



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary  
B. Keith Overcash, P.E., Director

date, 2009

Mr. William Baker, Jr.  
Vice President  
CTI of North Carolina, Inc.  
PO Box 576  
Savannah, Georgia 31402

SUBJECT: Air Quality Permit No. 05870T15  
Facility ID: 6500261  
CTI of North Carolina, Inc.  
Wilmington, New Hanover County  
Fee Class: Title V

Dear Mr. Baker

In accordance with your completed Air Quality Permit Application for **renewal** of your Title V permit received **July 26, 2007**, we are forwarding herewith Air Quality Permit No. **05870T15** to CTI of North Carolina, Inc. 1002 Front Street, Wilmington, North Carolina authorizing the construction and operation, of the emission sources and associated air pollution control devices specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .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.

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Permitting Section

1641 Mail Service Center, Raleigh, North Carolina 27699-1641  
2728 Capital Blvd., Raleigh, North Carolina 27604  
Phone: 919-715-6235 / FAX 919-733-5317 / Internet: www.ncair.org

One  
North Carolina  
*Naturally*

William A. Baker

Date, 2009

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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.

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

This Air Quality Permit shall effective from date, 2009 until date, 2013, 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 Mark J. Cuilla, E.I.T., at (919) 733-1499.

Sincerely yours,

Donald R. van der Vaart, Ph.D., P.E.,  
Chief

Enclosure

c: Gregg Worley, EPA Region IV (with review)  
Wilmington Regional Office  
Central Files

**Attachment**  
**Insignificant Activities per 15A NCAC 2Q .0503(8)**

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>
<b>IES1</b>	Fixed-roof storage tanks 116, 118, 127, and 128 in the CTI plant
<b>IES2</b>	Ethanol in-line enclosed blending system
<b>IES3</b>	55 gallons storage drums
<b>IES4</b>	Ethanol blending Methanol Tank (2,000 gallon capacity)
<b>IES5</b>	Ethanol Blending Various Totes of 300 to 500 gallon capacity and a total in-line tank capacity of approximately 4,000 gallons
<b>IES6</b>	Temporary Material Storage Tank (Tank 200)
<b>IES7</b>	One natural gas/No. 2 fuel oil-fired boiler (1 million Btu per hour maximum heat input capacity)
<b>I47</b>	47 Hp diesel engine for loading fuel oil

**List of changes**  
**Permit No. 05870T15**

<b>Page</b>	<b>Section</b>	<b>Description of Change</b>
Cover	-	-amended all dates and permit revision numbers
TOC	-	-added reference to Section 2.3 -removed all references to Part II
All	Header	-amended permit revision number
3-4	Equipment Table	-grouped like sources -amended equipment descriptions as necessary to match ESM
5	2.1 A.1.b 2.1 A.2.b	-corrected testing cross reference -corrected testing cross reference
6	2.1 A.3.b	-corrected testing cross reference
7	2.1 B.2.b 2.1 B.2.c	-removed December 1, 2002 date for painting of tanks as date has already passed -removed December 1, 2002 date for equipping tanks with self-supporting roofs as date has already passed
8	2.1 B.3	-added applicability statement to avoidance condition (2D .0933)
9	2.1 C (table)	-added ID numbers where necessary for clarification of applicability -added NSPS Subpart designation
10	2.1 C.1.a	-updated shell language (removed old paragraph a and renumbered subsequent paragraphs)
11	2.1 C.1.d 2.1 C.1.e	-corrected cross reference due to renumbering of section -corrected cross reference due to renumbering of section
12	2.1 C.1.j 2.1 C.1.k 2.1 C.1.l 2.1 C.2.a	-corrected cross reference due to renumbering of section -corrected cross reference due to renumbering of section -corrected cross reference due to renumbering of section -added ID numbers
13	2.1 C.2.c 2.1 D (table)	-added ID numbers -added ID numbers where necessary for clarification of applicability
14	2.1 D.1.a 2.1 D.1.d 2.1 D.2.a.v	-added ID numbers -added ID numbers -corrected testing cross reference
15	2.1 D.2.b.i 2.1 D.2.b.ii 2.1 D.3.a	-added ID numbers -added ID numbers -added ID numbers
16-17	2.1 D.4	-added section for CAM
17	2.2 A.1	-moved former paragraph h language to beginning of permit condition
19	2.2 A.1.f	-added ID numbers
20	2.2 A.1.g 2.2 A.1.h  2.2 A.3.a	-added ID numbers -modified recordkeeping language to reflect alternative demonstration per Permittee request -added "avoided" MAVT Subpart listings
21	2.2 A.3.e 2.2 A.3.f	-corrected testing cross reference -added testing requirements per WIRO comments -corrected testing cross reference
22	2.2 A.3.i.i	-modified definition of "control efficiency" to add language specifying efficiency with control device operating levels
23	2.2 A.3.i.iii	-added clarification for calculating monthly HAP emissions during floating roof landings per Permittee request

