

The proposed amendments and adoption will be published in the North Carolina Register on **5/15/2020**.

**Written comments may be submitted to Stephen Benjamin, Secretary, NC Gas and Oil Inspection Board, 1050 Mail Service Center, Raleigh, NC 27699-1050 or [steve.benjamin@ncagr.gov](mailto:steve.benjamin@ncagr.gov).**

Any person may request a public hearing on the proposed rules by submitted a request in writing no later than May 30,2020, to Stephen Benjamin, Secretary, NC Gasoline and Oil Inspection Board, 1050 Mail Service Center, Raleigh, NC 27699-1050.

## **02 NCAC 42 .0102        DEFINITIONS**

Except as otherwise defined in Chapter 119, North Carolina General Statutes, the definitions applicable in this Chapter are as follows:

- (1) "ASTM" means ASTM International.
- (2) "Approved lead substitute" means an EPA registered gasoline additive formulated to reduce valve seat recession in engines designed to operate on leaded gasoline.
- (3) "Biodiesel" means a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM D 6751.
- (4) "Biodiesel Blend" means a blend of biodiesel meeting ASTM D 6751 with petroleum-based diesel fuel meeting ASTM D 975 or fuel oil meeting ASTM D 396 and designated BXX, where XX represents the volume percentage of biodiesel in the blend.
- (5) "Biomass-based diesel" means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under 42 U.S.C. 7545, an includes fuel derived from animal wastes, including poultry fats and poultry wastes, and other waste materials, or from municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater, except that the term does not include biodiesel as defined in this Part.
- ~~(5)~~(6) "Board" means the Gasoline and Oil Inspection Board.
- ~~(6)~~(7) "Cetane number" means the relative ignition quality of diesel fuels by the ASTM Cetane Method D 613.
- (8) "CFR" means the Code of Federal Regulations.
- ~~(7)~~(9) "Denatured fuel ethanol" means ethanol meeting the provisions of ASTM D 4806, "Standard Specification for Denatured Fuel Ethanol to be Blended with Gasolines for Use as an Automotive Spark-Ignition Engine Fuel."

- (8)(10) "Director" means the Director of the Standards Division of the North Carolina Department of Agriculture and Consumer Services.
- (9)(11) "Distributor" means any person who transports or stores or causes the transportation or storage of gasoline at any point between any gasoline refinery or importer's facility and any retail outlet or wholesale purchaser-consumer's facility.
- ~~(10) "E85" means a petroleum product that is a blend of denatured ethanol and gasoline or natural gasoline of which the ethanol portion is nominally 70 to 85 percent ethanol by volume and meeting the requirements of ASTM D 5798.~~
- (11)(12) "EPA" means the United States Environmental Protection Agency.
- (13) "Ethanol Flex Fuel" means a mixture of gasoline and ethanol that contains 51 percent to 83 percent ethanol by volume.
- (12)(14) "Leaded" means any gasoline or gasoline-oxygenate blend which contains more than 0.05 gram lead per U.S. gallon (0.013 gram lead per liter) or contains an approved lead substitute which provides a lead equivalency of at least 0.10 gram lead per U.S. gallon (0.026 gram per liter).
- (13)(15) "Liquefied petroleum gas" means any material which is composed predominantly of any of the following hydrocarbons or mixtures of same: propane, propylene, butanes (normal or iso-butane), and butylenes.
- (14)(16) "Motor Octane Number" means the number describing the relative anti-knock characteristic of a motor fuel determined by ASTM Motor Method (D 2700).
- (15)(17) "NCWM" means the National Conference on Weights and Measures.
- (16)(18) "NIST" means the National Institute of Standards and Technology.
- (17)(19) "Octane Index" means the number obtained by adding the research octane number and the motor octane number and dividing the sum by two.
- (18)(20) "Oxygenate" means any substance which, when added to gasoline, increases the amount of oxygen in that gasoline, and which has been approved by EPA for use in gasoline.
- (19)(21) "Premium Diesel" means a refined middle distillate petroleum product that meets the specifications of ASTM D 975 and NIST Handbook 130, Uniform Engine Fuels, Petroleum Products and Automotive Lubricants Regulation, section 2.2.1.
- (20)(22) "Qualitative word or term" means any word or term used in a brand name which by definition or customary usage indicates a level of quality, classification, grade, or designation.
- (21)(23) "Regular" when used as part of a brand name or as a grade designation for gasoline or gasoline-oxygenate blend shall be construed to mean an unleaded regular grade commercial automotive gasoline or gasoline-oxygenate blend.
- (22)(24) "Renewable Diesel Fuel" means a fuel which is not a mono-alkyl ester; meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of the Clean Air Act; is intended for use in engines that are designed to run on conventional, petroleum derived diesel fuel; is derived from nonpetroleum renewable resources

