ROY COOPER Governor

ELIZABETH S. BISER Secretary

MICHAEL A. ABRACZINSKAS Director



TBD

Mr. Rigel Rodriguez Vice President EHS CTI of North Carolina, Inc. - Wilmington Terminal PO Box 576 Savannah, GA 31402

Subject: Air Permit No. 03467R29 CTI of North Carolina, Inc. - Wilmington Terminal Wilmington, New Hanover County, North Carolina Permit Class: Title V PSD Class: Minor Facility ID# 6500010

Dear Mr. Rodriguez:

In accordance with your completed application for modification of an existing synthetic minor permit pursuant to 15A NCAC 02Q .0315(c) received December 19, 2023, we are forwarding, herewith, Permit No. 03467R29 to CTI of North Carolina, Inc. - Wilmington Terminal, Wilmington, New Hanover County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Additionally, any emissions activities determined from your air permit application as meeting the exemption requirements contained in 15A NCAC 02Q .0102 have been listed for information purposes as an "ATTACHMENT" to the enclosed air permit.

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

Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B.

This permit shall be effective from TBD until June 30, 2030, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.



Rigel Rodriguez TBD Page 2

Changes have been made to the permit stipulations. The Permittee is responsible for carefully reading the entire permit and evaluating the requirements of each permit stipulation. The Permittee shall comply with all terms, conditions, requirements, limitations, and restrictions set forth in this permit. 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. Specific changes and additions are summarized below (note: this list may not include all changes and additions):

- Updated emission inventory requirement to be an annual submittal (instead of every five years).
- Made the emission inventory requirement a separate specific condition. Renumbered all subsequent conditions.
- The specific condition for 02Q .0315 "Synthetic Minor Facilities" has been replaced with a condition for 02Q .0317 "Avoidance Conditions" (PSD Avoidance). The VOC annual emission limit has been increased to 250 tpy to reflect the major stationary source threshold in 40 CFR 51.166(b)(1)(i)(b). However, at the request of the Permittee, none of the throughput limits associated with 02Q .0315 have been changed.
- Added a requirement to submit a 1st-time Title V application within 12 months.

Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or <u>russell.braswell@deq.nc.gov</u>.

Sincerely,

Mark J. Cuilla, EIT, CPM, Chief, Permits Section Division of Air Quality, NC DEQ

Enclosures

c: Laserfiche (6500010)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY <u>PERMIT DECISION</u>

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

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

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

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

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

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

* * *

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

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NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF AIR QUALITY

AIR PERMIT NO. 03467R29

Issue Date: TBD	Effective Date: TBD
Expiration Date: June 30, 2030	Replaces Permit: 03467R28

To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

CTI of North Carolina, Inc. - Wilmington Terminal 1312 South Front Street Wilmington, New Hanover County, North Carolina Permit Class: Title V Facility ID# 6500010

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission	Emission Source	Control	Control System
Source ID	Description	System ID	Description
ES-B-1 (NESHAP)	one No. 4 fuel oil-fired boiler (12.88 million Btu per hour maximum heat input rate, 1964 Cleaver & Brooks)	N/A	N/A
ES-2	one bottom loading distillate loading rack	VCU	vapor combustion unit
ES-3	one bottom loading gasoline marine vessel loading rack	N/A	N/A
ES-4	one top loading distillate/residual marine vessel loading rack	N/A	N/A
ES-5 (NSPS)	one bottom loading gasoline loading rack	VCU	vapor combustion unit
ES-8901 (NESHAP)	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 53,717 barrels capacity	N/A	N/A
ES-8902	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 21,864 barrels capacity	N/A	N/A
ES-8903	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 21,854 barrels capacity	N/A	N/A
ES-8904	internal floating pontoon roof gasoline/distillate/residual fuel oils/ethanol storage tank, 27,285 barrels capacity	N/A	N/A

Emission Source ID	Emission Source Description	Control System ID	Control System Description
ES-8906	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 32,221 barrels capacity	N/A	N/A
ES-8907	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 30,020 barrels capacity	N/A	N/A
ES-8908	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 35,735 barrels capacity	N/A	N/A
ES-8910	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 35,819 barrels capacity	N/A	N/A
ES-8912	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 32,684 barrels capacity	N/A	N/A
ES-8916 (NSPS)	one fixed external roof petroleum additive tank, 20,000 gallons capacity	N/A	N/A
ES-8914 (NSPS)	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 80,300 barrels capacity, with mechanical shoe seal	N/A	N/A
ES-8915 (NSPS)	internal floating pontoon roof gasoline/distillate/residual fuel oils storage tank, 143,334 barrels capacity, with mechanical shoe seal	N/A	N/A

in accordance with the completed application 6500010.23B received December 19, 2023 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environmental Quality, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any <u>TESTING, REPORTING, OR MONITORING REQUIREMENTS:</u>

A. SPECIFIC CONDITIONS AND LIMITATIONS

 Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 02D .0202, 02D .0503, 02D .0516, 02D .0521, 02D .0524 (40 CFR 60, Subpart Kb --Volatile Organic Liquid Storage Vessels), 02D .0524 (40 CFR Part 60, Subpart XX), 02D .0535, 02D .0540, 02D .0611, 02D .0903, 02D .0906, 02D .0912, 02D .0925, 02D .0927, 02D .0932, 02D .1111 (40 CFR 63, Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities Area Sources) and (Subpart JJJJJJ – Industrial, Commercial, and Institutional Boilers Area Sources), 02D .2600, 02Q .0207, 02Q .0304(d) and (f), 02Q .0317, and 02Q .0504.