<b>Page</b>	<b>Section</b>	<b>Description of Change</b>
24-25	2.2 A.4.e	-corrected testing cross reference -added testing requirements per WIRO comments
25	2.2 A.4.f	-corrected testing cross reference
26	2.2 A.4.i.i 2.2 A.4.i.iii	-modified definition of “control efficiency” to add language specifying efficiency with control device operating levels -added clarification for calculating monthly HAP emissions during floating roof landings per Permittee request
28	2.3	-added Section for non-applicable requirements (CAM)

State of North Carolina,  
Department of Environment,  
and Natural Resources

Division of Air Quality



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
<b>05870T15</b>	<b>05870T14</b>	<b>date, 2009</b>	<b>date, 2013</b>

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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee: 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:** 6500261.07B  
**Complete Application Date:** July 26, 2007

**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 xxth day of xxxxxx, 2009

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Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section  
By Authority of the Environmental Management Commission

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2.3- **Permit Shield for Nonapplicable Requirements**

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in this permit unless otherwise specified.

Under Title 15A NCAC 2Q, the operation of emission sources and associated air pollution control devices and appurtenances listed in this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

## 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:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
WIL1	<b>One</b> natural gas/No. 2 fuel oil-fired boiler (11.7 million Btu per hour <b>maximum</b> heat input capacity)	NA	NA
114 115 117	<b>Three</b> external pontoon floating roof-type storage <b>tanks</b> storing any organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.0 psia at 84.1 degrees F (2,037,042; 2,024,358; and 2,024,316 <b>gallon capacities, respectively</b> )	NA	NA
203 204 205 207 208 209 210 211	<b>Eight</b> internal floating roof storage <b>tanks</b> storing any material listed in Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 11.0 psia at 84.1 degrees F (357,336; 2,007,516; 363,720; 544,320; 579,054; <b>1,446,396</b> ; 1,515,192; and 1,502,214 <b>gallon capacities, respectively</b> )	NA	NA
213 214 215 225 (NSPS, Subpart Kb)	<b>Four</b> internal floating roof storage <b>tanks</b> storing any material listed in Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 76.6 kPa (11.0 psia) at 84.1 degrees F (1,957,200; 498,246; 487,704; and 210,000 <b>gallon capacities, respectively</b> )	NA	NA
219 220 (NSPS, Subpart Kb)	<b>Two</b> internal floating roof storage <b>tanks</b> storing any material listed in Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 76.6 kPa (11.1 psia) at 84.1 degrees F (36,456 <b>gallon capacity, each</b> )		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
216 217 218 222 223 224 (NSPS, Subpart Kb)	<p>Six fixed roof storage tanks storing any material listed in Table 1, or any other organic/inorganic material not classified as a TAP with a true vapor pressure less than 27.6 kPa (4.00 psi) at 84.1 degrees F* (39,750; 39,750; 39,750; 38,430; 38,430; and 38,262 gallon capacities respectively)</p> <p>*Any organic/inorganic material with a vapor pressure equal to or greater than 27.6 kPa (4.00 psia) but less than 76.6 kPa (11.1 psia) at 84.1 degrees F may also be stored after the tank is equipped with an internal floating roof</p>	NA	NA
TLR1  RLR	<p>One tank truck loading rack (the submerged-boom loading arm shall be used when loading any TAP listed in Table 1)</p> <p>One railcar loading rack utilizing a submerged-boom loading arm</p>	ZTOF01	One vapor combustion unit
TLR2	One tank truck loading rack utilizing a submerged-boom loading arm	NA	NA
MLR	One marine loading rack utilizing a submerged-boom loading arm	SC01	One packed bed scrubber (5 gallons per minute single pass water injection rate)
221	One fixed roof storage tank storing any material listed in Table 1 or any other organic/inorganic material not classified as a TAP (9,240 gallon capacity)	NA	NA

## 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. One natural gas/No. 2 fuel oil-fired boiler (11.7 million Btu per hour maximum heat input capacity; ID No. WIL1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.56 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521

#### 1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas and/or No. 2 fuel oil, that are discharged from this source (**ID No. WIL1**) into the atmosphere, shall not exceed 0.56 pounds per million Btu heat input.

