DEPARTMENT OF FOOD AND AGRICULTURE

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March 7, 2007

DMS NOTICE D -07-1

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TO WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Survey of Fuel Temperature Delivered from Retail Motor Fuel Dispensers

Retail deliveries of gasoline and diesel are currently not temperature compensated and are metered at the ambient temperature of the fuel, which may or may not be the reference temperature of 60°F. There has been growing interest over the possible need for temperature compensated sales of fuel at retail locations. It was generally accepted that the temperature of fuel in underground storage tanks attained a year round average of 60°F. With the now universal use of double walled underground storage tanks and frequent fuel deliveries at retail service stations, it is believed that fuels are maintained at higher average temperatures than the reference temperature of 60°F. To study the effect this may have on fuel deliveries, we are asking county personnel to determine temperatures of 87 and 91 octane gasoline, and diesel if available, during routine dispenser inspections over a period of one year.

The survey will start April 1, 2007 and end March 31, 2008

Protocol

• Equipment needed; Normal standards for testing retail motor fuel dispensers and a certified and traceable Fahrenheit thermometer with ½-degree minimum graduations.

The following procedure will need to be done **only once** per location.

For each grade of fuel, randomly select a dispenser (one is sufficient if it is a multi-grade dispenser). If possible, place the test standard out of direct sunlight.

After dispensing product for the normal test:

Determine the accuracy of the delivery

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- Place the probe into the fuel, after thermometer reading has stabilized, record the fuel temperature.
- In addition, record date, time, and air temperature.
- If an attendant can provide storage tank temperatures from their instruments, record those values in the column provided.

A worksheet to record the above information is enclosed. Please send copies of the completed worksheets to DMS Sacramento, to be included in the statewide survey.

Thank you for your cooperation in this important survey. If you have any questions, please contact your area specialist or Ken Lake, Program Supervisor at (916) 229 3047.

Sincerely,

Dennis R. Johannes

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Director

Enclosure

cc: Ed Williams, Director, County Liaison Office

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California Fuel Temperature Survey April 1 2007 – March 31 2008 County Temperature Time Diesel (to nearest 87 Octane 91 Octane **Date** 15 min) Metered Air Tank Metered Tank Metered Tank

Return a copy to DMS for data entry