- 2. PERMIT RENEWAL REQUIREMENT The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 02Q .0304(d) and (f). Pursuant to 15A NCAC 02Q .0203(i), no permit application fee is required for renewal of an existing air permit (without a modification request). The renewal request (with application Form A) should be submitted to the Regional Supervisor, DAQ.
- 3. ANNUAL EMISSION INVENTORY REQUIREMENTS As required by 15A NCAC 02Q .0207 "Annual Emissions Reporting", the Permittee shall report by June 30 of each year the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.
- 4. <u>PARTICULATE CONTROL REQUIREMENT</u> As required by 15A NCAC 02D .0503 "Particulates from Fuel Burning Indirect Heat Exchangers," particulate matter emissions from the fuel burning indirect heat exchangers shall not exceed the allowable emission rates listed below:

Source	Emission Limit (lbs/million Btu)
one No. 4 fuel oil-fired boiler (12.88 million Btu per hour maximum heat input rate, 1964 Cleaver & Brooks) (ES-B-1)	0.56

- 5. <u>SULFUR DIOXIDE CONTROL REQUIREMENT</u> As required by 15A NCAC 02D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from the combustion sources shall not exceed 2.3 pounds per million Btu heat input.
- 6. <u>VISIBLE EMISSIONS CONTROL REQUIREMENT</u> As required by 15A NCAC 02D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with a visible emissions standard in 15A NCAC 02D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" shall meet that standard instead of the 02D .0521 visible emissions standard.
- 7. <u>15A NCAC 02D .0524 "NEW SOURCE PERFORMANCE STANDARDS"</u> For the following equipment, The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, <u>Subpart Kb</u> indicated below, and including Subpart A "General Provisions."
 - a. in accordance with 40 CFR 60.116b, keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel;

b. in accordance with 40 CFR 60116b, Notify the Regional Supervisor, Division of Air Quality, within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range; and

True Vapor Pressure	Volume Range
27.6 kiloPascals	75-151 cubic meters
5.2 kiloPascals	greater than 151 cubic meters

- c. in accordance with 40 CFR 60.116b, keep copies of all required records for at least 2 years.
- 8. <u>15A NCAC 02D .0524 "NEW SOURCE PERFORMANCE STANDARDS"</u> For the following equipment, The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, <u>Subpart Kb</u> indicated below, and including Subpart A "General Provisions."

Emission Source(s)	Regulation
Storage tanks (ID Nos. <u>8914</u> [80,300 barrels] and	Subpart Kb – Volatile Organic Liquid
<u>8915</u> [143,334 barrels])	Storage Vessels

- a. <u>VOC Standards</u> As required by 15A NCAC 02D .0524 and 40 CFR 60112b, of the above storage vessels shall meet the following specifications:
 - i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
 - ii. Each internal floating roof shall be equipped with a mechanical shoe seal.
 - iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
 - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains, is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each

access hatch and automatic gauge float well shall be bolted except when they are in use.

- v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- viii. Each penetration of the internal floating roof that allows for passage of the column supporting the fixed roof shall have flexible fabric sleeve or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- b. <u>Inspection and Monitoring Requirements</u> As required by 15A NCAC 02D .0524 and 40 CFR 60.113b, the affected storage tanks shall comply with the following:
 - i. 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 seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
 - ii. For vessels equipped with a mechanical shoe primary seal, 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 <u>12</u> 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 <u>45</u> days. If a failure that is detected during the inspections cannot be repaired within <u>45</u> days and if the vessel cannot be emptied within <u>45</u> days, a <u>30</u>-day extension may be requested from the Administrator.
 - iii. 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 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 occur at intervals greater than **10** years.

- iv. Notify the Regional Supervisor in writing at least <u>30</u> days prior to the filling or refilling of each of the affected storage vessels to afford DAQ staff the opportunity to have an observer present. If the inspection required under 7.b.iii of this condition is not planned, and the owner or operator could not have known about the inspection <u>30</u> days in advance of refilling the tank, the owner or operator shall notify the Regional Supervisor at least <u>7</u> 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 <u>7</u> days prior to the refilling.
- c. <u>Recordkeeping Requirements</u> As required by 15A NCAC 02D .0524 and 40 CFR 60.115b, the affected storage tanks shall comply with the following recordkeeping requirements:
 - i. Keep a record of each inspection performed. 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).
 - ii. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
 - iii. Keep a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
 - iv. The owner or operator shall keep copies of all reports and records required under this specific condition for at least $\underline{2}$ years.
- <u>Reporting Requirements</u> As required by 15A NCAC 02D .0524 and 40 CFR 60.115b, the owner or operator shall submit the following records to the Regional Supervisor:
 - i. A written notification of the date construction of the affected storage tanks commenced postmarked no later than $\underline{30}$ days after such date;
 - ii. A written notification of the anticipated date of initial startup of the affected storage tanks postmarked not more than $\underline{60}$ days nor less than $\underline{30}$ days prior to such date;
 - iii. A written notification of the actual date of initial startup of an affected facility postmarked within <u>15</u> days after such date; and

- iv. A report that describes the control equipment and certifies that the control equipment meets the specifications under paragraphs 7.a and 7.b of this condition. This report shall be an attachment to the notification required by 7.d.iii of this condition.
- v. If any of the conditions described in paragraph 7.b.ii are detected during the annual visual inspection, a report shall be furnished to the Regional Supervisor within <u>30</u> days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the repair was made.
- 9. <u>15A NCAC 02D .0524 "NEW SOURCE PERFORMANCE STANDARDS"</u> For the bottom loading gasoline loading rack, ID No. ES-5, equipped with a vapor control unit (ID No. CD-VCU), the Permittee shall comply with all provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards (NSPS)" as promulgated in 40 CFR 60, <u>Subpart XX</u> "Standards of Performance for Bulk Gasoline Terminals," including Subpart A "General Provisions." As required by this standard, volatile organic compounds emissions from the vapor collection system shall not exceed 35 milligrams per liter of gasoline loaded. Compliance with the requirements of the 02D .0927 "Gas Bulk Terminals," and 02D .0932 "Gasoline Truck Tanks and Vapor Collection Systems" conditions shown elsewhere in this Permit shall be sufficient to demonstrate compliance with this rule.