**Testing** [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from the firing of natural gas and/or No. 2 fuel oil in this source (**ID No. WIL1**).

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

- a. Emissions of sulfur dioxide from this source (**ID No. WIL1**) 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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and 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 2D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .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 this source (**ID No. WIL1**).

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

- a. Visible emissions from this source (**ID No. WIL1**) 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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and 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 2D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas and/or No. 2 fuel oil in this source (**ID No. WIL1**).

**B. Three external pontoon floating roof-type storage tanks (ID Nos. 114, 115, and 117)**

The following table provides a summary of limits and standards for the emission sources described above:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Volatile organic compounds	*Internal floating roofs shall be equipped with primary and secondary seals and other VOC abatement requirements (not applicable until tank is equipped with self-supporting roof per 15A NCAC 2D .0927)	15A NCAC 2D .0925
Volatile organic compounds	*External floating roof gasoline tanks with an inside diameter of 100 feet or less shall be equipped with a self-supporting roof and other VOC abatement requirements	15A NCAC 2D .0927
Volatile organic compounds	No petroleum liquids with a true vapor pressure of 1.52 psia or above shall be stored in these tanks (not applicable after tank is equipped with self-supporting roof per 15A NCAC 2D .0927)	15A NCAC 2Q .0317 (2D .0933 Avoidance)
Volatile organic compounds	Each tank shall be controlled as described below	15A NCAC 2D .0949
Toxic air pollutants	<b>State-enforceable only</b> <b>See Section 2.2 A.1</b>	15A NCAC 2D .1100
Odorous emissions	<b>State-enforceable only</b> <b>See Section 2.2 A.2</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 A.3</b>	15A NCAC 2Q .0317 (MACT Avoidance)
Volatile organic compounds	<b>See Section 2.2 A.4</b>	15A NCAC 2Q .0317 (PSD Avoidance)

\*These requirements only apply if gasoline is stored in the tanks.

**1. 15A NCAC 2D .0925: PETROLEUM LIQUID STORAGE IN FIXED ROOF TANKS  
[APPLIES ONLY IF GASOLINE IS STORED IN A TANK WHICH HAS BEEN  
RETROFITTED WITH A SELF-SUPPORTING ROOF]**

- a. Gasoline shall not be stored in a tank 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 the 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 roof 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 2Q .0508(f)]

- b. If gasoline is stored in a tank, inspection and maintenance on these tank(s) shall be performed as follows:
  - i. Routine visual inspections 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 2D .0925 if the tanks are not inspected and maintained.
- c. If gasoline is stored in a tank, the Permittee shall maintain a logbook (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.

**Reporting** [15A NCAC 2Q .0508(f)]

- d. 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 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 2D .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 way that would result in evaporation.
- b. All tanks used for gasoline storage are to be painted white or silver at the next scheduled painting excluding any tanks already painted white or silver.
- c. All external floating roof tanks with an inside diameter of 100 feet or less used to store gasoline shall be equipped with a self-supporting roof, such as a geodesic dome, at the next time that the tank is taken out of service excluding any tanks already equipped with a self-supporting roof.

- d. All external and internal floating roof tanks storing gasoline shall be equipped with rim-mounted secondary seals.
- e. All tanks storing gasoline shall be equipped with welded seams where possible, otherwise gaskets on roof and deck fittings.
- f. All tanks storing gasoline shall be equipped with floats in the slotted guide poles with a gasket around the cover of the poles.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- g. 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 inspections of the structural integrity of the tanks. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0927 if the tanks are not inspected and maintained.
- h. 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.

**Reporting** [15A NCAC 2Q .0508(f)]

- i. 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 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.

**3. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .0933: PETROLEUM LIQUID STORAGE IN EXTERNAL FLOATING  
ROOF TANKS**

- a. In order to avoid applicability of 15A NCAC 2D .0933 for petroleum liquid storage in external floating roof tanks, the Permittee shall not store any petroleum liquids with a true vapor pressure that exceeds 1.52 pounds per square inch absolute in these sources (**ID Nos. 114, 115, or 117**).
- b. **This rule does not apply to a petroleum liquid storage vessel that has a fixed roof with or without internal floating roofs.**

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- c. The Permittee shall maintain a logbook (written or electronic) of the type of liquid(s) and the true vapor pressure of the liquid(s) stored the tanks.

