

# Washington State Department of Agriculture (WSDA) Weights & Measures



## Biofuel Quality in Washington State

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# Washington State - Fuel Standards & Regulations

Revised Code of Washington (RCW) 19.112 (Motor Fuel Quality Act) Fuel testing, labeling for blends, test at distribution levels, comply with EPA standards. 2% of total annual diesel must be biodiesel by Dec 2008.

<http://apps.leg.wa.gov/RCW/default.aspx?cite=19.112>

RCW 19.94 (Weights and Measures) Device registration, standards and authority for inspectors, service agents

<http://apps.leg.wa.gov/RCW/default.aspx?cite=19.94>

Washington Administrative Code (WAC) 16.657 (Retail pricing of motor and heating fuel)

<http://apps.leg.wa.gov/WAC/default.aspx?cite=16-657>

WAC 16.662 (Weights and measures national handbooks) WSDA statutes require us to adopt NIST Handbooks re: engine fuels, petroleum product.

<http://apps.leg.wa.gov/WAC/default.aspx?cite=16-662>

WAC 16.663 (Service agents — reporting, test procedures, standards and calibration of weighing and measuring devices)

<http://apps.leg.wa.gov/WAC/default.aspx?cite=16-663>

WAC 16.664 (National type evaluation program for dispensing devices) Certificate of conformance for fuel dispensing devices, repair of device, remanufactured device, and components.

<http://apps.leg.wa.gov/WAC/default.aspx?cite=16-664>

January 2007 Motor Fuel Quality Program Annual Report now available at

<http://agr.wa.gov/AboutWSDA/DirectorsOffice/2007MotorFuelQualityReportFINAL1-24-08.pdf>

## How does WSDA Ensure Quality?

WSDA uses nationally recognized standards such as the ASTM and the National Institute of Standards and Technology (NIST).

<http://www.astm.org>

<http://www.nist.gov>

WSDA performs random biofuel testing, field assessment of fuels and sampling throughout the fuel distribution system. We test at the retailers, producers, and distributors.

WSDA checks the accuracy of blend percentage labels at the retailers. Accurate pump labeling informs consumers of warranty issues.

Washington is keeping in line with neighboring states.

For higher biofuel blends, check the warranty recommendations at National Biodiesel Board

[http://www.biodiesel.org/resources/fuelfactsheets/standards\\_and\\_warranties.shtm](http://www.biodiesel.org/resources/fuelfactsheets/standards_and_warranties.shtm).

Washington uses a high threshold for biodiesel blend tolerance levels, and currently we're working with our stakeholders to establish blend tolerance levels.

## Test Results for 2007

Over 125 biofuel samples were taken in 2007 and test indicates there are some concerns with the following not meeting the ASTM standards or WSDA recommended test.

- Water and Sediment - 2 samples under compliance limit (0.050% max)
- Blend Determination – 18 samples under compliance limit (B5 + or - .5, B5 >+ or – 1%)
- Glycerin (Total and Free) – (Total 0.24, Free 0.02)
- Water suspended by Karl Fischer – (4 were over 500ppm, 13 were over 300ppm) help business be successful
- Sulfur Total – (2 samples under compliance limit 15 ppm 1 @ 26.87 and 1 @ 117.42)
- Microbial growth (WSDA recommended test) – 1 sample under compliance + microbials

Washington is reevaluating its collection of ASTM methods when testing biofuel. There are several test methods that can be consolidated and streamlined. WSDA is recruiting recommendations from our BF Tech WG to make sure the collection is well rounded and effective collection.

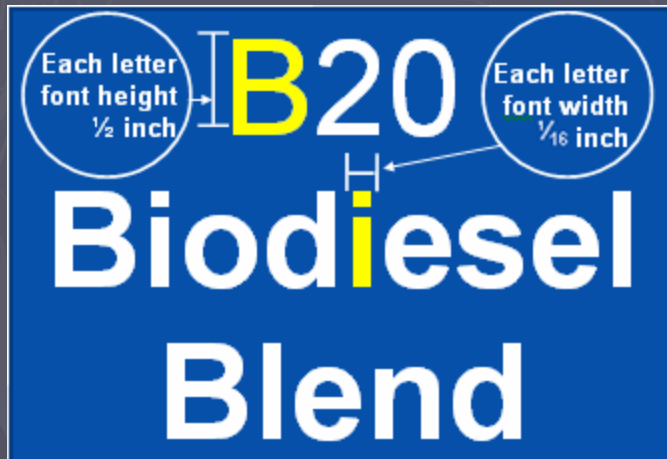
## Labeling Requirements

The WSDA determines the fuel labeling requirements on the NIST Handbook 130 as modified by WAC 16-662-115.

### **Biodiesel Dispensers must meet the following label standards:**

- Biodiesel blends less than 2% biodiesel may not be labeled as dispensing biodiesel.
- Biodiesel blends 2% - 5% must be labeled “Containing up to 5% biodiesel”.
- Biodiesel blends 5% and more must be labeled with the volume percentage of biodiesel.

Washington requires additional labeling standards above the NIST requirements regarding blend percentage due to statute (WAC 16-662-115).



## Biodiesel Specifications

**Biodiesel Blends** – Currently biodiesel intended to be blended must meet the ASTM D6751 Biodiesel Fuel (B100) and ASTM D975 for (Diesel)

**Diesel** - The base diesel fuel must meet ASTM D975 Standard Specification for Distillate Fuels.

Newly proposed ASTM standard will include B5 with Diesel.

**Biodiesel** - The biodiesel blend stock must meet the ASTM 6751 Standard Specification for Biodiesel (B100) Blend Stock for Distillate Fuels.

There is a newly proposed ASTM standard for B6 – B20, that has not been assigned a ASTM number as of yet, WSDA will adopt the new standard as it becomes effective.

## Biodiesel Dispensers

Our regulations require biodiesel dispensers be approved by National Type Evaluation Program (NTEP) for standard #2 diesel fuel. The dispenser (pump) must be correctly calibrated with the blend of biodiesel fuel being dispensed. Fuel dispensers at card lock locations must be a full computing device when used for retail sales, indicating price per gallon.

**There is no approved NTEP device for blending biodiesel. When NTEP approves of a biofuel mixing dispenser, WSDA will adopt the approved device.**

## Consumer Confidence

The quality of fuel in Washington State is regulated by the Motor Fuel Quality Act (19.112 RCW). This rule places an obligation on fuel industries that produce, distribute and retail fuel as well as on WSDA to ensure the consumer is getting the quality and quantity of fuel they pay for. WSDA verifying fuel pricing, testing and inspecting commercial devices, investigating complaints, and routinely test fuel quality.

Our job is to protect consumers from misleading marketing or retailing of fuels that do not measure up to state and federal quality standards.

***Our goal is to promote market place equality and confidence in motor fuel transactions for consumers and businesses.***

*Our most important goal is to look at fuel throughout the fuel distribution system and find concerns before it reaches the consumer.*

We feel our best enforcement tool is putting a hold order on fuel anywhere in the fuel distribution system if the fuel does not meet our standards.

## Contact Information

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Dept of Agriculture – Weights and Measures main page  
<http://agr.wa.gov/Inspection/WeightsMeasures/default.asp>