<u>NSPS EMISSIONS LIMITATIONS</u> – As required by 40 CFR 60, Subpart XX, the following Permit limits shall not be exceeded:

AFFECTED SOURCE	POLLUTANT	EMISSION LIMIT
Vapor Control Unit on loading rack, ID No. ES-5	TOC	35 mg TOC/liter of gasoline loaded

(Note: the facility has requested a Synthetic Minor permit limit of <u>10</u> mg total organic compounds TOC/liter of gasoline loaded. See item <u>A.22(a)(iii)</u> on page 22 below.)

- 10. <u>NOTIFICATION REQUIREMENT</u> As required by 15A NCAC 02D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:
 - a. Notify the Director or his designee 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 describe:
 - i. the name and location of the facility,
 - ii. the nature and cause of the malfunction or breakdown,
 - iii. the time when the malfunction or breakdown is first observed,

- iv. the expected duration, and
- v. an estimated rate of emissions.
- b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

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

"Fugitive dust emissions" means particulate matter 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).

- 12. <u>VAPOR COMBUSTION UNIT REQUIREMENTS</u> As required by 15A NCAC 02D .0611, VOC emissions shall be controlled as described in the permitted equipment list.
 - a. <u>Inspection and Maintenance Requirements</u> To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform periodic inspections and maintenance (I&M) as recommended by the manufacturer. As a minimum, the Permittee shall perform an **annual** (for each 12-month period following the initial inspection) internal inspection of each primary heat exchanger and associated inlet/outlet valves to ensure structural integrity.
 - b. <u>Recordkeeping Requirements</u> The results of all inspections and any variance from manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a logbook. Records of all maintenance activities shall be recorded in the logbook. The logbook (in written or electronic form) shall be kept on-site and made available to DAQ personnel upon request.
- 13. <u>RECORDKEEPING: REPORTING: MONITORING</u> As required by 15A NCAC 02D .0903 "Recordkeeping: Reporting: Monitoring," the owner or operator of any volatile organic compound emission source subject to the requirements of Section 02D .0900 shall:
 - a. Install, operate, and maintain process and control equipment monitoring instruments or procedures as necessary to comply with the requirements of Section 02D .0900;
 - b. Maintain <u>daily</u>, in writing, data and reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the volatile organic compound emission source or control equipment; and

- c. Comply with the monitoring, recordkeeping, and reporting requirements in Section 02D .0600.
- 14. <u>CIRCUMVENTION</u> The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .0906 "Circumvention," which includes in part the following:
 - a. The owner or operator shall not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission of a regulated pollutant which would otherwise constitute a violation of an applicable regulation.
 - b. Paragraph (a) above includes, but is not limited to, the use of gaseous dilutants to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a regulation that applies only to operations larger than a specified size.
- 15. <u>GENERAL PROVISIONS ON TEST METHODS AND PROCEDURES</u> As required by 15A NCAC 02D .0912 "General Provisions on Test Methods and Procedures," the owner or operator of any volatile organic compound source required to comply with rules in 15A NCAC 02D .0900 shall, at his own expense, demonstrate compliance by the methods described in 02D .0912 and 02D .2600. The owner or operator of a volatile organic compound source shall demonstrate compliance when the Director requests such demonstration. The Director shall explain to the owner or operator the basis for requesting a demonstration of compliance and shall allow reasonable time for testing to be performed. All tests shall be made by, or under direction of, a person qualified by training or experience in the field of air pollution testing.
- 16. <u>PETROLEUM LIQUID STORAGE IN FIXED ROOF TANKS</u> For the fixed roof gasoline storage tanks with internal floating roof(s), the Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .0925, "Petroleum Liquid Storage in Fixed Roof Tanks."
 - a. <u>Operational Requirements</u> The internal floating roof storage tanks shall not be operated unless:
 - i. The storage tank is equipped with a closure seal, or seals, to close the space between the roof edge and tank wall;
 - ii. The storage tank is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and
 - iii. 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; and

