

Clearinghouse Rule 16-044

DATCP Docket No. 15-R-06
Rules Clearinghouse No. ____

Proposed Hearing Draft
May 23, 2016

**PROPOSED ORDER
OF THE WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION
ADOPTING RULES**

The Wisconsin department of agriculture, trade and consumer protection hereby proposes the following rule *to repeal and recreate* ATCP ch. 87, subch. II; *to amend* ATCP 70.05 (1), ATCP 70.06 (1) and (7) (d); and *to create* ATCP 70.04 (18), ATCP 70.07 (1) (f), ATCP 70.10 (7); *relating to* maple syrup grading and processing, and affecting small business.

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

The Department of Agriculture, Trade and Consumer Protection (“Department”) regulates maple syrup grading and processing through ch. ATCP 70 (Food Processing Plants) and ch. ATCP 87 (Maple Syrup Grading and Processing). This rule revision will incorporate recent changes to federal maple syrup grade standards. In addition, this rule revision will also exempt traditional maple sap concentration facilities from the more-rigorous food processing plant requirements that are necessary in more complex maple syrup and maple sap product processing and packaging facilities.

Statutes Interpreted

Statute Interpreted: ss. 93.09 (1) and 97.29, Stats.

Statutory Authority

Statutory Authority: ss. 93.07 (1), 93.09 (1), 97.09 (4), and 97.29 (5), Stats.

Explanation of Statutory Authority

The Department has broad general authority, under s. 93.07 (1), Stats., to adopt rules to implement programs under its jurisdiction. The Department has specific authority to adopt rules related to food grade standards in s. 93.09 (1), Stats. The Department also has general authority

under s. 97.09 (4), Stats., to adopt rules specifying standards to protect the public from the sale of adulterated or misbranded foods. The Department has specific authority to promulgate rules related to food processors in s. 97.29 (5), Stats.,

Related Statutes and Rules

Wisconsin's maple syrup producers are governed by ch. 97, Stats. (Food Regulation). Maple syrup processing is regulated under s. 97.29, Stats., (Food processing plants). Subch. II (Maple Syrup) of Chapter 87 (Honey and Maple Syrup), Wis. Adm. Code, interprets ch. 97, Stats., as it relates to maple syrup grading.

Plain Language Analysis

Wisconsin ranks fourth in the nation in maple sap production. In 2014, Wisconsin maple syrup producers made 200,000 gallons with an approximate value of \$10,000,000. Maple syrup grades provide a common language for describing maple syrup sold both at wholesale and retail. Maple syrup grades are currently established by the United States Department of Agriculture, several states including Wisconsin, and the Canadian province of Quebec. The Wisconsin grade standards were adopted in 1980.

At the behest of maple syrup producers, the Department is proposing to modernize the Wisconsin maple syrup grade standards and the requirements enforced at maple syrup facilities. The USDA's Agricultural Marketing Service (USDA-AMS) adopted new maple syrup grade standards in 2015. In conjunction with the International Maple Syrup Institute (IMSI) USDA-AMS upgraded the Grade A color classes so that they are based on spectrophotometric analysis. Among other additional changes, the Grade B syrup designation is eliminated, and replaced with a Processing Grade designation. The new USDA-AMS standards have already been adopted by Vermont, New Hampshire and Maine.

This proposed rule will replace the existing maple syrup standards with those recently developed by the USDA-AMS. The Department is also looking at whether maple syrup producers are generally more interested in the alternatives of keeping the existing standards or having the Department develop new and unique standards for Wisconsin.

The second purpose of this rule revision is to address requirements for maple syrup facilities. The proposed rule differentiates between the stringent requirements for food processing facilities, in general, from requirements for those facilities where the only activity is the thermal concentration of sap, i.e., "sugar shacks." The proposed rule creates necessary rules for food safety in these latter facilities, but ones that address their unique facility characteristics. It also clarifies existing rules to indicate the simple transfer of reduced maple sap from the thermal concentration facilities to the further-processing facilities can be done under one food processing plant license.

The proposed rule also establishes requirements for processing a range of new products related to maple syrup. Among these are "maple water," that may be pasteurized non- or partially-concentrated sap, or a product of reverse osmosis treatment of sap, that is bottled for consumption. The Department will work with maple syrup producers during this rule-making process, to determine the extent to which rule revisions are needed to address concerns of food

safety as well as provide a regulatory framework for the production and standardization of these products.

