

## Chapter Ag 30

### SANITARY AND QUALITY STANDARDS FOR MILK

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Note: Chapter Ag 30 as it existed on December 31, 1978, was repealed and a new chapter Ag 30 was created effective January 1, 1979.

**Ag 30.01 Definitions.** As used herein unless the context otherwise requires: (1) "Department" means the state of Wisconsin department of agriculture, trade and consumer protection.

(2) "C-I-P system" means processing equipment in which pipelines and other product contact surfaces are so designed, constructed and permanently installed as to be cleaned-in-place.

(3) "Dairy farm" means any place or premises where one or more cows or goats are kept for the production of milk for sale.

(4) "Dairy plant" means a dairy plant as defined in s. 97.20 (1) (a), Stats.

(5) "Milk" means the milk of cows or goats and includes skim milk and cream.

(6) "Milk hauler" means any person who transports bulk milk from a dairy farm to a dairy plant or other processing or distribution location.

(7) "Milk quality test" means the standard plate count, plate loop count, coliform count, sediment test, inhibitory substance test for antibiotics, Wisconsin mastitis test, direct microscopic somatic cell count, and any other test for milk as described in "Standard Methods for the Examination of Dairy Products", 14th Edition (1978), copies of which are on file at the offices of the department, the secretary of state and the revisor of statutes, and may be obtained from the American Public Health Association, Inc., 1015 Eighteenth Street, N.W., Washington, D.C. Examinations may include such other chemical and physical determinations as the department may consider necessary for the detection of adulteration.

(8) "Person" means an individual, partnership, firm, association, corporation, or any other business unit or entity.

(9) "Producer" means any person who owns, controls or operates a dairy farm and sells milk produced on the farm from cows or goats.

(10) "Product" means a dairy product as defined in s. 97.20 (1) (b), Stats.

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(11) "Sanitize" means to destroy pathogens and other organisms, insofar as practicable, by the application of any sanitizing substance or process to product contact surfaces of dairy equipment or utensils which are otherwise clean. The sanitizing treatment or process shall not adversely affect the equipment or utensils or the quality of the milk or milk product coming in contact therewith, and shall be acceptable to the department.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79; am. (9), Register, November, 1980, No. 299, eff. 12-1-80; am. (7), Register, January, 1983, No. 325, eff. 2-1-83.

**Ag 30.02 Milking barn, stable, or parlor.** (1) **CONSTRUCTION.** (a) A milking barn, stable, or parlor shall be provided on all dairy farms and be used for the milking of herds during all milking time operations. The milking barn, stable or parlor shall conform to the following requirements:

1. Floors and gutters shall be constructed of concrete or other impervious and readily cleanable material, and in such a manner that they can be kept in a reasonably clean condition. Floors constructed after January 1, 1979 shall be sloped a minimum of one inch per 10 feet to ensure reasonable drainage.

2. Walls and ceilings shall be constructed of wood, tile, concrete, cement or other equivalent material and be painted, whitewashed or finished with such material as to permit them to be kept in a clean condition. The ceiling or loft floor shall be sufficiently tight-fitting to prevent sifting of chaff or other material into the milking barn, stable or parlor.

3. Separate stalls, stanchions or pens shall be provided for the housing of any cows, calves, bulls or horses which may be kept in the milking barn or stable.

4. Adequate natural or artificial light, or both, shall be provided for day or night milking operations. Artificial lighting systems constructed, substantially reconstructed or extensively altered after January 1, 1979 shall provide at least 10 foot-candles in all working areas in which milking is done.

5. Airspace and air circulation shall be sufficient to prevent condensation and excessive odors.

(b) A separate hot water supply shall be provided for prep stalls installed in any milking parlor after January 1, 1979.

(2) **MAINTENANCE AND CLEANLINESS.** (a) The interior of the milking barn, stable or parlor and all areas used in connection with milking operations shall be kept clean and maintained in a good state of repair. Floors and gutters, pens, stalls, walls, ceilings, pipelines, and equipment shall be kept clean and free of accumulated litter or filth. Manure shall be removed daily from the milking facility.