- 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.
- b. <u>Inspection Requirements</u> The Permittee shall conduct routine visual inspections through the hatches of the fixed roof tanks once per month. The Permittee shall also conduct a complete inspection of the cover and seal whenever the tank is emptied for maintenance, shell inspection, cleaning, or for other non-operational reasons or whenever excessive vapor leakage is observed.
- c. <u>Recordkeeping Requirements</u> The Permittee shall maintain the following records for a minimum of two years:
 - i. All required inspections;
 - ii. The average monthly storage temperature;
 - iii. The throughput quantities and types of petroleum liquid for each storage vessel; and
 - iv. The true vapor pressure of petroleum liquids stored.
- 17. <u>BULK GASOLINE TERMINALS</u> The Permittee of the bulk gasoline terminal shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .0927, "Bulk Gasoline Terminals."
 - a. <u>Gasoline Loading Control Requirements</u> The Permittee shall not load gasoline into any tank trucks or trailers unless the bulk gasoline terminal is equipped with a vapor control system that prevents the emissions of volatile organic compounds from exceeding 35 milligrams per liter. 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. The associated vapor collection system shall be operated and maintained in accordance with 15A NCAC 02D .0932(d) "Gasoline Tanks, Trucks and Vapor Collection Systems."
 - b. <u>Tank Truck and Trailer Loading Requirements</u> The Permittee shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank has been certified leak tight in accordance with 15A NCAC 02D .0932(c) within the last twelve (12) months. A copy of the certification test conducted shall be kept on site for each gasoline tank truck loaded at the terminal.
 - c. <u>Inspection Requirements</u> The Permittee shall inspect the vapor collection system, the vapor control system, and each lane of the loading rack while a gasoline tank truck or trailer is being loaded for liquid and vapor leaks as follows:
 - i. Visually inspect for leaks each day that the terminal is both manned and open for business;

- ii. Inspect weekly for leaks using sight, sound, or smell; or a meter used to measure volatile organic compounds; or an explosimeter; and
- iii. An inspection using either a meter used to measure volatile organic compounds or an explosimeter shall be conducted every month.
- d. <u>Recordkeeping Requirements</u> If no leaks are found, the owner or operator shall record the date that the inspection was done and that no leaks were found. If a leak is found, the owner or operator shall record the following information (for each leak found):
 - i. The date of the inspection;
 - ii. The findings (location, nature and severity of each leak);
 - iii. The corrective action taken;
 - iv. The date when corrective action was completed, and
 - v. Any other information that the terminal deems necessary to demonstrate compliance.
- e. <u>Leak Repairs</u> The owner or operator shall repair all leaks as follows:
 - i. The vapor collection hose that connects to the tank truck or trailer shall be repaired or replaced before another tank truck or trailer is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline tank truck or trailer.
 - ii. All other leaks shall be repaired as expeditiously as possible, but no later than 15 days from their detection. If more than 15 days are required to make the repair, the reasons the repair cannot be made shall be documented, and the leaking equipment shall not be used after the fifteenth day from when the detection was found until the repair is made.
- 18. <u>GASOLINE TRUCK TANKS AND VAPOR COLLECTION SYSTEMS</u> The Owner or Operator of gasoline truck tanks equipped for vapor collection and of vapor control systems at bulk gasoline terminals shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .0932, "Gasoline Truck Tanks and Vapor Collection Systems," which includes in part the following requirements:
 - a. <u>Gasoline Truck Tank Requirements</u>:
 - Gasoline truck tanks and their vapor collection systems shall be tested annually by a certified facility. The test procedure that shall be used is described in 15A NCAC 02D .2600 and is according to Rule NCAC 02D .0912. 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, according to Subparagraph (i) above shall display a sticker on the front tank shell. 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 02D .2615, 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 according to Subparagraph (i) above.
- b. Vapor Collection System Requirements:
 - i. The vapor collection system and vapor control system 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 there shall be:
 - A. No liquid leaks; and
 - B. 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 02D .2615.
 - iii. If a leak is discovered that exceeds the limit in Part (b) above, the vapor collection system or vapor control system shall be repaired as follows:
 - A. The vapor collection hose that connects to the tank truck or trailer shall be repaired or replaced before another tank truck or trailer is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline tank truck or trailer.
 - B. All other leaks shall be repaired as expeditiously as possible but no later than 15 days from their detection. If more than 15 days are required to make the repair, the reasons the repair cannot be made shall be documented, and the leaking equipment shall not be used after the fifteenth day from when the detection was found until the repair is made.
 - iv. The owner or operator of a vapor collection system at a bulk gasoline plant or a bulk gasoline terminal shall test, according to 15A NCAC 02D .2600 and 02D .0912 of this Section, the vapor collection system at least once per year. If, after two complete annual checks, no more than 10 leaks are found, the

Director may allow less frequent monitoring. If more than 20 leaks are found, the Director may require that the frequency of monitoring be increased.

- c. <u>Recordkeeping Requirements</u>:
 - i. The Permittee shall maintain records of all certification testing and repairs. The records shall identify the gasoline truck tank, vapor collection system, or 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 the reading;
 - E. The final test vacuum and the time of the reading;
 - F. The date and location of the tests;
 - G. The NC sticker number issued; and
 - H. The final change in pressure of the internal vapor value test.

A copy of the most recent certification test shall be kept with the truck tank. The owner or operator of the truck tank shall also file a copy of the most recent certification test with each bulk gasoline terminal that loads the truck tank. The records shall be maintained for at least two years after the date of the testing or repair, and copies of such records shall be made available within a reasonable time to the Director upon written request.

