

**RULES
OF
TENNESSEE DEPARTMENT OF AGRICULTURE
DAIRY DIVISION**

**CHAPTER 0080-03-04
REGULATION GOVERNING: FARM BULK MILK TANK TRUCKS, METHOD OF
DETERMINING BUTTERFAT AND UNIFORM CODE SYSTEM FOR
IDENTIFICATION OF PLANTS**

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0080-03-04-.01 FARM BULK MILK TANK AND BULK MILK TANK TRUCKS.

- (1) Definition of Terms and Clarification of Responsibility
 - (a) Handler: For the purpose of this regulation, handler means a cooperative association of milk producers, an independent milk marketing agency, or any person subject to licensure by the department as a Frozen Dessert Manufacturer, Dairy Plant, Trade Products Plant, or Receiving Plant.
 - (b) Hauler: For the purpose of this regulation, hauler means the operator of a tank truck who receives milk from farm milk tanks for delivery to a handler.
 - (c) Hauler Responsibility: A hauler shall be responsible as a carrier, and shall be responsible for determining the marketable quality of the milk, for accurately measuring and converting to weight the quantity of milk, for recording legibly the hauler's name, license number, milk weight and date of pickup on farm pickup records, for taking samples to determine the butterfat content, grade, and quality of milk received from farm milk tanks, for maintaining sanitary handling equipment, and for frequency of pickup.
- (2) License and Qualifications
 - (a) Hauler: Every person who operates a milk transport tank truck for delivery of milk from farm milk tanks to a handler shall be a licensed milk tester and/or sampler and weigher.
 - (b) Handler: Every handler receiving milk from a transport tank truck shall be licensed pursuant to the Dairy Law of the State of Tennessee, T.C.A. § 53-3-101, et seq.
- (3) Sanitation and Standards
 - (a) Milk House and Installation of Tank
 - 1. Construction shall meet the standards of the most recent edition of the Pasteurized Milk Ordinance, revised by the U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration.
 - 2. Installed milkroom equipment should be readily accessible to the operator. Aisles should be at least 30 inches wide, with added allowance at the outlets of bulk cooling/holding tanks, adjacent to wash and rinse vats and where operational conditions warrant. The space available to bulk cooling/holding tanks and CIP

(Rule 0080-03-04-.01, continued)

systems should be adequate to permit their disassembly, inspection and servicing.

3. Farm tanks shall not be located over floor drains except by permission of the commissioner of agriculture or his agent.
4. The door of the milk house shall not be used for entrance of hose from the tank truck. There shall be provided a small, self-closing port not to exceed 8 inches in diameter for the hose entrance. This opening shall be at least 6 inches above the floor inside milk house or 6 inches above ground level whichever is the higher. This opening shall be conveniently located in the milk house.
5. The agitator switch shall be conveniently located in the milk house. Automatic agitators shall be provided with manual control.
6. The covers of the farm tank shall remain closed except during the sampling, measuring, emptying, washing and sanitizing operations.
7. An apron of concrete construction with a minimum area of 32 square feet so located as to help protect milk-conducting facilities from filth and soil shall be provided. It shall be adjacent to the outside wall of the milk house in which the hose port is located. It is recommended that a firm driveway be provided adjacent to apron.
8. All farm tanks shall be installed high enough above the milk house floor so as to permit easy cleaning of floor underneath, minimum of 6 inches, and to comply with approved standards.
9. A safe electric outlet shall be provided close to the hose port for the purpose of connecting the pump on the tank transport.
10. All farm bulk tanks shall be set on a foundation sufficiently firm to withstand extended freezing and thawing and so anchored that after leveling they will remain level.