Summary of, and Comparison with Existing or Proposed Federal Statutes and Regulations

Businesses that only harvest maple sap are not subject to federal food safety rules, but businesses that convert the sap to maple syrup or any other food would be considered “facilities” and subject to the Food Safety Modernization Act and the rules that implement it. There is a federal standard of identity for maple syrup under 21 CFR 168.140, and maple syrup producers involved in interstate commerce must follow Good Manufacturing practices as outlined in 21 CFR 117. The proposed rule adopts the voluntary federal grade standards for maple syrup, with only minor modifications.

Comparison with Rules in Adjacent States

Retail sales of maple syrup in Illinois are under the jurisdiction of state or local health departments and regulations modeled on the FDA Food Code. Therefore, maple syrup sold at retail must originate in a facility subject to FDA or state inspection. Maple syrup is not one of the foods exempted from food processing rules via the Illinois Cottage Food Bill. Illinois does not license food processing plants. Production of maple syrup for wholesale is done in facilities subject to state rules that largely adopt FDA regulations.

Michigan licenses maple syrup producers who sell their product wholesale but does not require a retail food establishment license for sales of maple syrup made by a licensed producer. Maple syrup producers in Michigan can qualify for a cottage foods exemption from the food licensing requirement. Maple syrup producers who meet licensing exemptions (less than \$15,000 annually in sales) must follow the same labeling requirements for their maple syrup as those outlined for other cottage food products. Michigan requires the label to read "*Processed in a facility not inspected by the Michigan Department of Agriculture & Rural Development,*" because maple syrup cannot be processed in a home kitchen. Maple syrup producers who meet the licensing exemptions still must meet all requirements of the Michigan Food Law, including sanitation, building construct and design, employee hygiene, etc.

Iowa considers maple syrup an agricultural commodity, and thus not subject to state inspection. Notwithstanding, Iowa food processing plant regulations largely cite FDA rules. Iowa also exempts cottage food operations from licensing requirements.

In Minnesota, a license is required to legally sell maple syrup to the public unless all sap is obtained from the maple syrup producer’s land and no other “off farm” inputs are used in making the product (e.g., sap from neighbors’ trees). However, all maple syrup operations selling to the public are subject to inspections by the Minnesota Department of Agriculture. Labeling requirements for maple syrup are the same as for other foods under Minnesota jurisdiction.

Summary of Factual Data and Analytical Methodologies

Proposed rule changes were developed in response to requests from the Wisconsin maple syrup industry and after a review of existing Wisconsin rules and internal policies for inspection of maple syrup processing operations and rules in other leading maple syrup states (Vermont, New York, New Hampshire, Maine, and Ohio).

Analysis and Supporting Documents used to Determine Effect on Small Business

Recent inspection results and photographs taken during inspections at a wide range of maple syrup operations were evaluated in considering the effect of the proposed rule on small business. Department staff with experience in food processing plant inspection, or supervision thereof, provided formative input to the drafting of the proposed rule.

Effect on Small Business

Department inspections of maple syrup thermal concentration facilities, i.e., “sugar shacks,” have proven challenging over the years. The end product at these facilities (maple syrup) is not potentially hazardous, and the raw material is exposed to either cool ambient conditions (before boiling) or the heat of boiling, both of which preclude microbial growth. Thus there is little concern about food safety in relation to the process. In contrast, many facilities are in remote locations and there is a small, but real, risk of product contamination related to characteristics of the facility, e.g., pests, pieces of wood. This situation makes the rigorous enforcement of all requirements of ATCP 70 (Food Processing Plants) difficult for the maple syrup industry and the Department. Most facilities already meet the requirements of the proposed rule, so the proposed rule will have little effect on a sizeable proportion of the industry. Small businesses that do not currently meet the proposed facility requirements for maple syrup operations may face some facility-upgrade costs, particularly in areas of their facility in which finished syrup is stored and packaged. Similarly, operators may face facility-upgrade costs if they add reverse osmosis units to a facility that is currently only performing thermal concentration of maple sap. Businesses processing maple-derived water or un-concentrated or partially concentrated maple sap may face facility-upgrade costs.

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Where and When Comments May Be Submitted

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Comments will be accepted up to two weeks after the last public hearing is held on this rule. Hearing dates will be scheduled after this hearing draft rule is approved by the Board of Agriculture, Trade and Consumer Protection.

1 **SECTION 1.** ATCP 70.04 (18) is created to read:

2 ATCP 70.04 (18) MAPLE SAP THERMAL CONCENTRATION FACILITIES. Facilities used solely
3 for thermal concentration of maple sap shall meet the requirements of s. ATCP 87.14.