**4. 15A NCAC 2D .0949: STORAGE OF MISCELLANEOUS VOLATILE ORGANIC  
COMPOUNDS**

- a. The Permittee shall not place, store, or hold in any stationary tank, reservoir, or other container with a capacity greater than 50,000 gallons, any liquid volatile organic compound that has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir, or other container:
  - i. is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor gas loss into the atmosphere; or
  - ii. is designed and equipped with one of the following vapor loss control devices:

- A. 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; 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; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place; or
- B. a vapor recovery system or other equipment or means of air pollution control that reduces the emission of organic materials into the atmosphere by at least 90 percent by weight; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(f)]

- b. The Permittee shall maintain records in a logbook which specifies the following:
  - i. the contents of the tanks on a monthly basis (at the end of the month),
  - ii. the vapor pressure of the contents of the tanks 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 logbook showing the above records shall be maintained at the site (written or electronic format), and made available to the Division of Air Quality personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0949 if the records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- c. No reporting is required for 15A NCAC 2D .0949 for these emission sources.

**C. Fourteen internal floating roof storage tanks (ID Nos. 203 through 205, 207 through 211, 213 through 215, 219, 220, and 225)**

**Seven fixed roof tanks (ID Nos. 216 through 218, and 221 through 224)**

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	<b>(ID Nos. 213 through 220 and 222 through 225 only)</b> Internal floating roofs shall be equipped with primary and secondary seals and other VOC abatement requirements	15A NCAC 2D .0524 <b>(40 CFR 60, Subpart Kb)</b>
Volatile organic compounds	<b>(ID Nos. 203 through 205, 207 through 211, 213 through 215, and 225 only)</b> Each tank shall be equipped with an internal floating roof as described below	15A NCAC 2D .0949
Toxic air pollutants	<b>State-enforceable only</b> <b>See Section 2.2 A.1</b>	15A NCAC 2D .1100
Odorous emissions	<b>State-enforceable only</b> <b>See Section 2.2 A.2</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 A.3</b>	15A NCAC 2Q .0317 (MACT Avoidance)
Volatile organic compounds	<b>See Section 2.2 A.4</b>	15A NCAC 2Q .0317 (PSD Avoidance)

## 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notifications, testing, monitoring, recordkeeping, and reporting requirements for these sources (**ID Nos. 213 through 220 and 222 through 225**) contained in Environmental Management Commission Standard 15A NCAC 2D .0524 “New Source Performance Standards” (NSPS) as promulgated in 40 CFR Part 60 Subpart Kb, including Subpart A “General Provisions” as follows:
- 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. lowering of the stored liquid level, so that the floating roof is resting on its legs, as necessitated by normal vessel operation (for example, when changing stored material or when transferring material out of the vessel for shipment) is allowed and is not considered emptying. However the facility shall prevent the liquid from rising during the time in which the roof is resting on its roof supports prior to filling or refilling.
  - iii. 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.
  - iv. 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.
  - v. 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.
  - vi. 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.
  - vii. 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.
  - viii. 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.

- ix. 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.
- x. 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)]

- b. 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 owner or operator shall repair the items before filling the storage vessel.
- c. 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 accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the DAQ Regional Office in the inspections 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.
- d. For vessels equipped with a double-seal system as specified in [Section 2.1 C.1.a.iii.\(B\) above](#), the Permittee shall:
  - i. visually inspect the vessel as specified in [Section 2.1 C.1.e below](#) at least every 5 years; or
  - ii. visually inspect the vessel as specified in [Section 2.1 C.1.c above](#).
- e. 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 owner or operator 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 C.1.c and 2.1 C.1.d.ii above](#) and at intervals no greater than 5 years in the case of vessels specified in [Section 2.1 C.1.d.i above](#).
- f. 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 owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator 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** [40 CFR 60.116b]

- g. 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.
- h. The Permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- i. Available data on the storage temperature may be used to determine the maximum true vapor pressure as described in 40 CFR 60.116b(e).