(b) Construction of Farm Tanks

1. Construction of farm milk tanks shall meet the 3-A National Standard for holding and/or cooling tanks.
2. Tanks shall be equipped with adjustable legs and provided with adequate means so that movable parts can be sealed.
3. The minimum diameter of the outlet opening shall be 1 1/2 inches. Valves are to be sanitary in construction, readily cleanable and shall comply with the 3-A National Standard for fittings. A sanitary cap shall be provided to cover the outlet when not in actual use.
4. Tanks shall be equipped with a motor driven agitator so designed and powered as to provide adequate agitation of the milk without churning or excessive splash. Adequate agitation means that degree of agitation which within 5 minutes (or within tank manufacturer's specifications) restores uniformity to the fat content throughout the capacity volume. The agitator shaft and blades shall be easily and readily demountable for cleaning.

(Rule 0080-03-04-.01, continued)

5. Milk in farm tanks shall be cooled to 10°C (50°F) or less within four hours of the commencement of the first milking, and to 7°C (45°F) or less within two hours after the completion of milking. In no event shall the blend temperature of milk from the first milking and milk from subsequent milkings exceed 10°C (50°F).

(c) Sampling and Testing

1. Examination of the milk shall be made on each producer's milk at the time of pick up. Any milk which appears to be abnormal by sight and/or odor shall be rejected at the place of pick up.
2. Farm bulk milk shall be representatively sampled for quality in accordance with the standards of the most recent edition of the Pasteurized Milk Ordinance, revised by the U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration.
3. Temperature of milk in the farm tank shall be recorded at time of pick up.
4. Sampling of milk for an individual sample or for a sample for the making of butterfat tests shall be by the taking of a representative sample of milk after adequate agitation (minimum 5 minutes or longer as may be required by tank manufacturer's specifications) from each farmer's milk tank.
5. All samples for quality and butterfat are to be properly refrigerated at all times above freezing but below 40°F.

(d) Emptying, Cleaning and Sanitizing Farm Milk Tanks

1. Farm bulk milk tanks shall be emptied, cleaned, and sanitized at least once every 72 hours.
2. Cleaning.
 - (i) As soon as a farm bulk milk tank is emptied, the hauler who emptied the tank shall thoroughly rinse the tank with luke-warm or cold water. A water hose of sufficient length shall be provided in the milk house for the rinsing of farm tanks. The hose shall be equipped with necessary fittings, and a hanger to be provided in the milk house for storage of said hose.
 - (ii) As soon as is practical after the tank is emptied and rinsed, the owner or operator of the tank shall brush wash the tank with warm water and detergent or clean it by an approved mechanical method (metal sponges and metal buckets are not recommended); shall rinse the tank thoroughly with an acidity rinse; and shall allow the tank to drain.
 - (iii) Agitator shafts, down pipes, measuring rods and similar equipment shall be protected from contamination until used again.
3. Sanitizing: the owner or operator of the tank shall sanitize all milk contact surfaces with an approved solution of proper concentration just prior to use.

(Rule 0080-03-04-.01, continued)

(e) Transport Tanks

1. All tanks used to transport milk from farm to plant shall be constructed and maintained in accordance with the latest 3-A National Standards.
2. The transport tank shall be covered by the permit required by the appropriate health authority.

(f) Milk Conducting Facilities

Milk may be conducted from the farm bulk tank to the transport tank by approved hose or sanitary pipe. The fittings that attach the hose or pipe to the farm milk tank shall be protected with a sanitary cap to afford protection from contamination when not in use.

(g) Unloading of Milk at Plant

The unloading of milk from the transport tank shall be done in a place and a manner so as to prevent contamination during such operation.

(h) Cleaning and Sanitizing Transport Tanks

1. Transport tanks shall be cleaned and sanitized after each delivery unless the deliveries are to plants within the same market, in which case three loads in a twelve-hour period may be hauled between complete cleanups, provided that no more than a two-hour interval is permitted between loads or pickups without cleaning and sanitizing the pump and hose. The hauler must clean and sanitize the pump and hose. The handler must clean and sanitize the transport tank.
2. A tag designating date, time, place and name of tank clean-up personnel shall be attached to each transport unit at the completion of each tank cleaning and sanitizing operation.
3. Each handler shall provide facilities for adequate washing and bactericidal treatment of tanks, piping and accessories.