4 **SECTION 2.** 70.05 (1) is amended to read:

5 ATCP 70.05. (1) ~~CLEANLINESS~~GENERAL. (a) Persons engaged in food processing shall
6 maintain a high degree of personal cleanliness, and shall observe good hygienic practices during
7 all working periods. Persons engaged in food processing shall wash their hands before
8 beginning work and upon returning to work after using toilet facilities, eating, smoking, or
9 engaging in other activities which may contaminate the hands. Persons engaged in food
10 processing shall keep their fingernails clean and neatly trimmed, and shall not wear fingernail
11 polish unless they wear sanitary gloves at all times when handling food.

12 (b) Par. (a) does not apply to maple sap facilities that are required to meet the provisions
13 of s. ATCP 87.28.

14 **SECTION 3.** . ATCP 70.06 (1) is amended to read:

1 ATCP 70.06 (1) CONSTRUCTION AND MAINTENANCE; GENERAL. (a) Equipment and
2 utensils shall be of sanitary design and construction. Equipment and utensils shall be readily
3 accessible for cleaning and inspection and shall be constructed so that they can be easily cleaned.
4 Equipment and utensils shall be clean and in good repair.

5 (b) Par. (a) does not apply to maple sap facilities that are required to meet the provisions
6 of s. ATCP 87.26.

7 **SECTION 4.** ATCP 70.06 (7) (d) is amended to read:

8 ATCP 70.06 (7) (d) Paragraph (a) does not apply to the following equipment, provided
9 that the food processing plant operator cleans and sanitizes the equipment according to
10 manufacturer specifications:

- 11 1. Drying equipment.
- 12 2. Cloth-collector systems.
- 13 3. Dry product packaging equipment and storage containers.
- 14 4. Equipment used in brining, aging, curing, and dry product blending processes.
- 15 5. Food contact surfaces of equipment used solely to process foods or food ingredients
16 with low-water activity not greater than 0.85, such as chocolate, fats and oils, liquid nutritive
17 sweeteners, peanut butter or similar foods which are not potentially hazardous.
- 18 6. Equipment used solely for processing of maple sap according to the provisions of s.
19 ATCP 87.26.

20 **SECTION 5.** ATCP 70.07 (1) (f) is created to read:

21 ATCP 70.07 (1) (f) This subsection does not apply to food processing plants processing
22 liquid maple products, as defined in sub. ATCP 87.11 (7), or maple-derived water, as defined in
23 sub. ATCP 87.11 (8), that are required to meet the provisions of s. ATCP 87.24.

1 (8) “Maple-derived water” means permeate that is removed by reverse osmosis, or
2 water that is otherwise removed from sap from trees of the genus Acer.

3 (9) “Maple sap” means sap from the trees of the genus Acer that has not been
4 concentrated and is a potentially hazardous food as defined in sub. ATCP 70.02 (22).

5 (10) “Maple syrup” means the liquid food derived by concentrating and heating sap
6 from the trees of the genus Acer as defined in 21 CFR 168.140. The solids content of maple
7 syrup shall not be less than 66 percent by weight (degrees Brix). Maple syrup shall not contain
8 added sweeteners.

9 (11) “Non-shelf-stable concentrated maple sap” means sap from the trees of the genus
10 Acer that has been concentrated using heating or other methods, has a solids content of less than
11 66 percent by weight (degrees Brix) and is a potentially hazardous food as defined in sub. ATCP
12 70.02 (22).

13 (12) “Off flavor or odor” means any specific and identifiable or unidentifiable flavor
14 or odor that is not normally found in Wisconsin grade A maple syrup. Off flavors or odors may
15 be related to natural factors or manufacturing practices, and may develop or be acquired during
16 handling or storage.

17 (13) “Packaging” means the transfer of liquid maple products or maple-derived water
18 into a container that is sealed for sale, distribution or delivery to a customer.

19 (14) “Rich taste” means a full-bodied maple flavor of medium intensity.

20 (15) “Robust taste” means a full-bodied maple flavor of higher than medium intensity.

21 (16) “Shelf-stable concentrated maple sap” means sap from the trees of the genus
22 Acer that has been concentrated using heating or other methods, has a solids content of less than

1 66 percent by weight (degrees Brix) and is not a potentially hazardous food as defined in sub.
2 ATCP 70.02 (22).

3 (17) “Strong taste” means a full-bodied maple flavor of high intensity.

4 (18) “Taste” means the intensity of maple flavor.

5 (19) “Thermal concentration” means the direct or indirect application of heat to a
6 solution to evaporate water and thereby concentrate the solution.

7 (20) “Turbidity” means the suspension of fine mineral particles in the maple syrup
8 such that the syrup clarity is reduced.