**Recordkeeping and Reporting** [40 CFR 60.115b(a)]

- j. The Permittee shall keep a record of each inspection performed as required by **Sections 2.1 C.1.b-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).
- k. If any of the conditions described in **Section 2.1 C.1.c above** are detected during the annual visual inspection, a report shall be furnished 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.
- l. After each inspection required by **Section 2.1 C.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 C.1.d.ii above**, a report shall be furnished 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 C.1.b or 2.1 C.1.d above** and list each repair made.

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

- a. The Permittee shall not place, store, or hold in **these sources (ID Nos. 203 through 205, 207 through 211, 213 through 215, and 225)** 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 2Q .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 2D .0949 if these records are not maintained.

**Reporting** [15A NCAC 2Q .0508(f)]

- c. No reporting is required for 15A NCAC 2D .0949 for these emission sources **(ID Nos. 203 through 205, 207 through 211, 213 through 215, and 225)**.

- D. 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 tank truck loading rack utilizing a submerged-boom loading arm (ID No. TLR2)**

**One marine loading rack (ID No. MLR) utilizing a submerged-boom loading arm 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:

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Volatile organic compounds	<b>(ID No. TLR1 only, when loading gasoline)</b> Gasoline tank truck loading rack emissions shall not exceed 35 milligrams of VOC per liter of gasoline loaded	15A NCAC 2D .0927
Volatile organic compounds	<b>(ID No. TLR1 only, when loading gasoline)</b> Gasoline tank truck and vapor collection system specifications	15A NCAC 2D .0932
Volatile organic compounds	<b>(ID Nos. RLR, TLR1, TLR2, and MLR when loading volatile organic compounds other than gasoline)</b> Submerged loading of volatile organic compounds with a vapor pressure of 1.5 pounds per square inch absolute or greater	15A NCAC 2D .0948 (40 CFR 63.422)
<b>Volatile organic compounds</b>	<b>(ID No. TLR1 only, when loading gasoline)</b> <b>Compliance Assurance Monitoring</b>	<b>15A NCAC 2D .0614</b>
Toxic air pollutants	<b>State-enforceable Only</b> <b>See Section 2.2 A.1</b>	15A NCAC 2D .1100
Odorous emissions	<b>State-enforceable only</b> <b>See Section 2.2 A.2</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 A.3</b>	15A NCAC 2Q .0317 (MACT Avoidance)
Volatile organic compounds	<b>See Section 2.2 A.4</b>	15A NCAC 2Q .0317 (PSD Avoidance)

**1. 15A NCAC 2D .0927: BULK GASOLINE TERMINALS**

- a. Gasoline shall not be loaded into any tank trucks or trailers from **this source (ID No. TRL1)** 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 make 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 2D .0932(c) within the last 12 months.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- d. **This source (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 2D .0932(d) "Gasoline Tanks, Trucks and Vapor Collection Systems."

**2. 15A NCAC 2D .0932: GASOLINE TANK TRUCKS AND VAPOR COLLECTION SYSTEMS**

- a. Gasoline Tank Trucks.
  - i. The gasoline truck tank shall not be used if it sustains a pressure change greater than 3.0 inches of water in five minutes when pressurized to a gauge pressure of 18 inches of water or when evacuated to a gauge pressure of 6.0 inches of water.
  - ii. Each gasoline truck tank that has been certified leak tight shall display a sticker near the Department of Transportation certification plate required by 49 CFR 178.340-10b. This sticker shall show the identification number of the tank and the date that the tank last passed the pressure and vacuum test.
  - iii. There shall be no liquid leaks from any gasoline truck tank.
  - iv. Any truck tank with a leak equal to or greater than 100 percent of the lower explosive limit, as detected by a combustible gas detector using the test procedure described in 15A NCAC 2D .0940, shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the tank has been certified to be leak tight.

**Testing** [15A NCAC 2D .2601]

- v. Gasoline truck tanks and their vapor collection systems shall be tested annually. The test procedure that shall be used is described in 5A NCAC 2D .0940 and 15A NCAC 2D .0941.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- vi. The Permittee shall maintain records of all certification testing and repairs. The records shall identify the gasoline truck tank, vapor collection system, and vapor control system; the date of the test or repair; and, if applicable, the type of repair and the date of retest. The records of certification tests shall include:
  - (A) the gasoline truck tank identification number;
  - (B) the initial test pressure and the time of the reading;
  - (C) the final test pressure and the time of the reading;
  - (D) the initial test vacuum and the time of reading;
  - (E) the final test vacuum and the time of the reading, and
  - (F) the date and location of the tests.

