

not require end users to dispense fuel meeting the 500 ppm sulfur standard into nonroad, equipment, locomotives or marine vessels. During this time period, small refiner fuel and fuel produced under the credit provisions with sulfur levels exceeding 500 ppm would still exist in the distribution system. Furthermore, this fuel could be mixed downstream at the point where the fuels are dyed for IRS tax purposes with fuel meeting the 500 ppm standard and introduced into nonroad, locomotive and marine engines. During this time period, there would also be nonroad equipment with engines subject to "pull-ahead" emission standards (*i.e.*, engines equipped with emission controls that allow them to meet standards earlier than required). Some of this pull-ahead equipment is expected to be equipped with sulfur sensitive technology that would need to operate on fuel of 500 ppm or less sulfur in order to meet the proposed emission standards in-use. For this reason, it is important that NRLM end users be able to know the sulfur level of the fuel they are purchasing and dispensing. Therefore, fuel pump dispensers for the various sulfur grades would also need to be properly labeled.

For pumps dispensing 500 ppm (maximum) sulfur content diesel fuel for nonroad equipment engines subject to pull-ahead standards, we propose that the label read as follows:

LOW-SULFUR NON-HIGHWAY DIESEL FUEL

(500 ppm Maximum)

WARNING

Not for Use In Highway Vehicles or Engines

It is also likely that prior to June 1, 2010 some 15 ppm (maximum) diesel fuel will be introduced into the nonroad market early. Both the engine and fuel credit provisions envision such early introduction of 2011-compliant engines and 15 ppm fuel. Thus, it is important that nonroad end users be able to know when they are purchasing diesel fuel with 15 ppm or less sulfur. For pumps dispensing 15 ppm (maximum) sulfur content diesel fuel for nonroad equipment engines subject to pull-ahead standards, we propose that the label read as follows:

ULTRA-LOW SULFUR NON-HIGHWAY DIESEL FUEL

(15 ppm Maximum)

Required for All Model Year 2011 and Newer Nonroad Diesel Engines

Recommended for Use in All Nonroad, Locomotive and Marine Diesel Engines

WARNING

Not for Use in Highway Vehicles or Engines

For all other nonroad equipment, locomotive, and marine engine diesel fuel pumps (that is, pumps dispensing diesel fuel having a sulfur content greater than 500 ppm) we propose that the label read as follows:

HIGH-SULFUR NON-HIGHWAY DIESEL FUEL

(May Exceed 500 ppm)

WARNING

Not for Use In Highway Vehicles or Engines

Not for Use in Nonroad, Locomotive, or Marine Engines after August 31, 2010

May Damage Engines Certified for Use on Low-Sulfur or Ultra-Low Sulfur Diesel Fuel

During this time period, as discussed in section IV.B.2.b, it would be necessary to segregate heating oil from nonroad, locomotive and marine diesel fuel to avoid circumventing the intent of the first step of the proposed nonroad standards—that PM and SO₃ benefits be achieved by producing fuel to the NRLM diesel fuel standards in an amount that fully corresponds to the amount of fuel used in these engines. Consequently, for pumps dispensing non-highway diesel fuel for use other than in nonroad, locomotive or marine engines, such as for use in stationary diesel engines or as heating oil, we propose that the label read as follows:

HEATING OIL (May Exceed 500 ppm Sulfur)

WARNING

Federal Law *Prohibits* Use in Highway Vehicles or Engines, or in Nonroad, Locomotive, or Marine Engines

May Damage Engines Certified for Use on Low-Sulfur or Ultra-Low Sulfur Diesel Fuel

c. Pump Labeling Requirements for 2010–2014

Beginning September 1, 2010, with certain exceptions, all fuel introduced into any nonroad engine, regardless of year of manufacture, would be required to meet the 15 ppm standard. The exceptions are that segregated small

refiner nonroad diesel fuel and credit nonroad diesel fuel would be allowed to meet the 500 ppm sulfur standard only for use in pre-model year 2011 engines. This limited use of 500 ppm fuel would continue through August 31, 2014,³²² after which all nonroad fuel would have to meet the 15 ppm standard. Fuel for use in locomotive and marine engines would be required to meet the 500 ppm standard without exception. As discussed in section IV.B.3.b, during this time period, it would be necessary to segregate the 500 ppm (maximum) locomotive and marine diesel fuel from the small refiner and credit 500 ppm (maximum) nonroad diesel fuel to ensure an adequate supply of ultra low-sulfur (15 ppm maximum) nonroad diesel fuel for nonroad purposes.

For pumps dispensing 15 ppm (maximum) sulfur content nonroad diesel fuel, we propose that the label read as follows:

ULTRA-LOW SULFUR NON-HIGHWAY DIESEL FUEL

(15 ppm Maximum)

Required for all Model Year 2011 and Newer Nonroad Diesel Engines

Recommended for Use in All Nonroad, Locomotive and Marine Diesel Engines

WARNING

Not for Use in Highway Vehicles or Engines

For pumps dispensing segregated small refiner or credit 500 ppm (maximum) nonroad diesel fuel, as discussed in section IV.B.3.b, we propose that the label read as follows:

LOW-SULFUR NON-HIGHWAY DIESEL FUEL

(500 ppm Maximum)

WARNING

May Damage Model Year 2011 and Newer Nonroad Engines

Federal Law *Prohibits* Use in All Model Year 2011 and Newer Nonroad Engines

Not for Use In Highway Vehicles or Engines

For pumps dispensing marked 500 ppm sulfur (maximum) locomotive and marine diesel fuel, as discussed in section IV.B.3.b, we propose that the label read as follows:

³²² Production of 500 ppm fuel under the credit provisions would be allowed until June 1, 2012, but small refiner fuel subject to the 500 ppm standard could continue to be produced until June 1, 2014 and would be available to end users until September 1, 2014.