9 **ATCP 87.12 Licensing** (1) FOOD PROCESSING PLANT LICENSE. Unless exempted in s.
10 ATCP 70.03 (7) (e), no person shall process and sell at wholesale liquid maple products, or
11 maple-derived water, without a valid license issued by the department for a food processing plant
12 under s. 97.29, Stats. The person holding a food processing plant license shall meet all applicable
13 requirements of ch. ATCP 70 and this subchapter.

14 (2) RETAIL FOOD ESTABLISHMENT LICENSE. Unless exempted in s. ATCP 75.03 (9) (g),
15 no person shall process and sell to consumers liquid maple products, or maple-derived water,
16 without a valid license issued by the department for a retail food establishment under s. 97.30,
17 Stats. The person holding a retail food establishment license shall meet all requirements of s.
18 ATCP 75.03.

19 (3) FOOD WAREHOUSE LICENSE. Unless exempted in subs. ATCP 71.01 (4) and 71.02
20 (1), a person operating a licensed food processing plant processing liquid maple products, or
21 maple-derived water, and receiving, holding for more than 24 hours, and then selling, without
22 further processing, liquid maple products of maple-derived water obtained from another
23 processor, shall hold a food warehouse license under s. 97.27, Stats.

1 **ATCP 87.14 Food processing facilities used solely for thermal concentration of**

2 **maple sap.** (1) CONSTRUCTION AND MAINTENANCE; GENERAL. Buildings and facilities used to
3 process maple syrup or shelf-stable concentrated maple sap by methods other than the
4 application of heat, other liquid maple products, or maple-derived water shall be constructed and
5 maintained in accordance with s. ATCP 70.04. Buildings and facilities used solely for thermal
6 concentration of maple sap shall be of sound construction, and shall be constructed with tightly
7 sealed walls and ceiling to exclude pests. The floor of the food processing facility shall be
8 finished with a smooth, cleanable, and durable material, and shall be maintained in a clean
9 condition. The premises immediately adjacent to the facility shall be well drained and kept free
10 of accumulations of trash, garbage, and other potential health nuisances.

11 (2) DOORS AND WINDOWS. Doors, windows, skylights, transoms, and other external
12 openings shall be tight-fitting, free of breaks, and effectively screened or protected against the
13 entry of pests. External doors shall be kept closed when not in use.

14 (3) LIGHTING. (a) Lighting in every area of the food processing facility, whether natural
15 or artificial, shall be not less than 10 foot candles (108 lux).

16 (b) Artificial lights shall be equipped with protective shields and end caps or shatter
17 resistant bulbs.

18 (4) VENTILATION. Ventilation in the food processing facility shall be sufficient to prevent
19 condensation.

20 (5) TOILET AND HANDWASHING FACILITIES. All employees working in the food
21 processing facility shall have convenient access to a sanitary toilet in a toilet room complying
22 with applicable local law. Each processing area shall be equipped with a conveniently located
23 handwashing sink and each sink shall be provided at all times with potable water, soap in a soap

1 dispenser, a sanitary single-service means of drying the hands, and an easily cleanable covered
2 trash receptacle. A single handwashing facility may service areas in which pre-package
3 processing, storage, and packaging of liquid maple products and maple-derived water are done,
4 provided the handwashing sink is conveniently located for employee use.

5 (6) CLEANING FACILITIES. (a) If equipment, utensils or containers are cleaned or sanitized
6 manually, the food processing facility shall be equipped with wash and rinse sinks that are
7 suitable for all manual cleaning and sanitizing operations. Sinks shall be conveniently located
8 and adequate in number. Each sink shall be constructed of stainless steel or of one or more other
9 materials approved by the department. Each sink shall have at least 3 compartments.

10 (b) Every sink compartment shall be large enough to accommodate the immersion of at
11 least 50% of the largest item to be cleaned or sanitized in the sink. Every sink compartment shall
12 be served by hot and cold running water, and shall be cleaned before each use.

13 (c) Drain boards shall be provided in connection with every sink. Drain boards shall be
14 large enough to accommodate soiled equipment and utensils before washing, and cleaned and
15 sanitized equipment and utensils after the drain boards are cleaned and sanitized. Drain boards
16 shall be located and constructed so that they do not interfere with washing and sanitizing
17 operations. This paragraph does not prohibit the use of easily movable dish tables as drain
18 boards if the dish tables comply with this paragraph.

