A Summary of Regulations Governing Maple Syrup Production in Wisconsin

Digital Document available at
www.wismaple.org/handbook

A Project of the

Wisconsin Maple Syrup Producers Association

How to Use this Document

Digital Version: The table of contents below is interactive. This means the user can navigate to each section listed by clicking on the words. To return to the table of contents, click the "Table of Contents" found on the top of each page. Blue text within each section is a clickable link to the external site containing the regulations, form or other resource mentioned. Some of these links will be to resources contained on the Wisconsin Maple Syrup Association (www.wismaple.org) in the "Members Only" section. It is the author's expectation that these links will provide connections to up-to-date information.

Print Version: It is likely the print version will become out of date quickly. As you consult the printed document, please return to the WMSPA web-site (www.wismaple.org/handbook)for the digital version to find the most current links (see directions above for the digital version)

Traversing Acronyms

USDA	United States Department of Agriculture
FDA	United States Food and Drug Administration
FSMA	FDA Food Safety Modernization Act
CFR	Code of Federal Regulations
e-CFR	Electronic Code of Federal Regulations
cGMP	Current Good Manufacturing Practices
DATCP	Wisconsin Department of Agriculture, Trade and Consumer Protection
DNR	Department of Natural Resources
WPDES	Wisconsin Pollutant Discharge Elimination System
WMSPA	Wisconsin Maple Syrup Producers Association
IMSI	International Maple Syrup Institute
NAMSC	North American Maple Syrup Council
IPA	Isopropyl Alcohol
SDS	Safety Data Sheet *(Formally called Material Safety Data Sheets or MSDS)*

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Regulations Governing Maple Syrup Production in Wisconsin **First Edition Published: (October 2022), Adapted from *Regulations Governing Maple Syrup Production in Ohio* (January 2018).**
By: Dr. Gary Graham, Ohio State University Extension

Introduction and Disclaimer to this Publication

Pure Maple Syrup production in Wisconsin is regulated primarily by the US Food and Drug Administration (FDA) and Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP).

This document assembles the various components of information to assist veteran and new producers of maple syrup in Wisconsin with the basic federal and state regulations impacting the maple syrup industry.

Due to the constantly changing nature of government regulations, it is impossible to guarantee absolute accuracy of the material contained herein. The authors therefore, cannot assume any responsibility for omissions, errors, misprinting, changing of rules or regulations or addresses to resource links, or ambiguity contained within this publication and shall not be held liable in any degree for any loss or injury caused by such omission, error, misprinting, or ambiguity presented in this publication. Links provided within this publication are designed to provide reasonably accurate and authoritative information in regard to the subject matter covered. Links to several pieces of key legislation that regulate all food industries are included. Specific regulations for maple syrup are found within these Federal and State regulations. It is always best to go directly to the regulating agency for questions about the rules or regulations.

The on-line version of this document contains the most current information and links directly to the information contained here. It is highly recommended to use that version of this document.

Acknowledgements

This document was developed by drawing on the expertise of a wide range of contributors. Many of the resources included here have been published previously and we are grateful for the work of the countless organizations, individuals and researchers. We are all better when we work together.

Christine Anderson, Food Safety Coordinator at Anderson's Maple Syrup, Inc and Theresa Baroun, WMSPA Executive Director organized, reviewed and verified information contained in this compilation. This work was adapted from *Regulations Governing Maple Syrup Production in Ohio* (January 2018) by Dr. Gary Graham, Ohio State University Extension. This project could not have been completed without Dr. Graham's significant work and on-going support.

The WMSPA thanks Stefan Boerboom of Wisconsin Department of Agriculture, Trade and Consumer Protection for answering countless questions. Thank you to Patrick Campbell, FDA Office of Regulatory Affairs in Human and Animal Food for working with the WMSPA and reviewing this document. Thank you to Mike Czerniak for sharing his experience with the DNR WasteWater Permit and assisting in the development of a sample application for maple syrup producers. Thanks to Chad Strege, IT manager at Anderson's Maple Syrup, Inc. for coordinating the digital version. The WMSPA also thanks the North American Maple Syrup Council for grant funds to print a few copies of this document. Finally, thank you to the following organizations for additional information and resources provided: North American Maple Syrup Council (NAMSC), International Maple Syrup Institute (IMSI), and Proctor Maple Research Center, University of Vermont.

