



# Biodiesel

## DOCKET

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**California Department of Food and Agriculture  
Division of Measurement Standards**

**Integrated Energy Policy Report Workshop  
April 14, 2009**



# Division Mission Statement

***Preserve and defend the measurement standards essential in providing the citizens a basis of value comparison and fair competition in the marketplace***



# Authority

**Authority to regulate Weights and Measures and Fuel Products is found in Division 5 of the California Business and Professions Code**





# Alternative Fuels

## CDFA Responsibilities

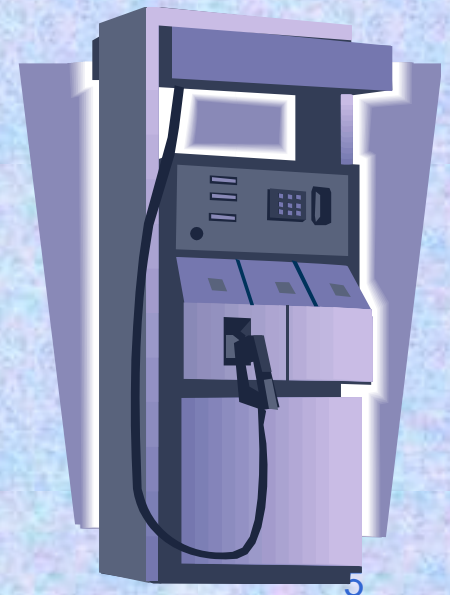
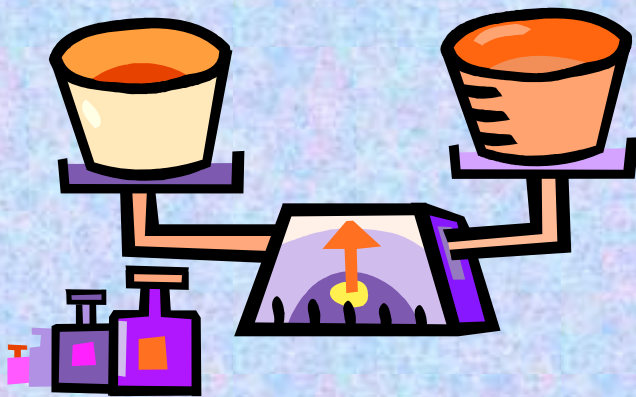
- ❖ **Division of Measurement Standards (DMS) role in alternative fuel development**
  - ✓ **Ensure Measurement Traceability**
  - ✓ **Promote Uniform Requirements and Practices**
  - ✓ **Ensure Consumers Get What They Pay For**
  - ✓ **Level Playing Field in the Marketplace**
  - ✓ **Harmonize with International Standards**





# Commercial Measuring Device

*A device used for ascertaining the measure of any commodity or thing which is sold on the basis of measure; or the determination of the measure of any commodity or thing upon which determination a charge for service is based.*





# Alternative Fuels

## Division Responsibilities

- **Type Evaluation**
  - National and California Type Evaluation Program
- **Device Accuracy**
  - CA Device Compliance Program
- **Fuel Quality, Advertising, Labeling, and Quantity**
  - CA Petroleum Products Program
- **State / County Relationship**



# CA Petroleum Products Program

## ❖ National Standards Organizations Participation

- Establish uniform standards to enhance consumer protection
- Foster fair competition
- Facilitate economic growth and trade





# Standards Organizations

- ❖ ASTM International, Inc.



- ❖ Society of Automotive Engineers



- ❖ National Institute of Standards and Technology

National Institute of  
Standards and Technology



NIST





# Biodiesel





# Biodiesel

## ❖ Established Fuel Standards

- ❑ The Department must adopt recognized consensus organization standards for compression-ignition engine fuels

## ❖ Biodiesel Blend Standards

- ❑ Current regulation - Must meet ASTM Diesel Fuel Specification D975
- ❑ ASTM recently modified D975 to limit biodiesel content to 5%



# Biodiesel

- ❖ **New ASTM Standard (D7467-08) for Biodiesel Blends of 6 to 20 volume percent**
  - ❑ **CDFA in formal rulemaking to modify existing regulations**
- ❖ **B21 to B100 Biodiesel as a motor fuel**
  - ❑ **As a result of recent changes, these blends cannot be used as a legal finished fuel**







# Developmental Fuel Variance

- ❖ **Current law allows for controlled sales and limited use of new fuels**
  - ❑ **Provides for fleet testing of new fuels for standards development**
  - ❑ **CDFA has granted 50 variances for this purpose**
  - ❑ **Additional legislation desired to facilitate record review ( B&P Code 13570 )**



# High Concentration Blends

- ❖ **CA distributors and customers want higher blends of Biodiesel Fuel**
  - ❑ **Currently there is no consensus standard**
  - ❑ **CDFA plans to begin method development for these blends and present the work to ASTM**
  
- ❖ **Biodiesel and Biodiesel Blend Labeling**
  - ❑ **Federal and State dispenser labeling is inconsistent**
  - ❑ **CDFA plans to modify rules to be consistent with Federal requirements**



# Biodiesel Blending Practices

## ❖ Blending Issues

- ❑ B99 rather than B100 being used for the production of lower concentration levels
- ❑ This pre-dilution practice is inconsistent with current regulations ( Section 4147(1) )

## ❖ Splash Blending Technique

- ❑ Can result in non-homogeneous blends
- ❑ Other techniques may be required to obtain consistent blend ratios







# Biodiesel Dispenser Issues

- ❖ Fuel dispensers must be type approved for the product family they are dispensing
- ❖ Diesel dispensers are approved to dispense biodiesel blends up to 20 volume percent
- ❖ At this time, only 2 manufacturers have type approved commercial dispensers for high concentration biodiesel blends
- ❖ Other non weights and measures issues:
  - Not Underwriters Laboratories approved
  - State and Local Fire Marshals may grant use permits



# Underground Storage Tanks (UST)

**State Water Resources Control Board regulations require:**

- ❑ **Design and construction of UST and piping be approved by an independent testing laboratory**
- ❑ **System components made of or lined with materials compatible with hazardous materials to be stored**
- ❑ **Approved UST components must include a list of compatible products tested and their measured permeation rate**

## **SB 1574 (2008 session)**

- ❑ **Would have allowed biodiesel blends up to B20 to be stored in UST on an interim basis**
- ❑ **Governor Schwarzenegger vetoed SB 1574**
- ❑ **Storage of alternative fuels needs to be addressed**



## Contact Information

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