19 (d) Brushes and cleaning tools shall be constructed of materials that can be cleaned and
20 sanitized, kept clean, and in good repair. Wiping cloths used to clean equipment and utensils
21 shall be cleaned, sanitized, and dried after each day's use, and shall be stored in an approved
22 sanitizing solution between uses during the processing day. Sanitizing solutions for wiping
23 cloths shall be changed frequently enough to maintain an effective concentration of sanitizing

1 chemical or at least daily, whichever is more frequent. Sanitizers shall be used in accordance
2 with the manufacturer's instructions. Wiping cloths used to clean food contact surfaces of
3 equipment and utensils shall not be used for any other purpose. Single service disposable towels
4 may be used in place of re-usable cloths if they are discarded after use.

5 (e) If a mechanical system is used to clean or sanitize equipment, utensils or food
6 containers, the mechanical system shall be designed, installed and maintained so that it is fully
7 effective for the purpose used. If a chemical sanitizer is used, the operator must be able to
8 demonstrate that it is used properly.

9 (7) PLUMBING SYSTEM AND SEWAGE DISPOSAL. Sewage and waste materials from the
10 food processing facility shall be removed in a sanitary manner, in compliance with applicable
11 state and local regulations. All plumbing, plumbing fixtures, and equipment shall be designed,
12 installed, and maintained to prevent backflow, backsiphonage, cross-connections, and
13 contamination.

14 *Note:* Plumbing and plumbing fixtures are subject to the requirements of chs. SPS 381 to
15 387, enforced by the department of safety and professional services.

16 (8) GARBAGE AND REFUSE DISPOSAL. (a) Garbage and refuse shall not be allowed to
17 accumulate in or around the food processing facility. Garbage and refuse shall be removed as
18 often as necessary to maintain the premises in a clean and sanitary condition.

19 (b) A separate room or a designated area for the accumulation of garbage and refuse must
20 be provided in food processing facilities that do not have a system for the daily removal or
21 destruction of garbage and refuse. Garbage and refuse storage areas shall be constructed and
22 maintained so they do not attract or harbor pests.

1 (c) Garbage and refuse shall be held in durable, leak-proof, easily cleanable, and pest-
2 resistant containers that are kept covered with tight-fitting lids, and shall be cleaned when
3 necessary to prevent insanitary conditions.

4 (d) Garbage and refuse shall not be burned on the premises, except in compliance with
5 state and local laws. Garbage, refuse, and building materials shall not be burned on the premises
6 if burning may contaminate food produced at the facility.

7 (9) CONTROL OF PESTS. (a) Effective measures shall be taken to control insects, rodents
8 and other pests in the facility. Pesticides and other hazardous substances shall not be stored or
9 used in a manner that may contaminate food, or which may constitute a hazard to employees or
10 the public. Pesticides shall not be stored, handled, or used in a manner inconsistent with label
11 directions, or in a negligent manner, and shall be approved for use in food processing operations.
12 Only pesticides approved for use in food processing operations shall be stored in the facility.

13 (b) All domestic animals shall be kept out of food processing areas.

14 (10) STORAGE OF FUEL FOR MAPLE SAP EVAPORATOR. Evaporation equipment may be
15 fueled by natural gas, oil, or wood. All fuel shall be stored outside the facility for processing
16 maple syrup or shelf-stable concentrated maple sap.

17 **ATCP 87.16 Food processing facilities for pre-package processing of maple syrup**
18 **and shelf-stable concentrated maple sap by methods other than the application of heat.**
19 Facilities shall be constructed and maintained in accordance with s. ATCP 70.04.

20 **ATCP 87.20 Food processing facilities for processing, storing, and packaging liquid**
21 **maple products or maple-derived water** (1) TRANSFER TO ANOTHER BUILDING OR AREA. Liquid
22 maple products and maple-derived water may be transferred from one building or area, operated
23 under a food processing plant license, to another building or area, operated under a food

1 processing plant license, provided that the transfer vessels meet the requirements of s. ATCP
2 70.06 and the transfer method prevents contamination.

3 (2) UNPACKAGED PRODUCT STORAGE ROOMS. Any room, used for storage of unpackaged
4 liquid maple products or maple-derived water, shall be constructed and maintained in accordance
5 with s. ATCP 70.04.

6 (3) CONTAINER-FILLING AND PACKAGED-PRODUCT STORAGE ROOMS. Any room in which
7 containers are filled with liquid maple products or maple-derived water, or these packaged
8 products are stored, shall be constructed and maintained in accordance with s. ATCP 70.04.

9 **ATCP 87.22. Containers for packaging liquid maple products or maple-derived**
10 **water.** All containers for packaging shall be stored in a manner to prevent contamination and
11 shall comply with the requirements of s. ATCP 70.10.