FDA Registration Record Keeping Information

Registration/Renewal only occurs every two years on even years between Oct. 1 to Dec. 31

Year First Registered: _____

Years Renewed: _____-_____-_____-_____-_____

FDA Registration Number: _____ PIN _____

Account ID: _____

Account Password: _____

Note: Copies of FDA paperwork should be kept for the existence of the operation.

Notes/Information on Your FDA Registration

_____

_____

_____

_____

_____

Wisconsin License and Registration Information

Both expire annually on March 31st

First Year Registered: _____

DATCP Registration Number: _____(Must Call DATCP for Reg. Number)

First Year Licensed: _____

DATCP License Number: _____

MyDATCP on-line registration information:

E-mail used: _____

Password: _____

Note: Copies of DATCP paperwork should be kept for the existence of the operation.

Notes/Information on Your DATCP License & Registration

_____

_____

_____

_____

_____

FDA Registration of a Maple Syrup Operation:

Disclaimer:
Information provided here represents the author's current understanding of requirements for Food Facility Registration. Included here are compiled answers to common questions and links to the Code of Federal Regulations and other regulatory sources. Any discrepancies between this document and the regulations are subject to US federal regulations. This document does not establish rights for any person and is not binding on the FDA or the public. Links can be accessed in the digital version.

What is FDA Registration?

Short answer:
FDA Registration refers to the Federal Food and Drug Administration (FDA) requirement that all food processing facilities register with the Federal government.

FDA Food Facility Registration is required under laws created by both the **Bioterrorism Act of 2002** and **Food Safety Modernization Act (FSMA)** of 2011. Boiling maple sap to create maple syrup has been defined by FDA as an act of processing. Maple Syrup Producers are required to register if more than 50% of the total syrup crop is sold to another processor or retailer.

- Registration is **FREE** – but must be completed on the FDA registration web-site.
- Registration is a two-step process:
  - First **set up an account** (save your account ID and password for future renewals)
  - Second **submit a registration** (keep account number and PIN for your records)
- Registration must be **renewed every two-years;** between Oct. 1 to Dec. 31 of every even numbered year. If you do not renew before the deadline you must start over and register as a new applicant.
- In 2020 the FDA added a requirement for a **Unique Facility Identifier**, which can be a DUNS number. A DUNS number is free but must be requested on-line. Here is the link to Dun & Bradstreet "Get a DUNS number" section https://www.dnb.com/duns-number/get-a-duns.html

FDA registration site: Registration of Food Facilities and Other Submissions | FDA

FDA Factsheet: what do food facilities need to know about this year's biennial registration renewal period?

If you have questions please call the **FDA FURLS Help Desk at 1-800-216-7331**

Detailed answer:
The **Public Health Security and Bioterrorism Preparedness and Response Act of 2002** (the Bioterrorism Act) directs the FDA, as the food regulatory agency of the Department of Health and Human Services, to take steps to protect the public from a threatened or actual terrorist attack on the U.S. food supply and other food-related emergencies.

To carry out certain provisions of the Bioterrorism Act, FDA established regulations requiring that:
- Food facilities register with FDA, and
- FDA be given advance notice on shipments of imported food.