A copy of the most recent certification test shall be kept in the truck tank.
- b. Vapor Collection System.
  - i. The gasoline vapor collection system and vapor control system (**ID No. ZTOF1**) shall be designed and operated to prevent gauge pressure in the truck tank from exceeding 18 inches of water and to prevent a vacuum of greater than six inches of water.
  - ii. During loading and unloading operations of gasoline **from this source (ID No. TLR1)** there shall be:
    - (A) no vapor leakage from the vapor collection system such that 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 2D .0940; and
    - (B) no liquid leaks.
  - iii. If a gasoline leak is discovered that exceeds the limit in Section 2.1 E.2.b.ii.(A) above, the vapor collection system or vapor control system (and therefore the source) shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the system has been retested and found to comply with the limits of Section 2.1 E.2.b.ii.(A) above.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2Q .0508(f)]

- iv. The owner or operator of a vapor collection system located at a bulk gasoline plant or a bulk gasoline terminal shall monitor the vapor collection system at least once per year and notify the DAQ in accordance with 15A NCAC 2D .0912 prior to testing. If after two complete annual checks no more than 10 leaks are found, the frequency of monitoring may be decreased with the approval of the Regional Supervisor. If more than 20 leaks are found, the Director may require that the frequency of monitoring be increased. No reporting is required.

**3. 15A NCAC 2D .0948: VOC EMISSIONS FROM TRANSFER OPERATIONS**

**Applies to marine loading rack (ID No. MLR), railcar loading rack (ID No. RLR) and two tank truck loading racks (ID Nos. TLR1 and TLR2) when loading volatile organic compounds other than gasoline.**

- a. The **Permittee** shall not load in any one day more than 20,000 gallons of any volatile organic compound with a vapor pressure of 1.5 pounds per square inch absolute or greater under actual conditions **from these sources (ID Nos. MLR, RLR, TLR1, and TLR2)** into any tank-truck, trailer, or railroad tank car unless the loading operation uses 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 2Q .0508(f)]

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

**4. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING**

- a. Per 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the following.
- b. Background.
  - i. Emission Unit. One tank truck loading rack (**ID No. TLR1**).
  - ii. Applicable Regulation. 15A NCAC 2D .0927 (when loading gasoline). Gasoline tank truck loading rack emissions shall not exceed 35 milligrams of VOC per liter of gasoline loaded.
  - iii. Control Technology. One 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.

<b>Control Device ID No. ZTOF01</b>	<b>Indicator</b>
I. Indicator  Measurement Approach	Presence of pilot light flame.  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  QIP Threshold	The indicator level is when the pilot light flame is not detected during loading operations.  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  A. Data Representativeness  B. Verification of Operational Status  C. QA/QC Practices  D. Monitoring Frequency  Data Collection Procedures  Averaging Periods	The UV beam detector is located at the pilot light in accordance with manufacturer’s recommendations.  NA  The UV beam detector is calibrated in accordance with company procedures, consistent with manufacturer recommendations or acceptable engineering practices.  Continuous during gasoline loading operations.  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.  None.

**Reporting** [15A NCAC 2Q .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.

## 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	<b>State-enforceable only</b> See Section 2.2 A.1	15A NCAC 2D .1100
Odororous emissions	<b>State-enforceable only</b> Odorous emissions must be controlled	15A NCAC 2D .1806
Hazardous air pollutants	Less than 10 tons per year any single HAP Less than 25 tons per year combination HAPs	15A NCAC 2Q .0317 (MACT Avoidance)
Volatile organic compounds	Less than 249 tons per year VOC	15A NCAC 2Q .0317 (PSD Avoidance)

#### State-enforceable only

#### 1. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

To ensure compliance with the air toxics regulations of 15A NCAC 2D .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

Pollutant 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.

	<b>1 Hour</b>	<b>24 Hour</b>
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
MEK	28,575	155,096
MIBK	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.

	<b>1 Hour</b>	<b>24 Hour</b>
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
MEK	44,321	270,695
MIBK	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.

	<b>1 Hour</b>	<b>24 Hour</b>
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
MEK	30,087	237,327
MIBK	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.

