MISSISSIPPI LEGISLATURE REGULAR SESSION 2002

By: Senator(s) Kirby To: Agriculture

SENATE BILL NO. 2763

AN ACT TO AMEND SECTION 75-55-5, MISSISSIPPI CODE OF 1972, TO SPECIFY THE MAXIMUM SULFUR CONTENT REQUIREMENT FOR ON-ROAD DIESEL FUEL AND OFF-ROAD DIESEL FUEL; AND FOR RELATED PURPOSES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI:

SECTION 1. Section 75-55-5, Mississippi Code of 1972, is amended as follows:

75-55-5. The words, terms and phrases as used in this chapter shall have the following meanings, unless the context requires otherwise:

(a) The term "commissioner" means the Commissioner of the Mississippi Department of Agriculture and Commerce, or his agents and employees.

(b) The term "State Chemist" means the Director of the Mississippi State Chemical Laboratory, or his agents and employees.

(c) The term "person" shall include any individual, firm, copartnership, joint venture, association, corporation, estate, trust or any other group or combination acting as a unit, and the plural as well as the singular number, unless the intention to give a more limited meaning is disclosed by the context.

(d) The term "illuminating oil" shall include coal oil, kerosene or other petroleum products used for illuminating purposes.

(e) The term "lubricating oil" means all petroleum based oils or synthetic lubricants intended for use in the crankcase of an internal combustion engine, either spark ignition

or diesel type. The purpose of the lubricating oil is to reduce friction between two (2) solid surfaces moving relative to one another.

(f) The term "gasoline pump" shall include pumps, meters and all measuring devices used for measuring gasoline and all oxygenated blended fuels; the term "diesel fuel pump" shall include pumps, meters and all measuring devices used for measuring diesel fuel; the term "kerosene pump" shall include pumps, meters and all measuring devices used for measuring kerosene; the term "liquefied compressed gas pump" shall include pumps, meters and all measuring devices used for measuring liquefied compressed gas.

(g) The term "gasoline" shall include (1) all products commonly or commercially known or sold as gasoline (excluding casinghead and absorption or natural gasoline) regardless of their classification or uses; and (2) a volatile mixture of liquid hydrocarbons, generally containing small amounts of additives, suitable for use as a fuel in spark ignition, internal combustion engines.

(h) The term "commercial gasoline" shall mean a liquid suitable for use as a fuel in spark ignition combustion engines, and shall be free of undissolved water, suspended matter and of any harmful ingredient or component and which, in addition, meets the following test requirements as set out in ASTM D4814, and it shall be the intent of this chapter that the state specifications may be kept current with ASTM D4814 as illustrated below:

(i) Corrosion ASTM D130. A clean copper strip shall not show more than extremely slight discoloration equivalent to ASTM Strip No. 1, when submerged in the gasoline for three (3) hours at one hundred twenty-two (l22) degrees Fahrenheit, as determined by ASTM D130.

(ii) Distillation range. For each month the distillation range shall be that specified by the vapor pressure class requirement for that month. Distillation temperature limits

shall be consistent with the corresponding vapor pressure class during the months affected by federal or state regulation which restrict vapor pressure. If the vapor pressure limit is between two (2) classes, the distillation temperature limits of the least restrictive class shall be acceptable. The method of test shall be ASTM D86.

(iii) Residue. The residue, after evaporation, shall not exceed two percent (2%), as determined by ASTM D86.

(iv) Gum test. The gum shall not exceed five (5) milligrams per one hundred (100) milliliters, after the extraction of the residue with a-heptane, as determined by ASTM D381.

(v) Sulphur. The sulphur content shall not exceed ten one-hundredths percent (0.10%) for unleaded gasoline or fifteen one-hundredths percent (0.15%) for leaded gasoline, as determined by ASTM D2622 or D4045.

(vi) Vapor pressure. The vapor pressure during the months of July and August shall not exceed ten (10) pounds per square inch at one hundred (100) degrees Fahrenheit, and during the months of November, December, January, February and March shall not exceed thirteen and one-half (13-1/2) pounds per square inch at one hundred (100) degrees Fahrenheit.