12 **ATCP 87.24 Operations water.** (1) Operations water shall be obtained from a source
13 that complies with NR 811 or 812.

14 (2) Operations water shall be available in consistently adequate quantity, and shall
15 comply with the microbiological drinking water standards in NR 809.

16 (3) If a facility operator obtains operations water from a privately owned water system,
17 the operator shall sample that water at least once annually. The operator shall have each sample
18 tested by a laboratory certified under ATCP 77, for compliance with the microbiological
19 standards under s. NR 809.30.

20 (4) A facility operator shall keep on file, for at least one year, records of the results of all
21 microbiological and other tests conducted on operations water sampled at the facility. Records
22 shall be made available for division review or copying upon request.

1 (5) Water, transported from elsewhere to the processing facility, shall be transported in
2 compliance with the requirements of s. ATCP 70.07 (6).

3 (6) Condensate from the thermal concentration of maple sap may be collected for re-use,
4 provided the collection equipment does not contaminate, or have the potential to contaminate,
5 the water. The water shall be collected and stored in containers that meet the requirements of s.
6 ATCP 87.22. Reclaimed condensate from the thermal concentration of maple sap may be used
7 to clean non-food-contact surfaces. Reclaimed condensate from the thermal concentration of
8 maple sap may be used to clean evaporators and other food-contact surfaces if approved by the
9 division in accordance with sub. ATCP 70.07 (3).

10 (7) Maple-derived water obtained by the reverse osmosis treatment of maple sap may be
11 used to clean evaporators or other food-contact surfaces if all of the following apply:

12 (a) The maple-derived water does not have any objectionable odors or flavors, or slime.
13 The food processing plant operator shall sample and organoleptically evaluate the maple-derived
14 water daily.

15 (b) Chemical treatment of the maple-derived water shall comply with sub. ATCP 70.07
16 (4).

17 (c) Any storage tank used to hold maple-derived water shall be constructed to meet the
18 requirements of sub. ATCP 70.06 (2) and shall be cleaned and sanitized after each day's use.

19 (d) The maple-derived water shall not be stored more than 24 hours before use.

20 (e) Distribution lines and hose stations used to distribute the maple-derived water shall be
21 clearly identified and not permanently connected to food product vessels. If a distribution line is
22 temporarily connected to a food product vessel, there shall be an atmospheric break and
23 automatic controls to prevent the maple-derived water from contacting food product.

1 **ATCP 87.26. Equipment and utensils used in facilities used solely for thermal**

2 **concentration of maple sap.** (1) CONSTRUCTION AND MAINTENANCE; GENERAL. (a) Equipment
3 and utensils including, but not limited to, tanks, bulk containers, filters, hydrometers,
4 thermometers, and skimmers, shall be of sanitary design and construction. Lead or lead-alloy
5 soldering shall not be used in the construction or repair of food-contact surfaces. Equipment and
6 utensils shall be readily accessible for cleaning and inspection and shall be constructed so that
7 items can be easily cleaned. Equipment and utensils shall be kept clean and in good repair.
8 Equipment and utensils used in processing maple syrup or shelf-stable concentrated maple sap
9 using methods than the application of heat shall be constructed, used, and maintained in
10 accordance with s. ATCP 70.06. Equipment and utensils used in processing non-shelf-stable
11 concentrated maple sap, maple sap, and purified maple-derived water shall be constructed, used,
12 and maintained in accordance with s. ATCP 70.06.

13 (b) FOOD CONTACT SURFACES. Food contact surfaces of equipment and utensils shall be
14 constructed of stainless steel or of one or more other food-grade materials which are smooth,
15 impervious, nontoxic, non-corrodible, nonabsorbent and durable under normal use conditions.
16 Food contact surfaces shall be easily cleanable, and shall be free of breaks, open seams, cracks or
17 similar defects. Food contact surfaces shall not impart any odor, color, taste or adulterating
18 substance to food. Food contact surfaces shall be readily accessible for manual cleaning. An
19 evaporator hood connected to a vent may be encased in a frame made of wood, provided the
20 wood frame is on the outside of the hood.

21 (c) SINGLE-SERVICE ARTICLES. Single-service articles shall be stored in the original
22 containers in which they were received, or in other closed containers which will protect them
23 from contamination before use. Single-service articles shall not be re-used.

1 (d) FILTER SOCKS AND PRESSES. Filtering materials such as socks and presses shall be in a
2 clean condition before use.