(b) No swine, sheep or fowl shall be permitted in the milking barn, stable or parlor. Cows, calves, bulls or horses shall be confined in separate stalls, stanchions or pens during milking operations.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.03 Milkhouse or room.** (1) **CONSTRUCTION AND FACILITIES.** A milkhouse or room of sufficient size shall be provided and used for the

(e) No dusty or objectionably strong-flavored feed shall be fed to cattle just before or during milking.

(4) **TRANSFER AND PROTECTION OF MILK.** (a) Each pail or can of milk shall be removed immediately from the milking barn, stable or parlor to the milkhouse.

(b) No milk shall be strained, poured, or transferred in the barn unless it is protected from contamination.

(c) Only clean, single service filters may be used to strain milk. Filters shall not be reused.

(5) **PERSONNEL; CLEANLINESS.** (a) Milkers' hands shall be washed clean and dried with sanitary toweling immediately before milking or performing any other milkhouse function, or the resumption of the milking operation following an interruption.

(b) Outer garments worn by milkers and milk handlers during milking operations shall be kept sufficiently clean to prevent the soiling of the hands or contamination of milking equipment or containers.

(6) **COOLING.** Bulk and can milk shall be cooled immediately after milking to 50° F. or lower unless delivered to the dairy plant within 2 hours after milking.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.10 Milk quality standards.** (1) **EXAMINATION OF MILK.** Dairy plant operators shall examine by sight and smell all milk received by them, and shall reject all milk which is found to be insanitary or adulterated, or affected with objectionable odors adversely affecting the quality of the milk.

(2) **MILK TESTING.** Tests to determine the sanitary quality of each producer's milk shall be conducted at least once each month. Tests shall consist of bacteriological, sediment, inhibitory substances and abnormal milk screening tests. Test results of all tests made of a producer's milk shall be furnished to the producer within 30 days after the test is completed except as otherwise required in this section.

(3) **SEDIMENT TESTS.** (a) In the sediment testing of milk in cans the tester, with a 1½ inch diameter disc shall be drawn across the bottom of one or more cans of milk selected at random.

(b) Where milk is in a bulk tank a mixed sample shall be taken from each bulk tank. The filtering area of the disc for the conduct of the test, using a 4-ounce sample, shall be 0.10, 0.14 or 0.20 inches in diameter. The filtering area of the disc, using a 16-ounce sample, shall be 0.40 inches in diameter.

(c) Discs shall be graded for sediment on basis of sediment standard composite visual grading charts prepared by the United States department of agriculture under 7 CFR 58.2732. Based on such charts the sediment discs shall be graded 1, 2, 3 and 4 as follows:

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SEDIMENT CONTENT DISC CLASSIFICATION	SEDIMENT CONTENT BASED ON A 1 1/4 INCH DI- AMETER DISC OR ITS FILTERING AREA EQUIVALENT	SEDIMENT GRADE STANDARD
No. 1	Not to exceed 0.50 mg.	Acceptable
No. 2	Not to exceed 1.50 mg.	Acceptable
No. 3	Not to exceed 2.50 mg.	Borderline
No. 4	Over 2.50 mg.	Reject

(d) When the milk of any producer has been tested and the sediment disc is graded number 4, the milk shall be rejected, and no further milk of that producer shall be picked up, accepted or delivered until a sediment test discloses a sediment disc grade of number 3 or better. Whenever milk has been tested and the sediment disc is graded number 3, the plant operator shall promptly notify the producer that the milk is of borderline quality and that if any subsequent test discloses a sediment disc grade of number 4, the milk will be rejected.

(4) BACTERIOLOGICAL TESTS. (a) Bacteriological tests shall be conducted on basis of a mixed sample of each producer's milk. The milk shall be graded by the standard plate count or plate loop count method, and test results shall be graded as follows:

GRADE	BACTERIOLOGICAL COUNT
1	Not over 200,000 per ml.
2	200,000 - 1,000,000 per ml.
Undergrade	Over 1,000,000 per ml.