- 19. For the bottom loading gasoline loading rack (ID No. ES-5) equipped with a vapor combustion unit, (ID No. CD-VCU), gasoline loading may only occur when the vapor combustion unit is operational.
- 20. <u>GENERALLY AVAILABLE CONTROL TECHNOLOGY</u> For affected sources as defined in §63.11081, the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, as promulgated in 40 CFR 63, <u>Subpart BBBBBB</u> - "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities," including Subpart A "General Provisions."
 - a. <u>Emissions Limitations and Management Practices</u> The Permittee shall operate and maintain the affected sources, including any associated air pollution control devices, in a manner consistent with safety and good air pollution control practices for minimizing emissions. In addition, the following requirements apply:

- i. The Permittee shall meet the following emission limits and management practices for each gasoline storage tank. Storage tanks that are subject to and comply with the control requirements of 40 CFR 60 Subpart Kb shall be determined to be in compliance with these requirements. Storage tanks that are subject to and comply with 15A NCAC 02D .0925 or 15A NCAC 02D .0933 shall also be determined to be in compliance with these requirements. [§63.11087]
 - A. Each tank with a capacity of less than 75 cubic meters (m³) or less than 151 m³ and a 365-day rolling average gasoline throughput of 480 gallons per day or less, shall be equipped with a fixed roof that is mounted to the storage tank in a stationary manner, and must be maintained such that all openings are in a closed position at all times when not in use. [Item 1 of Table 1 to this subpart]
 - B. For each tank with a capacity of greater than or equal to 75 m³ and not meeting the criteria in paragraph A, above, the Permittee shall meet one of the following requirements: [Item 2 of Table 1 to this subpart]
 - I. Reduce emissions of total organic HAP or TOC by 95 weightpercent with a closed vent system and control device, as specified in §60.112b(a)(3) of subpart Kb, OR;
 - II. Equip each internal floating roof gasoline storage tank according to the requirements of §60.112b(a)(1) of subpart Kb except for §60.112b(a)(1)(ii)(B) and §60.112b(a)(1)(iv) through (ix); AND equip each external floating roof tank according to the requirements of §60.112b(a)(2) except the requirements of §60.112b(a)(2)(ii) are only required for storage tanks that do not meet the requirements of §60.112b(a)(2)(i), OR;
 - III. Equip and operate each internal and external floating roof tank according to the applicable requirements in §63.1063(a)(1) and (b) of subpart WW, except for §63.1063(a)(1)(i)(C) and (D), and equip each external floating roof tank according to the requirements of §63.1063(a)(2) for each tank that does not meet the requirements of §63.1063(a)(1).
- The Permittee shall comply with the applicable requirements of §63.11088 for each gasoline loading rack by complying with the requirements of 15A NCAC 02D .0927. Additionally, the vapor collection system shall be designed and operated to prevent any TOC vapors collected at one loading rack or lane from passing through another loading rack or lane to the atmosphere. 15A NCAC 02D .0927 does not address railcar loading; facilities with railcar loading shall comply with §63.11088.
- iii. The Permittee shall comply with the applicable requirements of §63.11089 for monthly leak inspections of all equipment in gasoline service by

complying with the requirements of 15A NCAC 02D .0927 and 15A NCAC 02D .0932.

- b. Monitoring Requirements The following monitoring shall be conducted:
 - i. The Permittee shall calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the vapor processor systems, as follows:
 - A. The thermal oxidation system shall be equipped with a continuous parameter monitoring system (CPMS) capable of measuring temperature, which shall be installed in the firebox or in the duct work immediately downstream from the firebox in a position before any substantial heat exchange occurs. [§63.11092(b)(1)(iii)(A)]
 - B. The Permittee shall monitor the thermal oxidation system pilot flame using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light, to indicate the presence of a flame. The heat sensing device shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off. The pilot flame must be present while gasoline vapors are displaced to the vapor processor systems to assure compliance with the emission standard in §63.11088(a). [§63.11092(b)(1)(iii)(B)(1)]
 - C. The thermal oxidation system shall be operated in accordance with the submitted Monitoring and Inspection Plan, which demonstrates compliance with the following requirements: [§63.11092(b)(1)(iii)(B)(2)]
 - I. The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time the pilot flame is absent. [§63.11092(b)(1)(iii)(B)(2)(i)]
 - II. The Permittee shall verify during each day of operation of the loading rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through and automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start or end of a shutdown even may be used. [§63.11092(b)(1)(iii)(B)(2)(ii)]
 - III. The Permittee shall perform semi-annual preventative maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system. [§63.11092(b)(1)(iii)(B)(2)(iii)]

- IV. With the monitoring and inspection plan, the Permittee shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring, specific corrective actions that will be taken to correct any malfunction and define what the owner or operator would consider to be a timely repair for each potential malfunction. [§63.11092(b)(1)(iii)(B)(2)(iv)]
- V. The Permittee shall document any system malfunction, as defined in the submitted Monitoring and Inspection Plan, and any activation of the automated alarm or shutdown system with a written entry into a logbook (in written or electronic format). The record shall include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the submitted Monitoring and Inspection Plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction. [§63.11092(b)(1)(iii)(B)(2)(v)]
- Operation of the pollution control devices in a manner not compliant with the preceding paragraph(s) shall constitute a violation of the emission standard in §63.11088(a), except for malfunctions if the corrective actions as described in a submitted monitoring and inspection plan are followed. The Permittee shall: [§63.11092(d)]
 - A. Initiate corrective action to determine the cause of the problem within 1 hour;
 - B. Initiate corrective action to fix the problem within 24 hours;
 - C. Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;
 - D. Minimize periods of start-up, shutdown, or malfunction; and
 - E. Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.
- iii. The Permittee shall comply with the following requirements for each gasoline storage tank that is subject to the emission standard in §63.11087:
 [§63.11092(e)]
 - A. For gasoline storage tanks equipped with an internal floating roof, the Permittee shall perform inspections of the floating roof system according to the requirements of §60.113b(a) of subpart Kb if complying with option 2(b) in Table 1 to this subpart, or according to the requirements of §63.1063(c)(1) of subpart WW if complying with option 2(d) in Table 1 to this subpart. [§63.11092(e)(1)]

