Procedures for Taking Load Temperature

In order for a dairy plant to reject a load of raw milk due to a high temperature, the following protocol must be used.

The temperature can be taken using either of the following methods (infrared gun thermometers cannot be used).

1. With an accurate hand-held thermometer that has a stainless steel stem. The thermometer can be either a dial or digital type. Once the hatch has been opened, the temperature is taken by inserting the probe into the milk from the manhole. If the milk cannot be reached manually, the long-stem thermometer and/or device provided by Dairy Farmers of Ontario must be used.

   If the temperature reading is above 6°C, the temperature should be taken again using a different calibrated thermometer. If both thermometers indicate that the load of raw milk is above 6°C, the load may be rejected by the plant.

2. By automatic measurement whereby an RTD (Resistance temperature detector) in-line probe takes the temperature after the line has filled (approximately 100 litres). The pump will stop if the temperature is above 6°C. Plants using this system, that choose to reject the load, will be charged for the milk already pumped off the truck.

3. If the temperature reading is above 6°C, the temperature should be taken again using Method 1 (above). If both temperature readings are above 6°C, the load may be rejected by the plant.

Guidelines

1. Receivers are encouraged to take the temperature at the time a sample or samples of milk are being taken to avoid milk being pumped off before high temperatures are identified by the in-line reader.

2. The accuracy of a thermometer should be verified weekly, unless a non-compliant load is encountered, and at that time the calibration of the thermometer should be re-confirmed.

   For an adjustable dial thermometer, the recommended calibration method is:

   a) Fill a container with crushed or chipped ice and water.
   b) Insert the thermometer stem at 2” into the container and allow it to stabilize for 5 minutes.
   c) Make sure the tip of the thermometer is not touching the bottom of the container.
   d) If the temperature reading is 0°C, the thermometer is taking accurate readings.
   e) If the temperature reads above or below 0°C, the thermometer is not reading accurately. The thermometer should be replaced or recalibrated. (To recalibrate the thermometer, use a screwdriver to slowly turn the calibration screw to decrease/increase the temperature reading until the display reads 0°C).