3 (2) COVERING OF VESSELS CONTAINING MAPLE PRODUCTS. Vessels holding liquid maple
4 products or maple-derived water shall be covered to prevent contamination.

5 (3) ULTRAVIOLET LIGHTS. Ultraviolet light sources shall be shielded or shatterproof.

6 (4) FILTERING AND DEFOAMING AGENTS. Filtering agents such as diatomaceous earth shall
7 be non-toxic. Foaming agents and other processing aids shall be food grade.

8 (5) LOCATION AND INSTALLATION OF EQUIPMENT. Equipment which cannot be easily
9 moved shall be installed in a manner which prevents liquid or debris from accumulating under or
10 around the equipment. Equipment shall be installed so that there is adequate clearance on all
11 sides for cleaning and maintenance.

12 (6) CLEANING AND SANITIZING EQUIPMENT AND UTENSILS; GENERAL. All food contact
13 surfaces of equipment and utensils shall be cleaned and sanitized after completion of each batch,
14 not to exceed 40 days (960 hours) or continuous operations, without any interruption exceeding
15 30 minutes, or more frequently if necessary to prevent the adulteration of products. Sanitizers
16 and methods used to sanitize equipment shall comply with ss. ATCP 70.06 (7), (7m) through
17 (10) and 70.11.

18 **ATCP 87.28 Personnel standards in food processing facilities used solely for thermal**
19 **concentration of maple sap.** (1) GENERAL. Personnel in licensed food processing plant facilities
20 used solely for thermal concentration of maple sap to produce maple syrup and shelf-stable
21 concentrated maple sap shall meet the requirements of this section.

22 (2) CLEANLINESS. Persons engaged in thermal concentration of maple sap shall maintain
23 a high degree of personal cleanliness, and shall observe good hygienic practices during all

1 working periods. Persons engaged in processing shall wash their hands before beginning work
2 and upon returning to work after using toilet facilities, eating, smoking or engaging in other
3 activities which may contaminate the hands.

4 (3) EMPLOYEE HEALTH. No person who, by medical examination or supervisory
5 observation, has, or is reasonably suspected of having, any of the following conditions may work
6 in a food processing facility used solely for thermal concentration of maple sap, in any capacity
7 that may result in the contamination of food, or in the contamination of equipment or utensils
8 used to process or handle food:

9 (a) A reportable communicable disease.

10 (b) Any symptom of an acute gastrointestinal illness.

11 (c) A discharging or open wound, sore or lesion on the hands, arms or other exposed
12 portions of the body.

13 (4) CONSUMPTION OF FOOD OR BEVERAGES, AND USE OF TOBACCO. No person may
14 consume food or beverages or use tobacco in any food processing facility used solely for thermal
15 concentration of maple sap or in any area where food processing equipment or utensils are
16 cleaned or stored, except in designated areas which are separated from the processing area. This
17 subsection does not prohibit a sanitary drinking water fountain in a processing, storage, or
18 packaging area.

19 **ATCP 87.30 Processing maple syrup and shelf-stable concentrated maple sap by**
20 **methods other than the application of heat, non-shelf-stable concentrated maple sap, maple**
21 **sap, or maple-derived water.** (1) Equipment and utensils used in processing maple syrup or
22 shelf-stable concentrated maple sap, using methods other than the application of heat, non-shelf-

1 stable concentrated maple sap, maple-sap, and maple-derived water shall be constructed, used,
2 and maintained in accordance with s. ATCP 70.06.

3 (2) Equipment and utensils, described in sub. (1), shall be cleaned and sanitized in
4 accordance with ss. ATCP 70.06 (7) through (10).

5 (3) Personnel, in licensed food processing plants processing the products listed in this
6 section, shall meet the requirements of s. ATCP 70.05.

7 **ATCP 87.32 Production of maple-derived water.** (1) PROHIBITED FOR USE IN CERTAIN
8 BEVERAGES. Maple-derived water shall not be used as an ingredient in bottled drinking water or
9 a soda water beverage, as defined in s. 97.34 (1), Stats.

10 (2) DIVISION APPROVAL REQUIRED. The process and equipment used for production of
11 maple-derived water shall meet the requirements of s. ATCP 70.09 (1) and be reviewed and
12 approved by the division before use.

13 (3) ANNUAL TESTING. The operator of a food processing plant producing maple-derived
14 water as ingredient water shall collect a sample of maple-derived water at least annually and
15 have the sample analyzed at a laboratory that is certified under ch. ATCP 77 to perform analysis
16 of water for coliform bacteria levels, standard plate count, and either turbidity or organic content,
17 as specified in s. ATCP 70.07 (3) (a) 5.

