

# BULK MILK HAULERS: GUIDE TO BASICS

Individuals who haul milk in bulk must be licensed by the Indiana State Board of Animal Health. Haulers must follow very specific protocols and use appropriate, approved equipment during the collection process. More resources are available online at: [www.in.gov/boah/dairy-inspection/bulk-milk-trucks-and-haulers/](http://www.in.gov/boah/dairy-inspection/bulk-milk-trucks-and-haulers/)

## Licensing (Link to Application Guidance)

Dairy haulers must be licensed with the Indiana State Board of Animal Health.

1. Apply for a permit via BOAH's website at: [www.in.gov/boah](http://www.in.gov/boah)
2. Following the submission of bulk hauler's permit application, you will receive an email directing you to complete an online *Bulk Hauler Training Course*. (A study guide is [available online](#).)
3. After successful completion of *Bulk Hauler Training Course*, contact your local BOAH inspector to coordinate a time and date for on-site assessment of pickup procedures.

## Equipment and Supplies for Hauling Milk

1. Tank Truck
2. Sampling equipment: sample-collecting instrument, sample containers, sample rack or float, approved sanitizing solution, sanitizer field test kit, dial or electronic thermometer, waterproof indelible marker and an insulated sample carrying case.
3. Ice water bath to keep samples between 32° to 40°F (0° to 4.4°C).
4. Supply of milk weight record sheets and a pen to record the required information.
5. Watch or other accurate time-measuring device.

## Collecting Farm Bulk Milk

### Step-by-Step Procedure for Bulk Milk Collection

1. Take the sampling equipment and supplies into the milkhouse.
2. Turn on milkhouse lights.
3. Open the bulk tank lid and examine the odor and appearance of the milk carefully to determine if it is acceptable.

Normal milk is odorless and ranges in color from bluish white to golden yellow. Defective milk can be determined by looking for bloody milk, flaky milk, floating extraneous matter, off-odors, and other quality related problems such as storage in unapproved containers outside of bulk tank.

### To Measure the Milk:

4. Wash and dry hands.
5. Check the bulk-tank agitator. If the bulk-tank agitator is not in operation upon arrival, make sure the milk is absolutely motionless and then measure the milk following this procedure:
  - a. Remove the measuring gauge from the tank, and dry it with a sanitary paper towel.
  - b. Measure the milk. Verify the milk line is straight.
  - c. Remove the gauge and read it in a well-lighted area at eye level.
  - d. Repeat the procedure until you have two identical readings, then record the reading.



### **To Sample the Milk:**

6. Start the agitator and agitate the milk for at least five minutes or as recommended by the tank's manufacturer.
7. Complete the steps listed here while the milk is agitating or coming to rest after agitation:
  - a. Place the thermometer and the sampling dipper in an approved sanitizing solution for at least one minute. *The sampling device must be sanitized before use to avoid contamination of the milk sample.*
  - b. Using a certified thermometer that has been calibrated within the last six months; take the temperature of the milk in the bulk tank.
  - c. Mark the sample container clearly and accurately with producer identification, time, date, temperature, and hauler identification.
  - d. Sanitize the outlet valve hose connection.
  - e. Connect the milk transfer hose to the bulk tank outlet.
  - f. Complete other preparations as may be required.
8. Sample the milk, after at least five minutes of agitation.
  - a. Rinse the sanitized dipper at least twice with milk.
  - b. Take the milk sample from below the surface of the milk and transfer it, without contamination, to the sterile pre-identified container.
  - c. Hold the sample container away from the tank so that milk is not transferred over the manhole.
  - d. Protect the dipper from contamination throughout the sampling process.
  - e. Do not fill the sample container more than 3/4 full.
  - f. Seal the container and place it in the refrigerated sample case immediately. The temperature of the sample must be maintained between 32<sup>o</sup> and 40<sup>o</sup>F (0<sup>o</sup> to 4.4<sup>o</sup>C). Samples above 40<sup>o</sup>F (4.4<sup>o</sup>C) are not acceptable for testing.
  - g. Collect an extra sample of milk at the first milk pickup to be used as a temperature control sample. Mark this sample with the letters "TC" and the date, time, and sample temperature.
  - h. Rinse the sample dipper thoroughly with clean, tepid water and return the dipper to the sanitizing solution.

### **To Transfer the Milk:**

9. Have the tank agitator in operation. Open the tank valve and start pumping the milk to the tank truck.
10. Stop the agitator when the milk level in the farm tank reaches the agitator blades.
11. Turn off the milk pump when the farm bulk tank is empty, disconnect and cap the transfer hose, and place it in the truck. Close the hose port.
12. Rinse the farm bulk tank with warm water and close the lids.
13. Flush away all milk spilled on the floor.
14. Complete the weight slip. Before leaving the farm, complete the milk receipt with a copy for both the producer and the milk plant. All weight slips must have the BTU number recorded on the slip.
15. Turn off the milkhouse lights.

### **At the End of the Day's Operation:**

16. Wash the dipper in a hot detergent solution.

### **Additional Notes:**

- Legibly record thermometer temperature comparisons to bulk tank on a monthly basis
- When recording errors occur on documentation, strike language with single line and initial the change.

### **Disclaimer:**

For complete list of hauling and sampling requirements, please refer to the most current revision of the Pasteurized Milk Ordinance. [www.fda.gov/media/140394/download](http://www.fda.gov/media/140394/download)