including, but not limited to, vegetable oil, animal wastes, including poultry fats and poultry wastes, and other waste materials, or municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater; and meets the latest version of ASTM specification D 975.

~~(23)~~(25) "Research Octane Number" means the number describing the relative anti-knock characteristic of a motor fuel determined by ASTM Research Method (D 2699).

~~(24)~~(26) "Retail" means the sale or offering for sale of gasoline to the ultimate consumer for use in a motor vehicle.

~~(25)~~(27) "Substantially Similar" rule means the United States Environmental Protection Agency's "Substantially Similar" rule, Section 211 (f) (1) of the Clean Air Act [42 U.S.C. 7545 (f) (1)].

~~(26)~~(28) "Terminal" means a facility at which gasoline is dispensed into trucks for transportation to retail outlets or wholesale purchaser-consumer facilities.

~~(27)~~(29) "Unleaded" means any gasoline or gasoline-oxygenate blend to which no lead or phosphorus compounds have been intentionally added and which contains not more than 0.05 gram lead per U.S. gallon (0.013 gram lead per liter) and not more than 0.005 gram phosphorus per U.S. gallon (0.0013 gram phosphorus per liter).

#### **SECTION .0200 - QUALITY OF LIQUID FUEL PRODUCTS**

##### **02 NCAC 42 .0201      STANDARD SPECIFICATIONS**

(a) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" as standard specification for gasoline with the following modifications:

- (1) Applications for temporary exceptions to vapor pressure and vapor/liquid ratio specifications as provided in this Subparagraph may be made to the Director. Said applications shall contain evidence that outlets marketing gasoline in North Carolina cannot be supplied from bulk terminals furnishing specified volatility level gasoline or that customary sources of supply have been temporarily interrupted by product shortage and alternate sources furnishing specified volatility level gasoline are not available. Such temporary exceptions granted shall apply only until the next meeting of the Board at which time the Board shall establish the duration of the exception;
- (2) The minimum lead content for gasoline registered or labeled as "leaded" shall be as defined in 02 NCAC 42 .0102;
- (3) Vapor pressure and vapor/liquid ratio seasonal specifications as listed in this Subparagraph may be extended for a maximum period of 15 days to allow for the disbursement of old stocks. However, new stocks of a higher volatility classification shall not be offered for retail sale prior to the effective date of the higher volatility classification.

(b) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" as standard specification for alcohol blends with the following modifications:

- (1) A vapor pressure tolerance not exceeding one pound per square inch (1 psi) for ethanol blends of ~~up to 10 percent~~; 9 percent to 15 percent by volume;
- (2) Vapor pressure seasonal specifications as listed in this Subparagraph may be extended for a maximum period of 15 days to allow for the disbursement of old stocks. However, new stocks of a higher volatility classification shall not be offered for retail sale prior to the effective date of the higher volatility classification;
- (3) Applications for temporary exceptions to vapor pressure specifications as provided in this Subparagraph may be made to the Director. Said applications shall contain evidence that outlets marketing gasoline in North Carolina cannot feasibly be supplied from bulk terminals furnishing specified volatility level gasoline or that customary sources of supply have been temporarily interrupted by product shortage and alternate sources furnishing specified volatility level gasoline are not available. Such temporary exceptions granted shall apply only until the next meeting of the Board at which time the Board shall establish the duration of the exception;
- (4) The minimum temperature at 50 percent evaporated shall be 150 degrees F (66 degrees C) as determined by ASTM Test Method D 86 for ethanol blends of ~~up to 10 percent~~; 1 percent to 15 percent by volume;
- (5) The minimum lead content for gasoline and alcohol blends registered or labeled as "leaded" shall be as defined in 02 NCAC 42 .0102;
- (6) Octane rating shall not be less than the octane index certified on the brand name registration as required by 02 NCAC 42 .0500;
- (7) All blends, both leaded and unleaded, shall be blended according to the EPA "Substantially Similar" rule or an EPA waiver for unleaded fuel;
- (8) Water tolerance shall be such that no phase separation occurs when subjected to a temperature equal to the temperatures specified in the table for "Maximum Temperature for Phase Separation, °C," ASTM D 4814;
- (9) The vapor/liquid ratio specification shall be waived for ethanol blends of up to 10 percent.

