAP emitted per gallon of HAP liquid throughput)
 G_j = Throughput of HAP liquid for each calendar month for the storage tank (gallons)

- iii. The Permittee shall include HAP emissions from the landing of storage tank floating roofs, degassing of any storage tanks, and from the sources of emissions associated with storage tanks and loading racks into the monthly HAP calculations.
- iv. Each individual HAP is calculated as follows:

$$HAP_{ti} = \sum_{i=1}^m HAP_i + \sum_{j=1}^o HAP_j$$

Where:

HAP_{ti} = total monthly emissions of an individual HAP
 m = total number of loading racks
 o = total number of storage tanks

- v. Monthly total HAPs are calculated as follows:

$$HAP = \sum_{ti=1}^p HAP_{ti}$$

Where:

HAP = total HAPs emitted in the month
 p = total number of HAPs

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the HAP emissions are not monitored or if emissions exceed the limit(s) in Section 2.2.A.3.a of this permit.

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

- k. The Permittee shall maintain the following records:
 - i. The amount of HAP-containing liquids processed or stored on site in each loading rack or tank (gallons);
 - ii. The molecular weight of each HAP processed or stored on site (pounds per pound-mole);
 - iii. The vapor pressure of each HAP processed or stored on site (psia);
 - iv. Operating hours of the control devices (**ID Nos. ZTOF01 and SC01**) and the volatile organic liquids loaded during those hours of operation for the loading racks that they control;
 - v. The flow rate of water through the packed bed scrubber (**ID No SC01**) during operational hours;
 - vi. The control efficiency and operating parameters determined during testing and approved by DAQ, that are required to maintain the control efficiency for each HAP controlled at the marine terminal (**ID No. MLR**) by the packed bed scrubber (**ID No. SC01**); and
 - vii. Each HAP loaded at the marine terminal (**ID No. MLR**), the periods when they were loaded, and the required scrubber operating parameters during each of the periods of loading.
- l. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the HAP emissions records are not maintained or if emissions exceed the limit(s) in Section 2.2 A.3.a of this permit.

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

- m. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Section(s) 2.1 A.1.b and 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 HAP emissions from each truck loading rack (**ID Nos TLR1 and TLR2**), marine loading rack (**ID No. MLR**), and railcar loading rack (**ID No. RLR**);
 - (A) for each month during the semi-annual period, and
 - (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total;
- ii. The HAP emissions from each internal floating roof tank and each fixed-roof tank;
 - (A) for each month during the semi-annual period, and
 - (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total;
- iii. The total individual and total combined HAP emissions for each HAP and combination of HAPs;
 - (A) for each month during the semi-annual year period, and
 - (B) for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total.

4. 15A NCAC 02Q.0317: AVOIDANCE CONDITIONS for 15A NCAC 02D.0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid the applicability of this regulation, the above emission sources shall discharge into the atmosphere less than 249 tons of VOCs per consecutive 12-month period.
- b. VOCs from the truck loading rack (**ID No. TLR1**) and the railcar loading rack (**ID No. RLR**) may be controlled by the vapor combustion unit (**ID No. ZTOF01**) in demonstrating compliance with this PSD avoidance condition.
- c. Methanol emissions from the marine loading rack (**ID No. MLR**) may be controlled by the packed bed scrubber (**ID No. SC01**) in demonstrating compliance with this PSD avoidance condition. The scrubber shall use once-through water at a rate of at least 5 gallons per minute until the control efficiency is determined by testing.
- d. The marine loading rack is permitted to use scrubber control efficiency in the determination of methanol emissions.
 - i. Emission calculations may not credit any scrubber control efficiency for the loading of any VOL until a performance test is conducted to determine the control efficiency and scrubber operating parameters (flow rate) for that VOC.
 - ii. The Permittee shall not load any VOL containing TAPs from the marine loading rack unless an application is made to the DAQ evaluating TAPs from this emissions source in the facility wide assessment.

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

- e. The Permittee shall conduct a destruction efficiency performance test on the vapor combustor (**ID No. ZTOF01**) to determine the percent reduction of volatile organic compound emissions once per each 5-year permit term.
 - i. The Permittee shall conduct the testing in accordance with 15A NCAC 02D.2601.
 - ii. All required continuous monitoring systems shall be installed, calibrated and operating when the performance tests are conducted.
 - iii. Results of the performance tests shall be submitted to the Regional Supervisor, DAQ within 60 days after the completion of testing.
 - iv. Overall control efficiency (CE) is 97.13% for the vapor combustion unit (**ID No. ZTOF01**) as a result of the testing completed on **May 2, 2012** and approved by DAQ. This overall control efficiency of that most recent test shall be used.
- f. The Permittee shall conduct destruction efficiency performance test on the scrubber (**ID No. SC01**) to determine the percent reduction of volatile organic compound emissions within 90 days of modification to the packed bed scrubber.
 - i. The Permittee shall conduct the testing in accordance with 15A NCAC 02D.2601.
 - ii. All required continuous monitoring systems for water injection rate determination shall be installed, calibrated and operating when the performance tests are conducted.
 - iii. Results of the performance tests shall be submitted to the Regional Supervisor, DAQ within 60 days after the completion of testing.
 - iv. Overall control efficiency (CE) for methanol is 97.43% for the packed bed scrubber (**ID No. SC01**) as a result of the testing completed on **July 10, 2008** and approved by DAQ. This overall control efficiency shall be amended per the required subsequent performance testing and the control efficiency of that most recent test shall be used.
 - v. The Permittee shall conduct subsequent testing of the scrubber, in accordance with the above provisions to determine the control efficiency and scrubber operating parameters for other HAPs that may be loaded at the marine loading rack before any control efficiency may be claimed in demonstrating compliance with this avoidance condition.