The vapor pressure during the remaining months of the year shall not exceed eleven and five-tenths (11.5) pounds per square inch at one hundred (100) degrees Fahrenheit. The method of determination shall be ASTM D4953. Federal or state regulation restricting vapor pressure to lower levels shall preempt these standards during the applicable months.

(vii) Vapor liquid equilibrium. A maximum value of twenty (20) for the vapor liquid equilibrium test during the months July and August shall be obtained at a temperature of one hundred thirty-three (l33) degrees Fahrenheit; for the months of November, December, January, February and March it shall be obtained at a temperature of one hundred sixteen (116) degrees

Fahrenheit; for the other months of the year it shall be obtained at one hundred twenty-four (124) degrees Fahrenheit. The method of determination shall be ASTM D2533 or ASTM D4814, appendix X2.

(viii) Lead specifications. The unleaded gasoline shall contain less than five hundredths (0.05) gram of lead per gallon, and the leaded gasoline shall contain a minimum of five hundredths (0.05) gram of lead and less than four and two-tenths (4.2) grams of lead per gallon. The method of analysis should be ASTM D3237, (Atomic Absorption Spectrometry), ASTM D2599 (X-ray Spectrometry) or ASTM D2547 (Volumetric Chromate).

(ix) Classification.

1. "Leaded premium grade gasoline" shall have an (R + M)/2 octane antiknock index of at least ninety-three (93). The research octane number shall be at least ninety-six (96).

2. "Unleaded premium grade gasoline" shall have an (R + M)/2 octane antiknock index of at least ninety-one (91). The research octane number shall be at least ninety-four (94).

3. "Mid-grade unleaded gasoline" shall have an (R + M)/2 octane antiknock index of at least eighty-nine (89). The research octane number shall be at least ninety-two (92).

4. "Leaded regular grade gasoline" shall have an (R + M)/2 octane antiknock index of at least eighty-nine (89). The research octane number shall be at least ninety (90).

5. "Unleaded regular grade gasoline" shall have an (R + M)/2 octane antiknock index of at least eighty-seven (87). The research octane number shall be at least ninety (90), and the motor octane number shall be at least eighty-two (82).

6. "Third grade gasoline" shall have an (R + M)/2 octane antiknock of not more than eighty-seven (87).

The methods of octane determination shall be ASTM D2699 for the research octane number (R) and ASTM D2700 for the motor octane number (M), or ASTM D2885 for both the research octane number and

the motor octane number. The (R + M)/2 octane antiknock index shall be the average of the research and motor octane numbers. All retail pumps or delivery devices shall be labeled with the appropriate (R + M)/2 octane antiknock index in accordance with the Federal Trade Commission Octane Posting and Certification Regulation 306. No commercial gasoline shall be colored mahogany.

(i) The term "oxygenated fuel" means a liquid fuel which is a homogeneous blend of hydrocarbons and oxygenates. The term "oxygenate" means an oxygen containing, ashless organic compound which may be used as a fuel supplement or additive and includes alcohols and ethers. "Gasoline-oxygenate blend" means a blend consisting primarily of gasoline and a substantial amount of one or more oxygenates. This definition includes, but is not limited to, the following designations:

(i) "Gasohol" meaning any motor fuel containing a nominal ten (10) volume percent anhydrous denatured alcohol and ninety (90) volume percent unleaded gasoline, regardless of other name, label or designation.

(ii) "Leaded gasohol" meaning any motor fuel containing a nominal ten (10) volume percent anhydrous, denatured ethanol and ninety (90) volume percent leaded gasoline, regardless of other name, label or designation.

(iii) Any gasoline - oxygenate blend which meets the United States Environmental Protection Agency's "substantially similar" rule, Section 211(f)(1) of the Clean Air Act, 42 USCS 7545(f)(1).

(iv) Any gasoline - oxygenate blend for which there is an existing Clean Air Act waiver issued by the United States Environmental Protection Agency.

(j) "Alcohol blended fuel" means gasohol or leaded gasohol.