(b) Milk graded number 1 or 2 is of acceptable quality. If the milk is found to be of undergrade quality, the dairy plant operator shall notify the producer and resample and retest the producer's milk within 10 days. If on such retest the milk is found to be of undergrade quality, the plant operator or plant representative shall conduct an immediate inspection of the producer's farm premises, and if any insanitary or non-complying farm conditions are found to exist, all further milk deliveries from the producer shall be rejected until a subsequent bacteriological test shows the milk is of acceptable quality. If no insanitary or noncomplying conditions are noted on the farm inspection, a copy of the undergrade test report and the farm inspection report shall be mailed to the department immediately after completion of the farm inspection.

(5) INHIBITORY SUBSTANCES TESTS. (a) Inhibitory substances tests shall be conducted on basis of a mixed sample of each producer's milk. In lieu of monthly tests of individual producers, daily tests may be conducted on samples of each individual load of milk received at the plant.

(b) Milk shall be tested for inhibitory substances by the *Bacillus stearothermophilus* disc assay method, the *Sarcina lutea* cylinder plate method or other equivalent test method approved by the department, and shall be classified as negative or positive according to the test methodology applicable to the test which is used.

(c) Individual producer milk showing a positive test result shall be rejected and no further milk received from that producer until a negative test is obtained. If any individual load of milk shows a positive test result, the milk of each individual producer making up the load shall be individually sampled and tested prior to the next delivery of milk from

such producers. The milk of any producer found to be positive shall be rejected until a retest shows a negative result.

(6) **ABNORMAL MILK SCREENING TESTS.** (a) Abnormal milk screening tests shall be conducted on basis of mixed milk samples of milk from each producer by the Wisconsin mastitis test (WMT), direct microscopic somatic cell count (DMSCC) or electronic somatic cell count (ESCC).

(b) If the WMT test is used and the test value exceeds 21 mm., a confirmatory test of the milk sample shall be conducted either by the DMSCC or ESCC test method. If a DMSCC or ESCC test, whether or not conducted on a confirmatory basis, indicates the presence of 1,000,000 or more somatic cells per ml., a written report thereof shall be submitted to the producer within 48 hours after the completion of the test. In lieu of a confirmatory test where the WMT test value exceeds 21 mm., dairy plant operators or their representatives may conduct a milking time inspection to determine cause of the high WMT test result and suggest procedures to be followed to improve the quality of the milk. After the milking time inspection, all subsequent WMT test values in excess of 21 mm. shall be confirmed by the DMSCC or ESCC test.

(c) Whenever 2 of the last 4 consecutive tests of producer milk disclose a somatic cell count in excess of 1,000,000 or more per ml., the dairy plant shall immediately notify the department in writing of such a fact, and within 21 days of the last high somatic cell count the plant operator shall resample and retest the producer's milk using the DMSCC or ESCC method and make a milking time inspection of the herd. If the retest sample shows a somatic cell count in excess of 1,000,000 per ml., the department shall be so notified in writing within 5 days after completion of the test.

(d) Upon receipt of notices or reports as required in this subsection, the department may conduct examinations and tests of the producer's herd and issue holding orders on milk pending completion of laboratory tests and examinations. The department may by order prohibit milk containing in excess of 1,000,000 somatic cells per ml., and the sale or delivery of milk from animals determined to be affected with disease. Regardless of procedures prescribed in this subsection, the department may conduct screening tests for the detection and control of mastitis and follow other enforcement and control procedures specified under ch. Ag 10.

(7) **TEST METHODS.** Procedures and methods for the sampling and testing of milk under this section shall, except as otherwise provided, be those prescribed in "Standard Methods for the Examination of Dairy Products", Thirteenth Edition (1972), copies of which are on file at the offices of the department, secretary of state and revisor of statutes. Copies may be obtained from the American Public Health Association, Inc., 1015 - 18th Street, Northwest, Washington, DC 20036. Other tests for abnormal milk may be approved by the department if satisfactory evidence of their suitability and reliability is submitted.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79; am. (6) (b), Register, November, 1980, No. 299, eff. 12-1-80; am. (6) (c), Register, July, 1981, No. 307, eff. 8-1-81; am. (6) (b), Register, January, 1983, No. 325, eff. 2-1-83.