(c) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 975, "Standard Specification for Diesel Fuel Oils" as standard specification for diesel motor fuels and renewable diesel fuels with the following modification: For diesel motor fuel grade 2-D, the minimum flash point as determined by ASTM Test Method D 56 shall be 115 degrees F (46 degrees C).

(d) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 396, "Standard Specification for Fuel Oils" as standard specification for fuel oils and blends of biodiesel and fuel oil.

(e) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 3699, "Standard Specification for Kerosene" as standard specification for kerosenes with the following modification: For grade 2-K, the presence or absence of coloring matter shall in no way be determinative of whether a substance meets the requirements of this grade of kerosene.

(f) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 6751, "Standard Specification for Biodiesel (B100) Blend Stock for Distillate Fuels" as standard specification for biodiesel (B100) and for B99 (a blend of 99 percent biodiesel and one percent petroleum diesel).

(g) The Board hereby adopts by reference, including subsequent amendments and editions, ASTM D 5798, "Standard Specification for ~~Fuel Ethanol (Ed75-Ed85)~~ Ethanol Fuel Blends for Flexible Fuel for Automotive Spark-Ignition Engines" as standard specification for ~~E85 fuel ethanol~~. Ethanol Flex Fuel.

(h) The Board hereby adopts by reference, including subsequent amendments and editions, NIST Handbook 130, "Uniform Engine Fuels, Petroleum Products and Automotive Lubricants Regulation," section 2.2.1 "Premium Diesel Fuel" as the standard specification of premium diesel fuels in addition to ASTM D 975. Copies of this document may be obtained at no cost from the NIST Web site - ~~http://ts.nist.gov/WeightsandMeasures/~~ <http://nist.gov/pml/weights-and-measures/publications/nist-handbooks/handbook-130>.

(i) In addition to meeting all specification requirements as set forth in this Rule, each fuel must be suitable for the intended use. Motor fuels shall not contain concentrations of methyl tertiary butyl ether (MTBE) in violation of G.S. 119-26.3.

(j) ASTM documents adopted by reference herein are available for inspection in the office of the Director of the Standards Division and may be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 or their Web site - [www.astm.org](http://www.astm.org), at the following cost for each document: D 396, ~~thirty-five dollars (\$35.00);~~ fifty-four dollars (\$54.00); D 975, ~~forty-one dollars (\$41.00);~~ sixty-nine dollars (\$69.00); D 3699, ~~thirty dollars (\$30.00);~~ forty-eight dollars (\$48.00); D 4814, ~~forty-seven dollars (\$47.00);~~ sixty-nine dollars (\$69.00); D 5798, ~~thirty-five dollars (\$35.00);~~ forty-eight dollars (\$48.00); and D 6571, ~~thirty-five dollars (\$35.00);~~ forty-eight dollars (\$48.00).

## SECTION .0400 - DISPENSING DEVICES AND PUMPS

### 02 NCAC 42 .0401 LABELING OF DISPENSING DEVICES

(a) For the purpose of product identity, each dispensing device used in the retailing of any motor fuel shall, on the front panel of the dispenser and in plain view of the customer, be labeled with the following:

