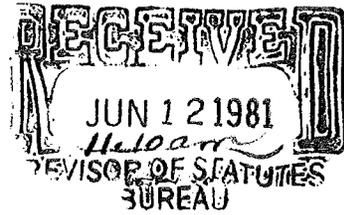


Ag 30, 31

STATE OF WISCONSIN )  
DEPARTMENT OF AGRICULTURE, ) SS.  
TRADE & CONSUMER PROTECTION )



TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Norman E. Kirschbaum, Administrator, Food Division, State of Wisconsin Department of Agriculture, Trade and Consumer Protection, and custodian of the official records of said Division, do hereby certify that the annexed order amending rules relating to time limitations for mastitis retests, pasteurizing standards and pasteurizing equipment for the pasteurization of dairy products, sections Ag 30.10 and 31.06, Wis. Adm. Code, was duly approved and adopted by the Department on June 12, 1981.

I further certify that said copy has been compared by me with the original on file in the Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Department offices in the city of Madison, this 12<sup>th</sup> day of June, 1981.

*Norman E. Kirschbaum*  
Norman E. Kirschbaum, Administrator  
Food Division

8-1-81



ORDER OF THE STATE OF WISCONSIN  
DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

ADOPTING, AMENDING AND REPEALING RULES

1           Relating to rules concerning time limitations for mastitis  
2 retests, pasteurizing standards and pasteurizing equipment for the  
3 pasteurization of dairy products.

---

Analysis Prepared by the Department of Agriculture, Trade  
and Consumer Protection

The proposed rules contain a simple amendment to section Ag 30.10(6)(c), which deals with milk quality standards. The change involves increasing the time within which dairy plant operators must resample and retest a producer's milk which has had a high somatic cell count on 2 of the last 4 consecutive tests for mastitis. The time limitation is increased from 14 to 21 days, which makes the rule consistent with recently amended section Ag 80.05(5). The latter amendment was effective December 1, 1980.

Existing Chapter Ag 31 rules, under section Ag 31.06(3)(b) establishes standards for the construction, installation, testing and operation of high-temperature short-time (HTST) pasteurizers and among other things requires that HTST pasteurizers be equipped with an automatic temperature recorder-controller device. Under section Ag 31.06(3)(a)2., these standards and requirements were made applicable only to grade A and frozen dessert manufacturing plants and not to other plants, namely cheese plants, until after July 1, 1981. This would mean that after July 1, 1981, cheese plants would be subject to the same HTST standards and requirements, including the automatic temperature recorder-controller requirement, which now apply to grade A and frozen dessert plants. The proposed rule change would, under new section Ag 31.06(3)(e) exempt cheese plants from the automatic temperature recorder-controller, flow diversion device and timing pump requirements for HTST pasteurizers, if manual pasteurization time and temperature records are kept and a representative sample of each vat is tested by the phosphatase test to ensure adequate pasteurization.

The proposed rules also make certain other organizational, structural and clarifying changes in existing s. Ag 31.06(3), by renumbering existing par. (b), as (c) and incorporating in this paragraph all requirements relating to HTST pasteurizers, and creating a new par. (d) relating solely to non-coil batch type pasteurizers.

The proposed rules further clarify existing standards for the pasteurization of product and establish a separate table under new par. (b), setting forth in one location all pasteurization time and temperature standards and requirements as they apply to non-coil batch and HTST pasteurization of dairy products under existing definitions and standards of identity for dairy products, including standards incorporated by reference under s. 97.09, Stats., (and as published under 21 CFR 131, 133, and 135) and rules of the department. Present rules do not fully and completely set forth all applicable standards for the pasteurization of product.

---

1 Pursuant to authority vested in the State of Wisconsin Depart-  
2 ment of Agriculture, Trade and Consumer Protection by sections  
3 93.07(1), 97.20(2), 97.24(4) and 97.52, Stats., the State of  
4 Wisconsin Department of Agriculture, Trade and Consumer Protection  
5 proposes to repeal, amend and adopt rules interpreting sections  
6 93.07(1), 97.20(2), 97.24(4) and 97.52, Stats., as follows:

7 1. Section Ag 30.10(6)(c) of the Wis. Adm. Code is amended to  
8 read:

9 Ag 30.10(6)(c) Whenever 2 of the last 4 consecutive tests of  
10 producer milk disclose a somatic cell count in excess of 1,000,000  
11 or more per ml., the dairy plant shall immediately notify the  
12 department in writing of such a fact, and within ~~14~~ 21 days of the  
13 last high somatic cell count the plant operator shall resample and  
14 retest the producer's milk using the DMSCC or ESCC method and make a  
15 milking time inspection of the herd. If the retest sample shows a  
16 somatic cell count in excess of 1,000,000 per ml., the department  
17 shall be so notified in writing within 5 days after completion of  
18 the test.