**Ag 30.11 Farm inspections; records, notices and reports.** (1) **INSPECTIONS.** (a) Every dairy plant operator shall, prior to receiving the

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initial shipment of milk from producers, inspect the dairy farm of the producer and prepare a farm inspection report. Thereafter, a farm inspection shall be made at least once each year and at such other times as dairy farm inspections indicate unsatisfactory conditions, or milk quality tests indicate the producer's milk is of substandard quality. Dairy farms shall be inspected to determine compliance with all farm sanitary requirements prescribed under this chapter. After each inspection, the inspection report shall be reviewed with the producer and a copy of the most recent report posted by the dairy plant in a conspicuous place in the milkhouse. The producer shall at all times keep the most recent inspection report posted and shall promptly correct conditions indicated in the inspection report which fail to comply with the requirements of this chapter.

(b) The department and dairy plant representatives shall at all reasonable times have access to dairy farms under their inspectional jurisdiction or responsibility for purposes of farm inspection or the sampling and testing of producer milk, and no producer shall interfere with or otherwise obstruct the department or dairy plant representative in the performance of their duties and responsibilities under this chapter. The dairy plant operator shall notify the department of any denial of access within 2 days after such denial. Upon receipt of such notice the department shall, within 5 days, inspect the producer's premises. If farm inspection is denied by a producer, the department may summarily prohibit the further sale or shipment of milk for human food purposes by the producer until such time as inspection rights are granted and the milk is found to be of acceptable sanitary quality.

(c) Milk quality tests as required under s. Ag 30.10, of producer milk, shall be made by the dairy plant operator on receipt of the initial shipment of milk from a producer. If initial tests disclose the milk is of unacceptable quality, procedures as otherwise specified in this chapter will be followed.

(2) **RECORDKEEPING.** Accurate records of the result of milk quality tests and farm inspections of each producer shall be kept on file at the dairy plant for a period of at least one calendar year.

(3) **FIELD SERVICE.** Every dairy plant shall have personnel or field service representatives available to them for purposes of conducting farm inspections and offering constructive assistance to producers in maintaining and improving milk quality.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.12 Notice prohibiting sale or delivery of milk.** (1) Whenever the department determines, as a result of a farm inspection or milk quality test, that milk of a producer is produced under insanitary conditions or that the milk is insanitary or adulterated, it may by notice in writing summarily prohibit the further sale of milk from the dairy farm as food for humans or for processing or manufacturing as food for humans. A copy of such notice shall be submitted to the dairy plant receiving the milk. No producer, upon receipt of such notice, shall continue to sell or deliver milk to any dairy plant until insanitary conditions have been corrected and the milk is of acceptable quality as determined by the department or the dairy plant receiving the milk.

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(2) Upon receipt of such notice, the dairy plant shall reject all further shipments of milk from the producer until such time as all conditions described in the notice have been corrected and the milk is of acceptable sanitary quality. On the request of the producer, it shall be the duty of the plant operator to conduct an immediate inspection of the farm premises to determine whether all conditions described in the notice have been corrected.

(3) If the sale of the milk was prohibited solely because of insanitary farm conditions and it is determined on such inspection that all farm conditions as described in the notice have been corrected, the dairy plant may receive and the producer may ship milk produced after such inspection and determination has been made. If the sale of milk was prohibited because of insanitary quality of the milk, no further milk may be shipped or received until milk quality retests have been made and the milk is determined to be of acceptable sanitary quality. Copies of all farm inspection reports or tests conducted by the dairy plant under this section shall be submitted to the department immediately upon completion of the farm inspection or tests. The dairy plant operator shall notify the department in writing of the acceptance of the producer's milk on the same day the milk is accepted. The department shall conduct an inspection of the farm premises within 5 days after receipt of notice from the dairy plant that conditions have been corrected and that the milk has been accepted.