	<b>1 Hour</b>	<b>24 Hour</b>
Acetic Acid	8,525	NA
Ethyl Acetate	35,955	NA
Ethlyenediamine	6,096	94,960
Glycol Ethers	33,952	NA
N-Hexane	NA	24,482
MEK	28,575	155,096
MIBK	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.

	<b>1 Hour</b>	<b>24 Hour</b>
Acetic Acid	8,976	NA
Ethyl Acetate	37,857	NA
Ethlyenediamine	6,418	145,308
Glycol Ethers	35,747	NA
N-Hexane	NA	37,462
MEK	30,087	237,327
MIBK	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 through 215, 219 through 220, and 225**) 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).

	<b>1 Hour</b>	<b>24 Hour</b>
Acetic Acid	345,458	NA
Ethyl Acetate	2,296,327	NA
Ethlyenediamine	68,681	776,391
Glycol Ethers	39,637	NA
N-Hexane	NA	1,056,129
MEK	1,834,794	7,226,226
MIBK	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).

	<b>1 Hour</b>	<b>24 Hour</b>
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
MEK	51,040	597,013
MIBK	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

**Recordkeeping** [15A NCAC 2Q .0508(f)]

- h. The Permittee shall maintain records of the process operational information necessary to determine compliance with 15A NCAC 2D .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 2D .1100. All records of compliance shall be maintained in a logbook and made available for inspection by personnel of the Division of Air Quality.

**State-enforceable only**

**2. 15A NCAC 2D .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 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

- a. In order to remain classified as 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 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 MACT 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 MACT 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 containing a HAP until a performance test is conducted to determine the control efficiency and scrubber operating parameters (flow rate) for that HAP.
  - 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 2D .2601]

- e. The Permittee shall conduct a **destruction efficiency** performance test on the vapor combustor (**ID No. ZTOF1**) to determine the percent reduction of hazardous air pollutant emissions **by June 5, 2012 and once per each subsequent 5-year permit term thereafter**.
  - i. The Permittee shall conduct **the testing** in accordance with **15A NCAC 2D .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 92.58%** for the vapor combustion unit (**ID No. ZTOF-01**) **as a result of the testing completed on June 5, 2007 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.**
- f. The Permittee shall conduct **destruction efficiency** performance test on the scrubber (**ID No. SC01**) to determine the percent reduction of **hazardous air pollutant** emissions **within 180 days after the initial startup of the packed bed scrubber**.
  - i. The Permittee shall conduct **the testing** in accordance with **15A NCAC 2D .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. **Until** performance testing is performed, **overall control efficiency** (CE) will be considered 95% for the packed bed scrubber (**ID No. SC01**) for methanol. Once performance testing is completed and approved by the DAQ, the value of the 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.

**Monitoring/Recordkeeping** [15A NCAC 2Q .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. ZTOF1**) 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 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**):

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

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 rate of the scrubber (ID No. CS01) drops below 5 gallons per minute, and/or no flame detected in the combustion unit (ID No. ZTOF-01)). Until performance testing is performed per Sections 2.2 A.3.e and f above, CE will be considered 92.58% for the vapor combustion unit (ID No. ZTOF-01) and 95% for the packed bed scrubber (ID No. SC01). Once performance testing is completed, the value of the most recent test shall be used.**

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:

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

Where:

HAP = total HAPs emitted in the month

p = total number of HAPs

- j. 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. SC-01**); 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.
- k. 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).
- l. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the HAP emissions are not monitored or records are not maintained, or if emissions exceed the limit(s) in Section 2.2 A.3.a of this permit.

**Reporting** [15A NCAC 2Q .0508(f)]

- m. 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 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 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 HAP 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 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 2Q .0317: AVOIDANCE CONDITIONS****for 15A NCAC 2D .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 2D .2601]

- e. The Permittee shall conduct a **destruction efficiency** performance test on the vapor combustor (**ID No. ZTOF1**) to determine the percent reduction of volatile organic compound emissions **by June 5, 2012 and once per each subsequent 5-year permit term thereafter.**
  - i. The Permittee shall conduct **the testing** in accordance with **15A NCAC 2D .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 92.58% for the vapor combustion unit (**ID No. ZTOF-01**) as a result of the testing completed on **June 5, 2007** 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.
- 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 180 days after the initial startup of the packed bed scrubber**.
  - i. The Permittee shall conduct **the testing** in accordance with **15A NCAC 2D .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. **Until** performance testing is performed, **overall control efficiency** (CE) will be considered 95% for the packed bed scrubber (**ID No. SC01**) for methanol. Once performance testing is completed and approved by the DAQ, the value of the 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.