- B. For gasoline storage tanks equipped with external floating roofs, the Permittee shall perform inspections of the floating roof system according to the requirements of §60.113b(b) of subpart Kb if complying with option 2(c) in Table 1 to this subpart, or according to the requirements of §63.1063(c)(2) of subpart WW if complying with option 2(d) in Table 1 to this subpart. [§63.11092(e)(2)]
- C. For gasoline storage tanks equipped with closed vent systems and control device, the Permittee shall conduct a performance test and determine a monitored operating parameter value in accordance with the requirements in §63.11092(a) through (d), except that the applicable level of control specified in paragraph (a)(2) of this section shall be a 95-percent reduction in inlet total organic compounds (TOC) levels rather than 80 mg/l of gasoline loaded. [§63.11092(e)(3)]
- iv. The Permittee shall comply with the annual certification test requirements of §63.11092(f) for gasoline cargo tanks by complying with the requirements of 15A NCAC 02D .0932.
- c. <u>Reporting Requirements</u> In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to <u>SUBMIT</u> to the Regional Supervisor, DAQ, in <u>WRITING</u>, the following:
 - i. Semi-annual compliance certifications due by July 30 for the period of time between January 1 and June 30 and by January 30 for the period of time between July 1 and December 31 of each year. The report shall include the following, as applicable: [§63.11095(a)]
 - A. For storage vessels complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, the information specified in §60.115b(a), §60.115b(b), or §60.115b(c), of subpart Kb depending upon the control equipment installed, or, if complying with option 2(d) in Table 1, the information specified in §63.1066 of subpart WW. [§63.11095(a)(1)]
 - B. For loading racks, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [§63.11095(a)(2)]
 - C. For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection. The Permittee shall also report the reason why each repair was not feasible and the date each repair was completed. [§63.11095(a)(3) and §63.11089(c)]
 - ii. The Permittee shall, consistent with 40 CFR 63.10(e)(3), submit semiannually an excess emissions and continuous monitoring system performance report and/or a summary report. The semiannual report shall be calculated on a quarterly basis and contain the information required per 40 CFR 63.10(e)(3)(vi) and shall be submitted at the time the Semi-annual

compliance certification is submitted. The report shall also include the following: [§63.11095(b)]

- A. Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained. [§63.11095(b)(1)]
- B. Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with §63.11094(b). [§63.11095(b)(2)]
- C. Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under §63.11092(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS. [§63.11095(b)(3)]
- D. Each instance in which malfunctions discovered during the monitoring and inspections required under §63.11092(b)(1)(i)(B)(2) and (b)(1)(iii)(B)(2) were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction. [§63.11095(b)(4)]
- E. For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection: [§63.11095(b)(5)]
 - I. The date on which the leak was detected;
 - II. The date of each attempt to repair the leak;
 - III. The reasons for the delay of repair; and
 - IV. The date of successful repair.
- iii. The Permittee shall submit a semiannual report including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11085(a), including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report, if one is required, or by July 30 for the period of time between January 1 and June 30 and by January 30 for the period of time between July 1 and December 31 of each year. [§63.11095(d)]

- d. <u>Recordkeeping Requirements</u> In addition to any other recordkeeping requirements of the EPA, the Permittee is required to maintain records as follows:
 - i. For performance tests performed after the initial test required under §63.11092(a), if applicable, the Permittee shall keep records that document the reason that the operating parameter value has changed since the previous performance test. [§63.11092(c)]
 - ii. For each gasoline storage tank that is subject to this rule, the Permittee shall keep records as specified in §60.115b of subpart Kb if complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, except records shall be kept for at least 5 years. If complying with the requirements of option 2(d) in Table 1, the Permittee shall keep records as specified in §63.1065 of subpart WW. [§63.11094(a)]
 - iii. The Permittee shall keep records of the test results for each gasoline cargo tank loading at the facility, as follows: [§63.11094(b)]
 - A. Records of all annual certification testing and periodic bubble leak testing, as applicable, and documentation of compliance with alternative requirements in §63.11088(b) verifying the vapor tightness testing, as applicable. The records shall be maintained at the terminal and made available to DAQ upon request. The records may be kept in electronic format provided that each record is an exact duplicate image of the original paper record, with certifying signatures, and is instantly available at the terminal, and provided that the Permittee has notified DAQ, in writing, in advance that the records will be kept electronically. If a terminal automation system is used to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), the records are not required to be kept on site, but a copy of the documentation shall be made available to DAQ upon request within 24 hours. [§63.11094(b)(1) through (2) and (c)]

The records for each test, in written or electronic format, shall include at a minimum, the following:

- I. Name of test;
- II. Cargo tank owner's name and address;
- III. Cargo tank identification number;
- IV. Test location and date;
- V. Tester name and signature;
- VI. Witnessing inspector, if any, name, signature, and affiliation;