(k) "Anhydrous, denatured ethyl alcohol (ethanol)" means normal two hundred (200) proof ethanol to which has been

added a maximum of five (5) volumes of approved denaturant(s) to one hundred (100) volumes of ethanol and containing not more than one and twenty-five hundredths percent (1.25%) water by weight as determined by ASTM E203.

(l) "Approved denaturant(s)" means materials used for denaturing ethyl alcohol for use as a motor fuel which have been approved by the United States Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, and both the State Chemist and the Commissioner of Agriculture and Commerce. Gasoline - oxygenate blends shall meet the state requirements for gasoline with the following modifications:

(i) An increase in vapor pressure not exceeding one (1) pound per square inch may be allowed for gasohol and leaded gasohol January through December of each year. The method of determination shall be ASTM D4953.

(ii) Federal regulation affecting vapor pressure shall preempt these standards during the applicable months.

(iii) The minimum distillation temperature at fifty percent (50%) evaporated shall be one hundred fifty-eight (158) degrees Fahrenheit as determined by ASTM D86.

(iv) Gas - liquid chromatographic procedures shall be considered as official for the determination of oxygenate content as described in ASTM D4814.

1. Gasohol and leaded gasohol shall contain ten plus/minus five-tenths (10+/-.5) volume percent anhydrous denatured ethanol.

2. Gasoline - oxygenate blends not otherwise defined in this chapter may contain the maximum percentage and type of oxygenates as allowed by the "substantially similar" rule under the Clean Air Act.

(v) Water tolerance shall be such that no phase separation occurs when the product is subjected to a temperature

equal to the lowest expected ambient temperature based on seasonal volatility classifications as specified in the current ASTM D4814.

(m) The term "oil" as used in this chapter shall include diesel fuel, kerosene, fuel oil, distillate, gas oil, tractor fuel or any other product other than gasoline, as defined in this chapter, which is usable as fuel in an internal combustion engine, and any product which, on distillation in accordance with the method of test of the American Society for Testing and Materials shows not more than ten percent (10%) recovered when the thermometer shows two hundred sixty-one (261) degrees Fahrenheit; and not more than ninety-five percent (95%) recovered when the thermometer shows four hundred sixty-five (465) degrees Fahrenheit or more; provided that nothing in this paragraph shall be construed to include oils received or sold as lubricants when such oils cannot be used as a fuel in internal combustion engines.

(n) "Diesel fuel" is any petroleum product intended for use or offered for sale as a fuel for engines in which the fuel is injected into the combustion chamber and ignited by pressure without the presence of an electric spark.

Specifications: The fuel oils herein specified shall be hydrocarbon oils free from acids, grit and fibrous or other foreign material. Three (3) grades of such oils are specified and these shall conform to the detailed requirements in the current American Society for Testing and Materials Specifications for Diesel Fuel Oils (ASTM D975), except for the sulphur content of Grade 2-D. All tests shall be in accordance with the applicable American Society for Testing and Materials method as set forth in the current ASTM Designation D975. Diesel fuel requirements are listed below:

	Grade 1-D	Grade 2-D	Grade 4-D
Flash point, degrees F. D93	Min. 100	Min. 125	Min. 130
Water & sediment, %			

by volume, D1796	Max. 0.05	Max. 0.05	Max. 0.5
Carbon residue on 10%			
residium, % D524	Max. 0.15	Max. 0.35	_____
Ash, % by weight, D482	Max. 0.01	Max. 0.01	Max. 0.1
Distillation, 90% point,			
degrees F., D86	_____	Min. 540	_____
	Max. 550	Max. 640	_____
Viscosity @ 100 degrees F.			
kinematic-centistokes			
D445	Min. 1.3	Min. 2.0	Min. 5.5
or	Max. 2.4	Max. 4.1	Max. 24.0
Viscosity @ 100 degrees			
F., Saybolt Universal			
Sec.	_____	Min. 32.6	Min. 45
	Max. 34.4	Max. 40.1	Max. 125

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Copper strip corrosion,			
D130	Max. No. 3	Max. No. 3	_____
Cetane number, D613 or D976	Min. 40	Min. 40	Min. 30