**Monitoring/Recordkeeping** [15A NCAC 2Q .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. ZTOF1**) 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**):

$$VOC_1 = \sum_{i=1}^n 0.000347 \times (VP_i / 14.7) \times (SF) \times (MW_i) \times (G_j) \times [1 - (CE \times FC)]$$

Where:

VOC<sub>1</sub> = sum of 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<sub>i</sub> = 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

$G_i$  = 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. CS01**) drops below 5 gallons per minute, and/or no flame detected in the combustion unit (**ID No. ZTOF-01**)). Until performance testing is performed per Sections 2.2 A.3.e and f above, CE will be considered 92.58% for the vapor combustion unit (**ID No. ZTOF-01**) and 95% for the packed bed scrubber (**ID No. SC01**). Once performance testing is completed, the value of the most recent 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 landing 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

- 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 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 VOC controlled at the marine terminal (**ID No. MLR**) by the packed bed scrubber (**ID No. SC-01**); 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.
- k. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions are not monitored or records are not maintained, or if emissions exceed the limit(s) in Section 2.2 A.4.a of this permit.

**Reporting** [15A NCAC 2Q .0508(f)]

- l. 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 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 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 year period, and
    - (B) for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total.

### 2.3- Multiple Emission Source(s) Specific Limitations and Conditions

- 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) utilizing a submerged-boom loading arm 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
-	Compliance Assurance Monitoring	15A NCAC 2D .0614

1. **15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING** - Pursuant to 15A NCAC 2Q .0512(a)(1)(B) “Permit Shield and Application Shield, with the issuance of this permit (05870T14), the following stipulation of non-applicability has been made:

- a. Permitted sources (**ID Nos. TLR1, RLR, and MLR**) have been 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 2D and 2Q and incorporated in a permit issued under 15A NCAC 2Q .0500.

Therefore, CAM has been determined to not be applicable to these specific sources, except during periods of loading gasoline in tank truck loading rack 1 (**ID No. TLR1**) covered under Section 2.1 D.4 above, or their associated control devices as described above.

## SECTION 3 - GENERAL CONDITIONS (v2.22.1)

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
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 2Q .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 Environment and Natural Resources upon request.

C. **Severability Clause** [15A NCAC 2Q .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 2Q .0507(e) and 2Q .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 NO<sub>x</sub> 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

E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]

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 2Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.

3. Minor Permit Modifications [15A NCAC 2Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.

4. Significant Permit Modifications [15A NCAC 2Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.

5. Reopening for Cause [15A NCAC 2Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .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 2Q .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 2Q .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 2Q .0523(c)]
 

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

#### **I.A. Reporting Requirements for Excess Emissions and Permit Deviations**

[15A NCAC 2D .0535(f) and 2Q .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 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. *(Note: Definitions of excess emissions under 2D .1110 and 2D .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 2D .0524), NESHAPS (15A NCAC 2D .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 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .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 2D .0535(f)(3).

#### Permit Deviations

3. Pursuant to 15A NCAC 2Q .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 2D .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 2D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .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 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .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 2Q .0508(e) and 2Q .0513(b)]

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .0508(f) and 2Q .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 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, 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 2Q .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 2Q .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 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .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 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. 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 2Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .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 2Q .0107 and 2Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .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 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .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 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

**BB. Financial Responsibility and Compliance History** [15A NCAC 2Q .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 2Q .0501(e)]

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 2Q .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 2Q .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 2D .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 2D .0300.

**HH. Registration of Air Pollution Sources** [15A NCAC 2D .0200]

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 2D .0202(b).

**II. Ambient Air Quality Standards** [15A NCAC 2D .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 2D .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 2Q .0508(i)(16)]

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
  - a. a description of the training and air testing experience of the person directing the test;
  - b. a certification of the test results by sampling team leader and facility representative;
  - c. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
  - d. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
  - e. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
  - f. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
  - g. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ.

**KK. Reopening for Cause** [15A NCAC 2Q .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 2Q .0513(c).
  3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .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 2Q .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 2Q .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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

**MM. Fugitive Dust Control Requirement** [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .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 2D .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. 1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(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 2Q .0501(d)(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 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., 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.

## ATTACHMENT

## List of Acronyms

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compounds