

DEPARTMENT OF FOOD AND AGRICULTURE

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DMS NOTICE
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April 2, 2007

Discard: Retain

TO WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Suitability of Liquid Measuring Devices Used With Ethanol and “Biodiesel” Fuels

With the increased interest and use of alternative fuels, questions have arisen as to the suitability of liquid measuring devices when used with ethanol and “biodiesel” fuels.

Ethanol

Any liquid measuring device approved for gasoline may be used with gasoline blended with up to 15 volume percent ethanol without having to be re-evaluated. Additionally **some** devices have weights and measures approval for use with pure ethanol and ethanol blends above 15 volume percent. It is important to ensure the approval covers the products to be dispensed.

Biodiesel

Any liquid measuring device approved for use with diesel may be used with diesel blended with up to 20 volume percent “biodiesel” (B20). Some devices may have weights and measures approval for 100 percent biodiesel (B100). Note that most approvals are based primarily on the properties of the liquid rather than the term “biodiesel”.

Note: Conformance with ASTM D 975 is required before a Compression Ignition Engine fuel can be distributed or sold. Generally B20 and below have been found to conform. At present, biodiesel blends that do not conform to ASTM D 975 require a variance to be distributed or sold but **cannot** be sold to the public. Officials are asked to notify DMS of locations where blends greater than B20 are being sold.

Service agencies should consult with device manufacturers regarding use with “biodiesel” and specific “biodiesel” blends greater than B20. We also recommend they confirm the selection with the type evaluation program staff before installing the devices.

To determine if a specific measuring device is approved for a given "biodiesel" blend that exceeds 20 volume percent obtain the biodiesel product characteristics including specific gravity and viscosity at the range of temperatures of the product.

Product characteristics can usually be compared to the products listed in the measuring device certificate of approval to determine if the selected device is suitable for the intended use. The alternative is to apply for and undergo evaluation. Additional selection requirements for devices may be necessary if the user intends to sell to the general public using credit cards, debit cards, etc., since this will also affect which devices and configurations are suitable for the intended application.

National Fire Prevention Association

There have also been concerns raised about Underwriter's Laboratories (UL) not yet certifying dispensers for use with "biodiesel" and ethanol fuels. Lack of UL and National Fire Prevention Association certification is a concern of local fire prevention officials, separate from weights and measures issues. This may or may not cause problems with local fire protection officials.

More information is available at: <http://www.ul.com/regulators/e85.cfm>

Device users may contact local fire protection agencies if they have questions.

If you have any questions, please contact your area specialist or Ken Lake, Program Supervisor, at (916) 229-2047.

Sincerely,



Dennis R. Johannes
Director

cc: Ed Williams, Director, County Liaison Office

James Parsegian, Supervising Deputy State Fire Marshal
1131 "S" Street, Sacramento CA 95814

Registered Service Agencies for retail and wholesale meters