The maximum sulfur content for on-road diesel fuel shall be in the amount that is specified in 42 USCS Section 7545, or in any federal statute, rule or regulation which either supercedes 42 USCS Section 7545 or further regulates on-road diesel fuel pursuant to federal law. The maximum sulfur content for off-road diesel fuel shall be in an amount that shall not exceed thirty (30) parts per million by July 1, 2003, twenty-five (25) parts per million by July 1, 2004, twenty (20) parts per million by July 1, 2005, and fifteen (15) parts per million by July 1, 2006, or in any lower amount that may be specified in any federal statute rule or regulation. For purposes of this provision, "on-road diesel fuel" is diesel fuel intended for use in motor vehicles that generally will be operated on streets, roads and highways, and "off-road diesel fuel" is diesel fuel not intended for use in such

motor vehicles, but that is intended for use in agricultural or construction equipment or vehicles that generally are operated off of a street, road or highway.

(o) The word "kerosene" shall include lamp oil, illuminating oil and coal oil which shall conform to the detailed requirements set forth in the current American Society for Testing and Materials Specification for Kerosene (ASTM D3699). All tests shall be in accordance with the applicable American Society for Testing and Material Methods as set forth in ASTM D3699. The detailed requirements are listed below:

(i) The oil shall be free of water and suspended matter.

(ii) The color shall not be darker than number plus sixteen (16) on the Saybolt scale, as determined by ASTM D156.

(iii) The flash point shall, by ASTM D56, not be lower than one hundred (100) degrees Fahrenheit when determined in Tagliabue closed type tester, as determined by ASTM D56.

(iv) The sulphur content shall not exceed four one-hundredths percent (0.04%) for No. 1-K kerosene and thirty one-hundredths percent (0.30%) for No. 2-K. The method of determination shall be ASTM D1266. No. 1-K kerosene is a special low-sulphur grade kerosene suitable for use in nonflue-connected kerosene burner appliances and in wick-fed illuminating lamps. No. 2-K Kerosene is suitable for use in flue-connected burner appliances and in wick-fed illuminating lamps.

(v) The distillation ten percent (10%) point shall not be higher than four hundred one (401) degrees Fahrenheit, as determined by ASTM D86.

(vi) The distillation end point shall not be higher than five hundred seventy-two (572) degrees Fahrenheit, as determined by ASTM D86.

(vii) The oil shall not show a cloud point at five (5) degrees Fahrenheit, as determined by ASTM D2500.

(viii) The oil shall burn freely and steadily for sixteen (16) hours, as determined by ASTM D187.

(ix) The gravity shall not be less than degrees API 41, as determined by ASTM D1298.

(x) The corrosion test results shall be No. 1 Maximum in a three-hour at two hundred twelve (212) degrees Fahrenheit test, as determined by ASTM D130.

(p) "Racing gasoline" means any gasoline which is sold for racing purposes. Racing gasoline may be sold from retail dispensing equipment under the following conditions:

(i) The product brand name and octane number shall be registered with the Commissioner of Agriculture and Commerce and the State Chemist.

(ii) The manufacturer shall forward a list of marketers selling these product(s) and the product(s) being sold by each marketer.

(iii) Marketers shall register their retail outlets by location and provide a list of the product(s) sold for each retail outlet.

(iv) The dispensing equipment shall contain a conspicuous sign stating that the fuel is racing gasoline. The dispensing equipment shall not contain any kind of representation indicating that the product is suitable for vehicles other than for racing.

(v) The dispensing equipment shall be dedicated to and isolated from any other motor fuel dispensing equipment in a manner that a vehicle cannot access both the commercial gasoline and the racing gasoline at the same time.

(vi) Any violation shall result in revocation of the approval to market and/or confiscation of the product.

(vii) The Commissioner of Agriculture and Commerce (the "commissioner") and the State Chemist are hereby given authority to change the specifications set forth in this section to comply with the currently recommended ASTM or federally required specifications.

SECTION 2. This act shall take effect and be in force from and after July 1, 2002.