- (1) For gasoline, the registered brand ~~name;~~ name, which shall include both a brand name and a grade designation;
- (2) For diesel fuel, the registered brand name plus a descriptive or generic label if the registered brand name does not identify the type or grade of product;
- (3) For ~~biodiesel and~~ biodiesel, biodiesel blends, and biomass-based diesel, the registered brand name plus a descriptive or generic label if the registered brand name does not identify the type or grade of ~~product;~~ product and the labels as appropriate to the specific product as described in the most current version of 16 CFR 306.10 Automotive Fuel Rating Posting and 16 CFR 306.12 Labels;
- (4) For gasoline-oxygenate ~~blends other than E85 fuel ethanol containing;~~ blends, the registered brand name, the labels appropriate to the specific product as described in the most current version of 15 CFR 306.10 Automotive Fuel Rating Posting and 16 CFR 306.12 Labels, and the following:

~~(A) — At least one percent by volume of methanol, the registered brand name plus an additional label which states that the blend "contains methanol."~~

~~(B)(A) Ten Gasoline-ethanol blends of ten percent or less by volume of ethanol, ethanol shall include a grade designation and the registered brand name plus an additional label which states that the blend "contains 10% ethanol," "may contain up to 10% ethanol," "contains 10% or less ethanol" or similar wording.~~

~~(B) Gasoline-ethanol blends of greater than 10 percent up to 15 percent by volume shall comply with EPA labeling requirements under 40 CFR 80.1501.~~

~~(C) — Greater than 10 percent but no more than 15 percent by volume of ethanol, the registered brand name plus an additional label that states the blend "contains up to 15% ethanol," "contains between 10-15% ethanol," or similar wording.~~

~~(D) — Greater than 15 percent but no more than 85 percent by volume of ethanol, the registered brand name plus an additional label which states the specific volume percentage of ethanol present in the blend such as "contains 30% ethanol."~~

~~(5) — For E85 fuel ethanol, the registered brand name.~~

~~(b) The additional labels required by Subparagraph (a)(4) of this Rule shall be composed of letters at least one inch in height, minimum one eighth inch stroke, which contrast with the label background and shall be affixed to the dispenser front panel in a position conspicuous from the driver's position. Exceptions to the requirements in Subparagraph (a)(4) of this Rule are:~~

~~(1) — For fuels not covered by an EPA waiver, the additional label shall identify the percent by volume of ethanol or methanol in the blend; and~~

~~(2) For fuels meeting the EPA's "Substantially Similar" rule and which do not contain methanol, no additional label is required.~~

~~(c) Each dispensing device used in the retailing of products other than motor fuel shall, on the front panel of the dispenser and in plain view of the customer, be labeled as follows:~~

~~(1) Kerosene shall be labeled as either 1-K Kerosene or 2-K Kerosene. In addition, each dispenser shall contain one of the following legends as appropriate:~~

~~(A) On 1-K kerosene dispensers, the legend "Suitable For Use In Unvented Heaters"; or~~

~~(B) On 2-K kerosene dispensers, the legend "May Not Be Suitable For Use In Unvented Heaters"; and~~

~~(2) Other products shall be labeled with either the applicable generic name or a brand name which identifies the type of product.~~

~~(d) When a motor fuel or other product provided for in this Section is offered for sale, sold, or delivered at retail in barrels, casks, cans, or other containers, each container shall be labeled in accordance with this Section and in accordance with 15 U.S.C. 1451 et. seq., the Fair Packaging and Labeling Act.~~

~~(e) If a dispenser is designed so that one or more hoses connected to a common housing dispense more than one type or grade of product, means shall be provided to indicate the identity of the product being dispensed from the hose.~~

(f) Copies of 16 CFR 306 and 40 CFR 80.11501 may be accessed free of charge at [www.ecfr.gov](http://www.ecfr.gov).

02 NCAC 42 .0405 is proposed for adoption as follows:

**02 NCAC 42 .0405      RETAIL STORAGE TANKS AND DISPENSER FILTERS**

The presence of water in retail storage tanks, filters on retail dispensers, product storage identification and volume product information shall be per the most current version of NIST Handbook 130, "Uniform Engine Fuels, Petroleum Products and Automotive Lubricants Regulation," Section 4, "Retail Storage Tanks and Dispenser Filters." Copies of this document may be obtained at no cost from the NIST website – <https://www.nist.gov/pml/weights-and-measures/publications/nist-handbooks/handbook-130>.

*History Note:      Authority G.S. 119-26.*