



ENVIRONMENTAL HEALTH INFORMATIONAL BULLETIN

TO: Orange County Retail Food Facility Owners/Operators

SUBJECT: The Metal Probe Food Thermometer

The California Retail Food Code (CRFC) establishes structural and operational requirements for all food facilities operating in California. The purpose of this bulletin is to instruct food facility operators on the proper use, storage, and calibration of a metal probe thermometer.

Potentially hazardous foods (PHF) are capable of supporting the rapid growth of disease causing microorganisms. PHF must be maintained at holding temperatures that are at or below 41°F, or above 135°F at all times. Section 113996(a-c) of CRFC provides the required holding temperatures of potentially hazardous foods. There are some exemptions to this requirement that are stated in CRFC Section 113996.

Section 114159(a) of CRFC states that an accurate, easily readable, metal probe thermometer (scaled in Fahrenheit, +2°F or -2°F accuracy) suitable for measuring the temperature of food shall be readily available on the premises. A properly calibrated operating metal probe thermometer is critical to maintaining proper PHF temperatures and in possibly preventing foodborne illnesses.

The metal probe thermometer (figure 1) is a very useful tool for the food facility operator. Food temperatures should be monitored throughout the day to ensure that potentially hazardous foods are maintained at the required temperatures. During the course of a food facility inspection, the district Environmental Health Specialist will ask for the presence of and a demonstration on the proper use and handling of the metal probe thermometer.

The metal probe thermometer should be handled with care, as it may become inaccurate, if mishandled or dropped. It should be recalibrated on a routine basis. If the metal probe thermometer appears to be reading temperatures improperly, it may need to be calibrated. A properly calibrated probe thermometer will read 32°F in an ice bath slurry. Calibration of a metal probe thermometer only requires a container (cup or glass) of ice and water, and a small wrench that will fit the calibration nut (figure 2) under the dial. To form the ice slurry, fill the container with ice and then add water to fill the glass. Combine enough ice and water to cover the sensing unit indicator indentation on the probe thermometer (figure 3). Insert the probe thermometer, and wait until the indicator dial settles on a temperature reading. Using the wrench on the calibration nut, rotate the dial arrow point to 32°F. Some metal probe thermometers are equipped with their own calibration wrench.

While using the probe thermometer to monitor food temperatures, cross-contamination of cooked, ready to eat foods by raw products such as meats, poultry, or seafood must be avoided. Cooked, ready to eat foods should be checked prior to the raw food products.

The probe thermometer must be cleaned and sanitized prior to use between checking the temperatures of various foods.

The metal probe thermometer must be stored in a clean and sanitary manner in a location that is readily accessible to food preparation staff. Between uses, it must be cleaned and sanitized, as old food residues may reside inside the thermometer holder. An alternative method may be to store the probe thermometer in clean water that is maintained at 135°F or above.



Fig. 1



Fig 2



Fig. 3