- VII. Vapor tightness repair including nature of repair work and when performed in relation to vapor tightness testing;
- VIII. Test results including test pressure, pressure or vacuum change, mm of water, time period of test, number of leaks found with instrument, and leak definition;
- iv. The Permittee shall record all monthly leak inspections, including a signature at the completion of each inspection and records of each detected leak, in a logbook (in written or electronic format), which shall be kept on site and made available to Division of Air Quality personnel upon request. The Permittee shall maintain a section in the logbook which contains a list, including identification numbers, summary description, or diagram(s) showing the location of all equipment in gasoline service. If the Permittee has elected to implement an instrument program under §63.11089, the records shall contain a full description of the program. [§63.11094(d) and (e)]
- v. The Permittee shall:
 - A. Keep an up-to-date, readily accessible record of the continuous monitoring data required under §63.11092(b) or §63.11092(e). This record shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. [§63.11094(f)(1)]
 - B. Keep records of all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under §63.11092(b) or §63.11092(e). [§63.11094(f)(2)(i)] And;
 - C. Keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) of the air pollution control and monitoring equipment, including, if applicable, records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.11094(g)]
- 21. <u>DETERMINATION OF LEAK TIGHTNESS AND VAPOR LEAKS</u> To comply with the requirements of 15A NCAC 02D .0932, the Permittee shall follow the procedures specified in 15A NCAC 02D .2615 as follows:
 - a. <u>Leak Detection Procedures.</u> One of the following test methods from the EPA document "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, published by the U.S. Environmental Protection Agency, December 1978, shall be used to determine compliance with 15A NCAC 02D .0932 Gasoline Cargo Tanks and Vapor Collector Systems:

- i. The gasoline vapor leak detection procedure by combustible gas detector described in Appendix B to EPA-450/2-78-051 shall be used to determine leakage from gasoline cargo tanks and vapor control systems.
- ii. The leak detection procedure for bottom-loaded cargo tanks by bag capture method described in Appendix C to EPA-450/2-78-051 shall be used to determine the leak tightness of cargo tanks during bottom loading.
- b. <u>Annual Testing.</u> The pressure-vacuum test procedures for leak tightness of cargo tanks described in Method 27 of Appendix A to 40 CFR Part 60 or 49 CFR Part 180.407 shall be used to determine the leak tightness of gasoline cargo tanks in use and equipped with vapor collection equipment. Method 27 of Appendix A to 40 CFR Part 60 is changed for fugitive emissions leak prevention to read:
 - i. 8.2.1.2 "Connect static electrical ground connections to tank."
 - ii. 8.2.1.3 "Attach test coupling to vapor return line."
 - iii. 16.0 No alternative procedure is applicable.
- c. Copies of Appendix B and C of the EPA document, "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, cited in this Rule, are hereby incorporated with subsequent amendments and editions by reference and are available on the Division's Website https://deq.nc.gov/about/divisions/air-quality/air-quality-enforcement/emissionmeasurement.
- 22. <u>GENERALLY AVAILABLE CONTROL TECHNOLOGY</u> For the existing one No. 4 fuel oil-fired boiler (12.88 million Btu per hour maximum heat input rate, 1964) (ID No. ES-B-1), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, as promulgated in 40 CFR 63, <u>Subpart JJJJJJ</u>, " National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."
 - a. <u>Compliance Requirements</u> As required by 15A NCAC 02D .1111, the Permittee shall comply with the following requirements:

Note: This rule applies to the **existing** 1964 Cleaver & Brooks No. 4 fuel oil-fired boiler (ID No. ES-B-1).

- i. General Duty Clause (40 CFR 63.11205(a)) At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- ii. Boiler Tune-up (40 CFR 63.11223) An initial boiler tune-up is required by March 21, 2014. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within thirty days of startup. The Permittee shall comply with the following with respect to the tune-up:

- A. <u>Periodic tune-ups</u>: A <u>biennial</u> tune-up is required and shall be conducted no more than 25 months after the previous tune-up. The following units are only required to conduct a tune-up every five years: seasonal boilers (shutdown for 7 consecutive months or 210 consecutive days each 12-month period due to seasonal conditions; only biomass or oil), limited-use boilers, and units with oxygen trim systems, as defined in 40 CFR 63.11237. Each five-year tune-up must be conducted within 61 months of the previous tune-up.
- B. <u>Fuel required for the tune-up</u>: The permittee shall conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
- C. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown but must inspect each burner at least once every 36 months (72 months for 5-year tune-ups).
- D. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- E. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the air to fuel ratio inspection until the next scheduled unit shutdown but must conduct the inspection at least once every 36 months (72 months for 5-year tune-ups).
- F. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- G. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken with a portable CO analyzer.
- b. <u>Notification and Reporting Requirements</u> In addition to the notification and reporting requirements of the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
 - i. <u>Compliance Report</u> must be prepared by March 1 of every other year (or every five years depending on the frequency of the tune-up requirements)

starting March 1 the year following the first periodic tune-up and submitted upon request. The report must meet the requirements of 40 CFR 63.11225(b)(1-2).

- c. <u>Recordkeeping Requirements</u> In addition to any other recordkeeping requirements of the EPA, the Permittee shall maintain the following records as defined under 40 CFR 63.11225(c):
 - i. Copies of all required notifications.
 - ii. Maintain the following records to document conformance with the work practices, emission reduction measures, and management practices:
 - A. Tune-up records records must identify each boiler, the date of tuneup, the procedures followed for tune-up, the manufacturer's specifications to which the boiler was tuned, and the following:
 - I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tuneup of the boiler.
 - II. A description of any corrective actions taken as a part of the tune-up of the boiler.
 - III. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler but <u>only</u> if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
 - B. A copy the Energy Assessment required by 40 CFR 63.11214(c).
 - C. Seasonal boilers For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.
 - D. Records of non-waste determinations per 40 CFR 63.11225(c)(2)(ii).
 - iii. Malfunction Records Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
 - iv. Record Retention You must keep each record for 5 years following the date of each recorded action.