If the results of this test are above the limit given in Section 2.2.A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

- g. The Permittee shall install, calibrate, maintain, and operate a device, such as a UV beam sensor or thermocouple, to continuously monitor and record the presence of a flame within the combustion chamber of the vapor combustor unit (**ID No. ZTOF01**) and a device to prevent the loading of vapors to the combustion unit when a flame is not detected when control is required.
- h. The Permittee shall, install, calibrate, maintain, and operate a device to continuously monitor and record water flow rate to the packed bed scrubber (**ID No. SC01**).
- i. The Permittee shall use the following equations to determine the total monthly emissions of VOCs facility-wide:
 - i. Calculation of monthly VOC emissions from each truck loading rack (**ID Nos. TLR1 and TLR2**), the marine loading rack (**ID No. MLR**), and the railcar loading rack (**ID No. RLR**):

$$VOC_i = \sum_{i=1}^n 0.000347 \times \left(\frac{VP_i}{14.7} \right) \times (SF) \times (MW_i) \times (G_j) \times [1 - (CE \times FC)]$$

Where:

VOC_i = sum of the monthly VOC emissions from each specified loading rack for each volatile organic liquid (i) in pounds per month.

0.000347 = the conversion factor for gallons to pound moles of volatile organic liquid at 29°C (84°F)

VP_i = Vapor pressure for each volatile organic liquid processed or stored on site in pounds per square inch

SF = Saturation Factor for each truck and railcar loading rack shall be 0.55 for loading tanks that are clean, dry and odor free, 1.00 for all other tanks. The value shall be 0.75 for the marine loading rack.

MW_i = Molecular weight for each VOC processed or stored on site in pounds per pound-mole

G_j = Throughput of VOL for each calendar month for each specific loading rack in gallons

CE = Overall VOC control efficiency for the abatement system on the loading rack (percent/100). CE is considered to be 0% if uncontrolled (e.g., control device(s) not operating, once through water rate of the scrubber (**ID No. SC01**) drops below 5 gallons per minute, and/or no flame detected in combustion unit (**ID No. ZTOF01**)). The value of the most recent performance test shall be used.

FC = Fractional control value calculated for VOC for each loading rack (**ID Nos. TLR1, RLR, MLR**) determined by the gallons of VOL processed through the loading rack during periods of control and non-control calculated on a monthly basis (e.g., if the control device was used for 50% of the VOL loaded, then FC = 0.5)

n = total number of different VOLs

- ii. Calculation of monthly VOC emissions from each internal and external floating roof tanks and each fixed-roof tank

$$VOC_t = \sum_{i=1}^m [(EF_i) + (G_i)]$$

Where:

VOC_t = Monthly total VOC emissions from each specific storage tank for each VOL(i) in pounds per month

EF_i = Emission factor based upon TANKS 4.09D modeling (with meteorological data included in the TANKS 4.09D model) specific to each storage tank (pounds of VOC emitted per gallon of VOL throughput)

G_i = Throughput of each VOL(j) for each calendar month for each specific storage tank in gallons

m = Total number of VOLs

- iii. The Permittee shall include VOC emissions from the loading of storage tanks, degassing of any storage tank floating roofs, and from other sources of emissions associated with storage tanks and loading racks into the monthly VOC emissions.
- iv. Facility wide VOC is calculated as follows:

$$VOC_{fw} = \sum_{l=1}^p VOC_l + \sum_{t=1}^q VOC_t$$

Where:

VOC_{fw} = facility wide monthly VOC emissions

VOC_l = monthly VOC emissions from each loading rack for all VOLs loaded

VOC_t = monthly VOC emissions from each storage tank for all VOLs loaded

p = total number of loading racks

q = total number of tanks

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions are not monitored or if emissions exceed the limit(s) in Section 2.2.A.2.a of this permit.