(4) Any producer affected by notice under this section may, within 10 days, make a written request for a hearing thereon before the department. Such hearing, if requested, shall be conducted as expeditiously as possible and not more than 20 days after receipt of the request.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.13 Identification of adulterated or insanitary milk.** Whenever it is determined by the department that milk is adulterated or of insanitary quality, within the meaning of ss. 97.50 and 97.52, Stats., it shall summarily reject the milk by tagging the container thereof and adding a harmless food grade color to the milk to prevent its sale or use for human food purposes. The plant operator shall identify and reject milk which it finds to be adulterated or insanitary by tagging the container of the milk.

**History:** Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.14 Transportation.** (1) (a) Persons engaged in the business of hauling milk in cans to dairy plants shall transport such milk only in vehicles equipped with fully enclosed dust-tight bodies, except where a substitute vehicle must be used because of gross weight restrictions on highways used to transport milk to a dairy plant. If a substitute vehicle is used, the cans of milk shall at all times be covered with a suitable covering material. No other products or materials which may contaminate the milk shall be hauled on the same vehicle with the milk. When skim milk, buttermilk or whey is being transported to producers in the same vehicle used to transport milk, the skim milk, buttermilk or whey shall be transported in a sealed compartment separate from the compartment used to transport milk, and be equipped with exterior inlets and outlets.

(b) This does not prohibit producers from hauling their own milk, or on an occasional accommodation basis, the milk of other producers to a

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dairy plant in cans, through the use of their own trucks or vehicles, provided the milk is otherwise protected from contamination during transport and not unloaded or transferred enroute to a dairy plant contrary to sub. (5).

(2) Milk from producers shall be collected at intervals not exceeding 4 calendar days except in emergency situations where roads are impassable, in which event delivery time may be extended an additional day. Milk determined to contain over 200,000 bacteria per ml., shall be collected at intervals of no more than 2 calendar days. It is the duty of the dairy plant to notify milk haulers, or persons hauling or shipping milk in cans, whenever a maximum 2 day pickup and delivery is required.

(3) Bulk milk trucks used by milk haulers shall be equipped with necessary fittings to adapt the transfer hose to all bulk tank outlet valves. The fittings shall be kept attached to the hose and stored in a sanitary manner in the hose cabinet. The cap and fittings shall be removed and replaced as necessary only in the milkhouse or dairy plant.

(4) Bulk milk truck tanks, including sanitary piping, fittings and pumps, used by milk haulers, shall be cleaned and sanitized at least once each day. If the tank is not to be used immediately for the pickup of another load of milk, it shall be washed promptly and sanitized prior to further use. The outside of the tank shall be maintained in a clean condition. Outside fittings and openings shall be equipped with dust covers. Tanks shall be cleaned in an enclosed heated room with an impervious, drained floor, and equipped with hot and cold water under pressure, a wash vat, pressure sanitizing facilities and equipment storage racks.

(5) No milk hauler, producer or other person transporting milk from the farm to a dairy plant shall unload or transfer such milk, or any part thereof, from one container to another, at any place other than a dairy plant.

History: Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.15 Construction, alterations.** (1) The department will, upon request, provide all interested persons with guidelines and suggested layouts for the construction of milking and milk handling systems and dairy farm facilities, and such other informational materials it may have which would aid in the planning, construction, reconstruction or extensive alteration of such systems or facilities meeting the requirements of this chapter.

(2) Producers desiring departmental review of plans, schematic drawings or sketches of dairy farm facilities relating to milking operations are encouraged to submit them to the department for comment and review before construction begins.

(3) Plans shall, within 14 days after their receipt, be returned by the department to the producer together with a report of its comments or objections.

History: Cr. Register, October, 1978, No. 274, eff. 1-1-79.

**Ag 30.16 Applicability.** This chapter applies to all dairy farms producing ungraded milk or milk products.

History: Cr. Register, October, 1978, No. 274, eff. 1-1-79; am. Register, November, 1980, No. 299, eff. 12-1-80.

Register, January, 1983, No. 325