(i) Frequency of Pickup

1. Bulk tank raw milk for Grade A or manufacturing purposes must be picked up from the farm at least every three (3) days.
2. At the time of collection, the bulk milk hauler shall collect only that raw milk which has been stored continuously in the farm tank from the time of milking until the time of milk collection. The hauler shall collect the entire volume of acceptable milk being stored in the tank at the time of collection. A hauler may collect only part of the entire volume of acceptable milk being stored at the time of collection if:
 - (i) Before any additional milk is added to the tank storage, the remaining milk is picked up or emptied, and the tank is cleaned and sanitized in accordance with this rule; or
 - (ii) The tank is:

(Rule 0080-03-04-.01, continued)

- (I) Equipped with a 7-day recording device that complies with the most recent version of Appendix H of the Grade "A" Pasteurized Milk Ordinance, revised by the U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, and
 - (II) Cleaned and sanitized when empty, and is emptied at least once every 72 hours.
- (4) Standards for Measurements in Farm Milk Tanks

The department adopts by reference, as if fully stated herein, the standards and requirements of the most current version of the National Institute of Standards and Technology Handbook 44, and supplements thereto, as it pertains to farm bulk milk tank specifications.

Authority: T.C.A. §§ 52-304, 4-3-203, and 53-3-104. **Administrative History:** Original Rule certified June 5, 1974. Amendment to Rules 0080-03-04-.01(1) (c); 0080-03-04-.01(1)(d); 0080-03-04-.01(3)(h)1.and 0080-03-04-.01(3)(i) filed February 19, 1976; effective March 20, 1976. Amendment filed October 24, 1978; effective December 11, 1978. Amendment filed September 18, 2015; effective December 17, 2015.

0080-03-04-.02 METHOD OF DETERMINING THE BUTTERFAT OF MILK OR CREAM WHEN BEING SOLD ON BUTTERFAT BASIS. The Babcock Test or other tests approved by the Commissioner as set out in the latest edition of Official Methods of Analysis prepared by the Association of Official Analytical Chemists, shall be an official method of determining the butterfat of milk or cream when being sold or purchased on a butterfat basis.

Authority: T.C.A. § 52-304. **Administrative History:** Original Rule certified June 5, 1974.

0080-03-04-.03 UNIFORM CODE SYSTEM FOR THE IDENTIFICATION OF DAIRY AND/OR FOR TRADE PRODUCTS PLANTS.

In accordance with the recommendations of the National Conference on Interstate Milk Shippers, code numbers which shall appear on all consumer packages shall be assigned to dairy and/or trade products plants as follows:

- (a) The plant numbers will employ five (5) digits of which the first two and the last three are separated by a dash (-). (Example 00-000). The first two digits will be the number 47 which is the number assigned to the State of Tennessee. This will be followed by a dash (-). (Example 47-000).
- (b) The third digit preceded by the dash (-) will indicate the type of operation for which the number is issued.
 - 1. Number one (1) will indicate a fluid milk or Grade "A" plant operation. (Example 47-100).
 - 2. Number two (2) will indicate a frozen dessert manufacturing plant (no number will be issued a retail soft service establishment). (Example 47-200).
 - 3. Number three (3) will indicate a manufacturing plant operation. (Example 47-300).
- (c) The fourth and fifth digits will be used to identify the individual plants.

(Rule 0080-03-04-.03, continued)

In the event a product is processed by one company and distributed by another company, the name and address of the distributor and/or processor shall be on the information panel. The processing company is not required to put their name and address on the carton if the number assigned them by the commissioner and the name and address of the distributor is on the carton. In the event a processing plant operates more than one plant they may use the address of the general office provided that the code number of the plant where processed is legible on the carton.

Authority: T.C.A. §§ 52-304, 4-3-203, 53-3-104. **Administrative History:** Original Rule certified June 5, 1974. Amendment filed September 18, 2015; effective December 17, 2015.