These regulations became effective on **December 12, 2003.**

The **FDA Food Safety Modernization Act (FSMA)**, enacted on **January 4, 2011**, amended section 415 of the Federal Food, Drug, and Cosmetic Act (FD&C Act), **in relevant part, to require that facilities engaged in manufacturing, processing, packing, or holding food for consumption in the United States submit additional registration information to FDA, including an assurance that FDA will be permitted to inspect the facility at the times and in the manner permitted by the FD&C Act.** Section 415 of the FD&C Act, as amended by FSMA, also mandates food facilities that are required to register with FDA to renew such registrations every other year, and provides FDA with authority to suspend the registration of a food facility in certain circumstances. Specifically, if FDA determines that food manufactured, processed, packed,

received, or held by a registered food facility has a reasonable probability of causing serious adverse health consequences or death to humans or animals, FDA may by order suspend the registration of a facility that:

1.Created, caused, or was otherwise responsible for such reasonable probability; or

2.Knew of, or had reason to know of, such reasonable probability; and packed, received, or held such food.

Other basic elements of FSMA:

- Updated the **Current Good Manufacturing Practices (cGMPs).** The state of Wisconsin's Food Processing regulations is closely aligned with the Federal cGMPs (found in 21 CFR part 110). cGMPs focus on cleanliness and protecting food from contamination. They should be followed by food processing operations. (see 21 CFR part 117)
  Federal cGMP Sections Include:
  - **Personnel** (disease control, cleanliness, clothing, training)
  - **Buildings and grounds** (floors, walls, ceilings, lighting, drainage, waste, pests, etc.)
  - **Sanitary operations** (cleaning, sanitizing, pests, general maintenance)
  - **Sanitary facilities** (equipment and utensils, toilets/handwashing, water supply, instruments for measuring temp, brix, compressed air, cold storage, etc.)
  - **Processes and controls** (food grade/stainless for food contact, appropriate temps, control against contamination)
  - **Warehousing and distribution** (storage conditions)
  - **Defect action levels** (unavoidable defects that present no health hazard)

- Added requirements for some food facilities to implement Hazard Analysis and Risk-based Preventive Controls for human food (HACCP). This is referred to as **FSMA's Preventive Controls Rule**. (see survey link below to see if your operation is subject to the Preventive Controls rule)

- Attempted to **clarify who is exempt** from the FDA registration and FSMA's Preventive Control Rule. More information can be found in the FDAs Guidance documents (Seventh Edition, Aug. 2018).

Who Needs to Register with FDA? A simplified guide

The following is a generalized statement based on the two sales options and their requirement for FDA registration. This information was taken from the Code of Federal Regulations Question & Answer documents provided by the FDA. Direct links can be accessed by clicking the blue words in the digital document.

FDA's basic definitions:

"Retail is food sold directly to the consumer from the location the food was produced and food sold directly to a consumer by the producer at a farmers market. Anything else, the FDA generally considers **Wholesale**."

"Wholesale includes bulk syrup and syrup sold in **Retail** packages sold to another business for resale."

"If a maple producer Wholesales more syrup in dollar value than is sold Retail directly to the consumer, that producer is required to register with the FDA as a food facility."

Are maple syrup producers "farms" and, thus, exempt from registering with the FDA?