19 2. Section Ag 31.06(3)(a)1 and 2 of the Wis. Adm. Code are  
20 amended to read:

21

1 Ag 31.06(3)(a)1. Whenever pasteurization of a product is re-  
2 quired by a standard of identity ~~as set forth in~~ under 21 CFR 131, 133,  
3 and 135, or rules of the department, or a product is otherwise repre-  
4 sented as having been pasteurized, it shall be pasteurized in equip-  
5 ~~ment which will heat every particle of milk or skim milk to at least~~  
6 ~~145° F. and cream and other dairy products to at least 150° F., and~~  
7 ~~hold them at such temperature continuously for at least 30 minutes,~~  
8 ~~or heat every particle of milk and skim milk to at least 161° F.,~~  
9 ~~and cream and other dairy products to at least 166° F., and hold~~  
10 ~~them at such temperature continuously for at least 15 seconds. Ice~~  
11 ~~cream or ice milk mix and dairy frozen desserts shall be heated to~~  
12 ~~at least 175° F. for at least 25 seconds or to at least 155° F. for~~  
13 ~~at least 30 minutes as provided under Wis. Adm. Code chapter Ag-70.~~  
14 ~~Condensed products for re-pasteurization shall be heated to 166° F.~~  
15 ~~for 25 seconds. Cream for butter making shall be heated to at least~~  
16 ~~185° F. for at least 15 seconds for 165° F. for 30 minutes. This~~  
17 ~~subsection shall not prohibit any other process which is equally~~  
18 ~~effective and approved by the department.~~ in accordance with time  
19 and temperature requirements which may be specified for the product  
20 or as otherwise set forth under par. (b), and in equipment which  
21 will heat every particle of milk or other dairy product to the  
22 required temperature and continuously hold them at such temperature  
23 for the required period of time.

24 2. Equipment used in the pasteurization of product shall  
25 conform to accepted industry standards for the sanitary construc-  
26 tion, installation, testing and operation of the equipment, and the  
27

1 requirements of pars. (c) and (d) relating to high-temperature  
2 short-time (HTST) and non-coil batch pasteurizers. Pasteurizing  
3 equipment-in Dairy plants subject to the requirements under-Wis.  
4 Adm.-Code of chapters Ag 70 and 80, Wis. Adm. Code, shall conform  
5 also be subject to pasteurization and pasteurization equipment  
6 standards and requirements of paragraph-(b) this subsection.  
7 Pasteurizing equipment requirements specified under ~~paragraph-(b)~~  
8 par. (c) for HTST pasteurizers shall apply to all other dairy plants  
9 after July 1, 1981, except as provided under par. (e).

10 3. Section Ag 31.06(3)(a)3. of the Wis. Adm. Code is  
11 repealed.

12 4. Section Ag 31.06(3)(b) of the Wis. Adm. Code is renumbered  
13 section Ag 31.06(3)(c), and as renumbered Ag 31.06(3)(c)(intro) and  
14 7. are amended to read:

15 Ag 31.06(3)(c)(intro) ~~Pasteurizing-equipment-shall-conform~~  
16 ~~to-accepted-industry-standards-for-the-sanitary-construction,~~  
17 ~~installation,-testing-and-operation-of-high-temperature-short-time~~  
18 ~~pasteurizers-(HTST)-and-sanitary-standards-for-non-coil-type-batch~~  
19 ~~pasteurizers.~~ All component equipment or optional component equip-  
20 ment of high-temperature short-time pasteurizers (HTST), except  
21 heating and cooling equipment, shall be connected to each other with  
22 sanitary pipelines and fittings and so installed as not to have an  
23 adverse effect on the time, temperature, and pressure relationships  
24 of the HTST system. ~~Such-HTST-systems,-parts~~ All parts and equip-  
25 ment of the HTST system shall be installed to facilitate easy access  
26 for cleaning, maintenance and inspection, and in accordance with the  
27 following standards and requirements:

