



MATERIAL GENERAL SERVICES SPECIAL PROVISIONS  
ULTRA-LOW SULFUR DIESEL FUEL MGS-03-02D

**1.0 DESCRIPTION.** This specification covers diesel fuel blends for use in Missouri Department of Transportation equipment designed to operate on diesel fuel oils.

**2.0 GENERAL.**

**2.1** Diesel fuel shall be a blend of ultra-low sulfur, on-highway diesel fuels, free from grit, acid, and fibrous or other foreign material likely to clog or injure pumps, injectors, valves, filters, etc. The color of the delivered fuel shall not be red.

**3.0 COMPOSITION.**

**3.1** During the period from September 15 through March 31, diesel fuel supplied under this specification may consist of a blend of No. 1-D and No. 2-D diesel. During the period from April 1 through October 31, the fuel supplied shall not contain No. 1-D diesel.

**4.0 TESTING.**

**4.1** The fuel blend shall meet the Missouri requirements for diesel fuel (ASTM D 975, Standard Specification for Diesel Fuel Oils).

**4.2** During the period from September 15 through November 30 the fuel shall meet a cloud point of no more than 4°F. During the period from December 1 through March 31, a winter grade of diesel fuel shall be supplied and shall exhibit low temperature operability as verified by the Cloud Point, the Low Temperature Flow Test, or a combination of the Cold Filter Plugging Point and the Cloud Point as follows:

<b>Low Temperature Operability Requirements</b>	
Cloud Point, (ASTM D 2500), °F (°C), max.	-14 (-25)
Low Temperature Flow Test (LTFT) (ASTM D 4539), °F (°C), max.	-14 (-25)
Cold Filter Plugging Point (CFPP) (ASTM D 6371), °F (°C), max.	-14 (-25)

**4.2.1** It is the supplier's option which of the above tests is used to test and certify the low temperature operability of the fuel, however, if the Cold Filter Plugging Point (CFPP) test is used to qualify the fuel, the Cloud Point shall have a maximum value no higher than 4°F (-16°C). Certified test results shall be supplied with the response to the request for bid for the test(s) selected to certify the fuel. Any time that the low-temperature operability characteristics of the fuel changes, independent laboratory testing shall be performed to verify that the low temperature operability requirements are in accordance with this specification and the fuel shall be re-certified. The supplier's authorized representative shall sign certifications.

**4.2.2** The Department reserves the right to examine the bills of lading covering shipments of blending fuels and fuel blends supplied under this specification. The supplier shall provide ready access to all required documentation to verify compliance.

**4.2.3** In addition to the requirements of Sec. 3.1, the use of additives is permitted providing the blend meets the low temperature operability requirements of Section 4.2.

**4.2.4** Acceptable alternative test procedures for the Cloud Point test are ASTM D 5771, Cloud Point of Petroleum Products (Optical Detection Stepped Cooling Method), ASTM D 5772, Cloud Point of Petroleum Products (Linear Cooling Rate Method) or ASTM D 5773, Cloud Point of Petroleum Products (Constant Cooling Rate Method).

**5.0 SAMPLING AND ACCEPTANCE.**

**5.1** Samples may be taken at destination during offloading of the fuel into Department tanks. Offloading shall not commence until the Department representative has been notified.

**5.2** With the response to each request for bid, the supplier shall furnish a signed certification stating that the fuel to be delivered under the bid will meet all requirements of this specification. The signed certification statement shall be as follows:

This certifies that all fuel shipments made by this company under this bid will comply with MoDOT specifications for the fuel grade specified.

Signature: \_\_\_\_\_

**5.3** Acceptance will be based on the certification furnished by the supplier and the results of any testing deemed necessary by the Department.

**5.4** The supplier shall guarantee the removal and/or replacement of any shipment that does not meet the requirements of the specification. It is expressly understood that existing fuel contained in Department tanks that is contaminated by supplied fuel that is not in accordance with these specifications shall also be replaced completely at the expense of the supplier.

**6.0 ORDERING INFORMATION.** The specification material will be set forth in the bid request.