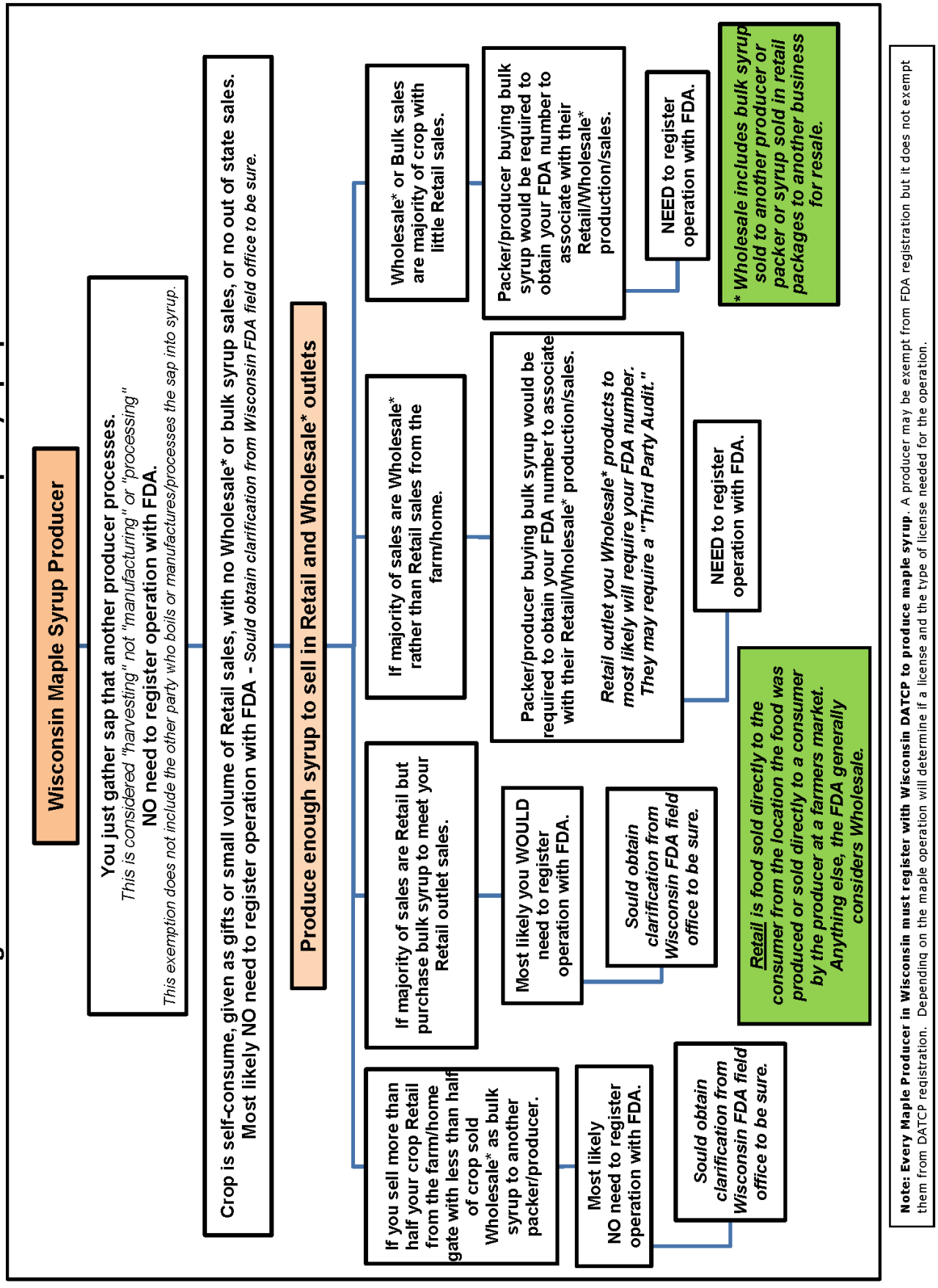
The response to this question depends upon the activities of the maple syrup producer. The activities of maple syrup producers customarily consist of two types: gathering sap from sugar maple trees and concentrating the sap through the application of heat to make syrup. **Gathering sap** is "harvesting," which is included in the definition of "farm" (21 CFR 1.227). Therefore, the farm is exempt from registration. **However, making maple syrup** by concentrating sugar maple sap (i.e., by evaporation using heat) is a form of "manufacturing/processing" (21 CFR 1.227). Accordingly, a facility that concentrates sugar maple sap is performing a "manufacturing/processing" activity and **is required to register**, unless all of the concentrated sap is consumed on the farm or another farm under the same management or is exempt from registration as a retail food establishment.

What does this mean for my Maple Operation? Do I need to register?

The University of New Hampshire's cooperative extension received a grant to assist Maple Producers in understanding whether they need to register and/or comply with FSMA's Preventive Controls rule. Clicking the link below will take you to a confidential survey to:

1. Find out if you must complete a Food Facility Registration with the FDA.
2. See if you are subject to FSMA's Preventive Control Rule (see "What is FDA Registration" above).
3. Find resources at the end with links to the cGMPs, FDA registration, etc.

Link to the on-line tool "Does FSMAs Preventive Controls Rule Apply to your Maple Operation?"