^{23. &}lt;u>LIMITATION TO AVOID 15A NCAC 02D .0530</u> - Pursuant to 15A NCAC 02Q .0317 "Avoidance Conditions," to avoid the applicability of 15A NCAC 02D .0530 "Prevention of

Significant Deterioration" (PSD), as requested by the Permittee, facility-wide emissions shall be less than the following:

Pollutant	Emission Limit	
VOC	Less than 250 tons per consecutive 12-	
	month period	

- a. To ensure enforceability of this limit, the following restrictions shall apply:
 - i. The Loading Rack Throughput shall be limited to loading gasoline at 300,000,000 gallons per year and loading distillates/residual fuel oil at 568,299,312 gallons per year.
 - ii. The Marine Vessel Loading Rack Throughput shall be limited to loading gasoline at 4,200,000 gallons per year and loading distillates/residual fuel oil at 84,000,000 gallons per year.
 - iii. The Vapor Control Unit shall limit emissions of VOC to <u>10</u> mg VOC per liter gasoline loaded. This limit is contingent upon DAQ approves Vapor Control Unit stack test – completed and approved in June/July 2011.
- b. For compliance purposes, the Permittee shall record monthly and total annually the gallons of gasoline, and gallons of distillates/residual fuel oil loaded at the loading rack. Also, a logbook of any maintenance performed on the Vapor Control Unit shall be kept on site and made available to DAQ personnel upon request.
- c. Within sixty (<u>60</u>) days after each calendar year, the Permittee shall report the annual gallons of gasoline, and gallons of distillates/residual fuel oil for the previous twelve (12) months on a monthly rolling average/total basis to the Regional Supervisor, Division of Air Quality.
- 24. <u>APPLICATION REQUIREMENT</u> In accordance with 15A NCAC 02Q .0504 "Option for Obtaining Construction and Operation Permit," the Permittee shall file a 1st-time Title V application following the procedures of Section 15A NCAC 02Q .0500 by TBD+12 months.

B. GENERAL CONDITIONS AND LIMITATIONS

In accordance with G.S. 143-215.108(c)(1), <u>TWO COPIES OF ALL DOCUMENTS</u>, <u>REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, REQUESTS FOR</u> <u>RENEWAL, AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT</u> shall be submitted to the:

Regional Supervisor North Carolina Division of Air Quality Wilmington Regional Office 127 Cardinal Drive Extension Wilmington, NC 28405 910-796-7215

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

- 2. <u>RECORDS RETENTION REQUIREMENT</u> In accordance with 15A NCAC 02D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years unless another time period is otherwise specified.
- 3. <u>ANNUAL FEE PAYMENT</u> Pursuant to 15A NCAC 02Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
- 4. <u>EQUIPMENT RELOCATION</u> In accordance with 15A NCAC 02Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
- 5. <u>REPORTING REQUIREMENT</u> In accordance with 15A NCAC 02Q .0309, any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application regarding facility emissions;
 - b. changes that modify equipment or processes of existing permitted facilities; 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.

6. In accordance with 15A NCAC 02Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In

accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will effectuate 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 cleaning device(s) and appurtenances.

- 7. <u>CHANGES NOT REQUIRING PERMIT REVISIONS</u> Pursuant to 15A NCAC 02Q .0318, changes to the facility that are not exempt pursuant to 15A NCAC 02Q .0102 may be allowed without first modifying an applicable air permit if the change(s) meet(s) the requirements of 15A NCAC 02Q .0318(b)(1) through (b)(5) and the owner or operator notifies the Director in writing, using forms provided by the Division, seven calendar days before the change is made. Within 10 business days of receipt of the notice, the Division shall notify the owner or operator of its determination of whether the change(s) meet(s) the requirements of 15A NCAC 02Q .0318(b)(1) through (b)(5).
- 8. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
- 9. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
- 10. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
- 11. In accordance with 15A NCAC 02D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
- 12. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
- 13. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such 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.
- 14. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
- 15. <u>PERMIT RETENTION REQUIREMENT</u> In accordance with 15A NCAC 02Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make

available to personnel of the DAQ, upon request, the current copy of the air permit for the site.

- 16. <u>CLEAN AIR ACT SECTION 112(r) REQUIREMENTS</u> Pursuant to 15A NCAC 02D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.
- 17. <u>GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS</u> 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 02D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval. Additionally, in accordance with 15A NCAC 02D .0605, the Permittee shall follow the procedures for obtaining any required audit sample and reporting those results.

Permit issued this the TBD.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

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

Air Permit No. 03467R29

ATTACHMENT to Permit No. 03467R29, TBD

Emission Source ID No.	Emission Source Description ^{1,2}
IES-3	Equipment Leak Fugitives
IES-8905	fixed roof distillate/residual fuel oils storage tank, 20,472 barrels capacity
IES-8909	fixed roof distillate/residual fuel oils storage tank, 19,039 barrels capacity
IES-8911	fixed roof distillate/residual fuel oils storage tank, 19,126 barrels capacity
IES-8917	fixed roof "gasoline additive" (low vp) storage tank, 216 barrels capacity
IES-8918	fixed roof "gasoline additive" (low vp) storage tank, 143 barrels capacity
IES-8919	fixed roof "gasoline additive" (low vp) storage tank, 132 barrels capacity
IES-8920	fixed roof "gasoline additive" (low vp) storage tank, 179 barrels capacity
IES-8921	fixed roof "gasoline additive" (low vp) storage tank, 179 barrels capacity
IES-8929	fixed roof distillate/fuel oil storage tank, 177 barrels capacity
IES-8930	fixed roof "dye additive" storage tank, 6 barrels capacity
IES-8922	fixed roof distillate additive tank, 600 gallon capacity

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

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

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