18 (4) STANDARDS. The maple-derived water shall contain less than 1 coliform bacterium
19 per 100 mL, have a standard plate count of not more than 500 colony-forming units per 500 mL,
20 and either turbidity of less than 5 units or organic content of less than 12 mg per liter, as
21 measured by the chemical oxygen demand or permanganate-consumer tests, as specified in s.
22 ATCP 70.07 (3) (a) 5.

1 **ATCP 87.34 Recall plan.** (1) PLAN REQUIRED. A person holding a food processing plant
2 license under s. 97.29, Wis. Stats., and processing, storing, or packaging liquid maple products or
3 maple-derived water shall have a written plan for identifying and recalling products processed at
4 that food processing facility, should a recall become necessary. The plan shall be updated as
5 necessary, and shall be made available to the division for inspection and copying upon request.

6 (2) PLAN CONTENTS. A plan pursuant to sub. (1), shall meet the requirements of s. ATCP
7 70.117.

8
9 **ATCP 87.36 Wisconsin grading standards for maple syrup.** (1) GRADING
10 STANDARDS. A person processing maple syrup may label containers of maple syrup with any of
11 the following Wisconsin grade designations, provided the product in the container is accurately
12 described by the definition of one of the stated grades in subs. (2) through (4) and the grade A
13 color class in sub. (5), if applicable. The grade of a lot of maple syrup shall be determined by
14 using the procedures in 7 CFR parts 52.1 – through 52.83.

15 (2) WISCONSIN GRADE A. No deviants for damage shall be labeled as Wisconsin Grade A.
16 The grade designation Wisconsin Grade A may be applied to maple syrup that meets all of the
17 following:

- 18 (a) Is not more than 68.9 percent solids content by weight (degrees Brix).
19 (b) Has good uniform color.
20 (c) Has good flavor and odor, and intensity of flavor (maple taste) normally associated
21 with the color class in sub. 4.
22 (d) Is free from off flavors and odors considered as damage.
23 (e) Is free from cloudiness, turbidity, sediment, and is clean.

1 (3) WISCONSIN MAPLE SYRUP FOR PROCESSING (PROCESSING GRADE) Maple syrup bearing
2 the grade designation Wisconsin maple syrup for processing (processing grade) shall be packed
3 in containers holding at least 5 gallons (18.925 liters) and shall not be packaged in containers
4 smaller than 5 gallons (18.925 liters) for retail sale. Processing grade syrup is maple syrup that
5 meets all of the following:

6 (a) Fails to meet the requirements for Wisconsin grade A maple syrup.

7 (b) Possesses a fairly good characteristic maple taste.

8 (c) Is fairly clean and fairly free of damage, turbidity or cloudiness.

9 (d) May be in any color class and have any percent light transmittance.

10 (e) Has not more than 68.9 percent solids content by weight (degrees Brix).

11 (f) May contain off flavors and odors.

12 (g) May have a very strong taste.

13 (4) SUBSTANDARD MAPLE SYRUP. Maple syrup bearing the grade designation Wisconsin
14 substandard is syrup that fails to meet the requirements in sub. (3) for Wisconsin processing
15 grade maple syrup.

16 (5) COLOR CLASSES FOR WISCONSIN GRADE A MAPLE SYRUP. The color class of Wisconsin
17 grade A maple syrup is determined by the percent of transmittance of light at a wavelength of
18 560 nanometers through the syrup, as measured with a spectrophotometer using matched square
19 optical cells having a 10 mm light path. The color value is expressed as percent of light
20 transmission, as compared to analytical grade glycerol fixed at 100 percent. Percent
21 transmittance is denoted by %Tc. Any method that provides equivalent results may be used to
22 determine Wisconsin grade A maple syrup color class. Wisconsin grade A maple syrup color
23 classes and corresponding flavor descriptors are shown in Table 1.

1 Table 1. Wisconsin Grade A Color Class Flavor Descriptor Percent light transmittance:

2	Golden	Delicate	At least 75.0
3	Amber	Rich	50.0 – 74.9
4	Dark	Robust	25.0 – 49.9
5	Very Dark	Strong	less than 25.0

6 **ATCP 87.38 Enforcement.** A person who violates this chapter may be prosecuted
7 under ss. 93.21 and 97.72, Stats.

8 **SECTION 9. EFFECTIVE DATE.** This rule takes effect on the first day of the month
9 following publication in the Wisconsin administrative register, as provided under s.
10 227.22(2) (intro.).

11

12

Dated this _____ day of _____, 2016.

WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION

By _____
Ben Brancel, Secretary