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

- j. The Permittee shall maintain the following records:
 - i. The amount of VOL processed or stored on site in each loading rack or tank (gallons);
 - ii. The molecular weight of each VOL processed or stored on site (pounds per pound-mole);
 - iii. The vapor pressure of each VOL processed or stored on site (psia);
 - iv. Operating hours of the control devices (**ID Nos. ZTOF01 and SC01**) and the VOLs loaded during those hours of operation from the loading racks that they control;
 - v. The flow rate of water through the packed bed scrubber (**ID No. SC01**) during operational hours;
 - vi. The control efficiency and operating parameters determined during testing and approved by DAQ, that are required to maintain the control efficiency for each VOC controlled at the marine terminal (**ID No. MLR**) by the packed bed scrubber (**ID No. SC01**); and
 - vii. Each VOL loaded at the marine terminal (**ID No. MLR**), the periods when they were loaded, and the required scrubber operating parameters during each of the periods of loading.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions records are not maintained or if emissions exceed the limit(s) in Section 2.2 A.4.a of this permit.

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

- k. The Permittee shall submit a semi-annual report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period 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 VOC emissions from each truck loading rack (**ID Nos. TLR1 and TLR2**), marine loading rack (**ID No. MLR**), and railcar loading rack (**ID No. RLR**);
 - (A) For each month during the semi-annual year period, and
 - (B) For each 12-month period ending on each month during the semi-annual period using a 12-month rolling total;
 - ii. The VOC emissions from each internal and external floating roof tanks and each fixed-roof tank;
 - (A) For each month during the semi-annual year period, and
 - (B) For each 12-month period ending on each month during the semi-annual period using a 12-month rolling total;
 - iii. The total facility wide VOC emissions;
 - (A) For each month during the semi-annual period, and
 - (B) For each 12-month period ending on each month during the semi-annual period using a 12-month rolling total

5. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. Per 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following.

- b. Background.
- Emission Unit. One tank truck loading rack (**ID No. ZTOF01**).
 - Applicable Regulation. 15A NCAC 02D .0927 (when loading gasoline). Gasoline tank truck loading rack emissions shall not exceed 35 milligrams of VOC per liter of gasoline loaded.
 - Control Technology. Once vapor combustion unit (**ID No. ZTOF01**).
- c. Monitoring approach. The key elements of the monitoring approach for volatile organic compounds from the loading of gasoline in this source, including parameters to be monitored, parameter ranges, and performance criteria are presented in the following table. The selected performance indicator is the presence of a pilot flame during loading operations.

Control Device ID No. ZTOF01	Indicator
I. Indicator	Presence of pilot light flame.
Measurement Approach	The presence of a pilot light flame on the flare during loading operations associated with TLR1 will be monitored continuously while loading gasoline using a UV beam detector. Monitoring points are located to provide an accurate detection of the pilot light flame.
II. Indicator Range	The indicator level is when the pilot light flame is not detected during loading operations.
QIP Threshold	The QIP threshold level is when the absence of flame is detected more than ten times in a six-month period during gasoline loading operations
III. Performance Criteria	
Data Representativeness	The UV beam detector is located at the pilot light in accordance with manufacturer's recommendations.
Verification of Operational Status	NA
QA/QC Practices	The UV beam detector is calibrated in accordance with company procedures, consistent with manufacturer recommendations or acceptable engineering practices.
Monitoring Frequency	Continuous during gasoline loading operations.
Data Collection Procedures	The presence of the pilot light flame is continuously measured by the UV flame detector and recorded by PRV data recorder during gasoline loading operations.
Averaging Periods	None.

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

- d. If gasoline is loaded in this source (**ID No. TLR1**), the Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. In addition, the summary report shall contain the following information, as applicable:
- Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8.

Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

2.3 - Permit Shield for Non-applicable Requirements

- A. One tank truck loading rack utilizing a submerged-boom loading arm (ID No. TLR1), and One railcar loading rack utilizing a submerged-boom loading arm (ID No. RLR), with associated vapor combustion unit (ID No. ZTOF01)**

One marine loading rack (ID No. MLR) with associated packed bed scrubber (ID No. SC01)

1. 15A NCAC 02D.0614: COMPLIANCE ASSURANCE MONITORING

- a. Pursuant to 15A NCAC 02Q .0512(a)(1)(B) “Permit Shield and Application Shield,” with the issuance of this permit **(05870T19)**, the following stipulation of non-applicability has been made:
 - i. Permitted sources **(ID Nos. TLR1, RLR, and MLR)** have been made determined to qualify for an exemption from requirements of 40 CFR Part 64 as being subject to an emissions cap that is approved under the rules of Subchapters 15A NCAC 02D and 02Q and incorporated in a permit issued under 15A NCAC 02Q .0500.

SECTION 3 - GENERAL CONDITIONS (version 5.5, 08/25/2020)

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 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. **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

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 and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

“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.*)

“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.

Excess Emissions

1. 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.
2. 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).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. 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.B 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 and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. 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; and
4. the method(s) used for determining the compliance status of the source during the certification period.

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. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

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 this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter 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 Section 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 (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

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 Environmental Protection Agency (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.

ATTACHMENT

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
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
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
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