1           7. HTST pasteurizers shall be equipped with an automatic  
2 temperature recorder-controller device. The temperature sensor of  
3 the recorder-controller shall be installed in the connection pro-  
4 vided for in the recorder-controller, and be examined by the depart-  
5 ment for accuracy and sealed at the required temperature and holding  
6 time. The department seal shall not be removed without prior notice  
7 to the department except in an emergency. If the seal is removed  
8 because of an emergency, the department shall be notified of such  
9 removal within 24 hours.

10           5. Sections Ag 31.06(3)(b), (d) and (e) of the Wis. Adm. Code  
11 are adopted to read:

12           Ag 31.06(3)(b)1. Milk and other dairy products as identified  
13 in the table below shall be pasteurized in accordance with the  
14 following time and temperature standards and requirements for the  
15 pasteurization of product in non-coil batch or high-temperature  
16 short-time (HTST) pasteurizers:

<u>Product</u>	<u>Non-coil Batch Pasteurization</u>	<u>HTST Pasteurization</u>
Milk or skim milk	145° F. for 30 minutes	161° F. for 15 seconds
Cream and other fluid dairy products	150° F. for 30 minutes	166° F. for 15 seconds
Cream for butter	165° F. for 30 minutes	185° F. for 15 seconds
Condensed milk products	155° F. for 30 minutes	166° F. for 15 seconds
Frozen dessert mixes	155° F. for 30 minutes	175° F. for 25 seconds
Process cheese	150° F. for 30 seconds	---

1           2. This subsection does not prohibit the use of any other  
2 process which is equally as effective in the pasteurization of  
3 product and approved by the department.

4           (d). Batch pasteurization equipment shall be of the non-coil  
5 type. Vats shall be constructed so that every particle of milk or  
6 dairy product is heated to the appropriate batch pasteurization temp-  
7 erature and held continuously at or above that temperature for the  
8 required time. All pasteurization vessels shall be equipped with  
9 leak detector valves. Batch pasteurizers shall have recording ther-  
10 mometers, mercury column product thermometers and a thermometer to  
11 record the temperature of the air space above the pasteurizer.

12           (e)1. Dairy plants making cheese from pasteurized milk  
13 utilizing high-temperature short-time pasteurization equipment not  
14 having a flow diversion device, a recorder-controller, and a timing  
15 pump or device shall manually keep a record of the plant's pasteuri-  
16 zation processes. The records shall include the dairy plant  
17 number, vat identification numeral or letter, date of manufacture  
18 abbreviated by month, day and year, pasteurization temperature,  
19 pasteurization starting and finishing time, and volume or weight of  
20 milk pasteurized. All cheese from each vat shall be marked with the  
21 dairy plant number, vat identification numeral or letter, and date  
22 of manufacture abbreviated by month, day and year until it is  
23 processed or cut and wrapped in consumer size packages.

24           2. A representative sample from each vat of pasteurized milk  
25 or cheese, identified by the same information contained in the  
26 record of the plant's pasteurization process under subd. 1, shall be  
27

1 taken and analyzed by the phosphatase test as described in 21 CFR  
2 133.113. Records of all phosphatase tests shall be maintained at  
3 the dairy plant for 6 months. Any vat of cheese from pasteurized  
4 milk having a positive phosphatase test shall be handled as raw milk  
5 cheese and held at 35° F. for not less than 60 days. The department  
6 may sample at all levels of distribution to determine compliance  
7 with this subdivision.

8 The rules, amendments and repeals contained in this order shall  
9 take effect on the first day of the month following publication in  
10 the Wisconsin Administrative Register, as provided in s. 227.026(1),  
11 Stats.

12 Dated: June 12, 1981.

13 STATE OF WISCONSIN  
14 DEPARTMENT OF AGRICULTURE, TRADE  
AND CONSUMER PROTECTION

15 By N. E. Kirschbaum  
16 N. E. Kirschbaum, Administrator  
Food Division

17 T1/41/ADMIN3  
18 5/06/81-5  
19  
20  
21  
22  
23  
24  
25  
26  
27