FDA Registration Decision Tree for Wisconsin Maple Syrup Operations
Wisconsin Maple Syrup Producer
You just gather sap that another producer processes.
This is considered "harvesting" not "manufacturing" or "processing"
NO need to register operation with FDA.
This exemption does not include the other party who boils or manufactures/processes the sap into syrup.
Crop is self-consume, given as gifts or small volume of Retail sales, with no Wholesale* or bulk syrup sales, or no out of state sales.
Most likely NO need to register operation with FDA - Sould obtain clarification from Wisconsin FDA field office to be sure.
Produce enough syrup to sell in Retail and Wholesale* outlets
If you sell more than half your crop Retail from the farm/home gate with less than half of crop sold Wholesale* as bulk syrup to another packer/producer.
Most likely NO need to register operation with FDA.
Sould obtain clarification from Wisconsin FDA field office to be sure.
If majority of sales are Retail but purchase bulk syrup to meet your Retail outlet sales.
Most likely you WOULD need to register operation with FDA.
Sould obtain clarification from Wisconsin FDA field office to be sure.
If majority of sales are Wholesale* rather than Retail sales from the farm/home.
Packer/producer buying bulk syrup would be required to obtain your FDA number to associate with their Retail/Wholesale* production/sales.
Retail outlet you Wholesale* products to most likely will require your FDA number. They may require a "Third Party Audit."
NEED to register operation with FDA.
Retail is food sold directly to the consumer from the location the food was produced or sold directly to a consumer by the producer at a farmers market. Anything else, the FDA generally considers Wholesale.
Wholesale* or Bulk sales are majority of crop with little Retail sales.
Packer/producer buying bulk syrup would be required to obtain your FDA number to associate with their Retail/Wholesale* production/sales.
NEED to register operation with FDA.
* Wholesale includes bulk syrup sold to another producer or packer or syrup sold in retail packages to another business for resale.
Note: Every Maple Producer in Wisconsin must register with Wisconsin DATCP to produce maple syrup. A producer may be exempt from FDA registration but it does not exempt them from DATCP registration. Depending on the maple operation will determine if a license and the type of license needed for the operation.

How Do I register with the FDA?

Registration must be completed here: Registration of Food Facilities and Other Submissions | FDA

First time registration is a 2-step process:

1. Set up an account (save your account ID and password for future renewals)
    - FDA instructions for setting up an account
2. Submit a registration (keep account number and PIN for your records)
    - FDA instructions for registration

Renewal requires:

1. Log-in with account ID and password
2. Update food facility registration (simply review, make applicable changes and submit)
    - FDA instructions for registration

Summarized directions created for Maple Syrup Producers have been provided on the WMSPA web-site in the FDA Registration section. https://wismaple.org/members-only There is information for First Time Registrations and for Renewing Registrations.

What about a DUNs number?

In 2020 the FDA added a requirement for a **Unique Facility Identifier (UFI)**, which can be a DUNS number. A DUNS number is issued by Dun & Bradstreet and is an unique identification number for businesses that are registered with the US Government. This is an independent organization NOT connected with the FDA. A DUNS number is **free** but must be requested on-line.

A DUNS number does not expire, but it can become inactive. If you think you already have a DUNS, use D&B D-U-N-S Number Lookup
If you need a DUNS, follow this link to Get a D-U-N-S Number - Establish Your Business - D&B

DUNS Import Safety Portal Fact Sheet (PDF)

What if I have no internet, email or a phone as required?

A waiver may have been granted if the operator requested one prior to Jan. 4, 2020.

Other options for what to do:

1. Producers can work with the bulk buyer of their syrup. Some bulk buyers may be willing to assist with the application and be a source for the email and phone number required on the registration form.

2. Producers can work with a neighbor willing to help with an application and allow the use of their email and phone number required on the registration form.

FDA Help Line:

FDA Industry Systems *Help Desk*
furls@fda.gov
1.800.216.7331

FDA Regional Contacts *(Minneapolis, Wisconsin, Dakotas)*

If you still have questions directly contact a regional FDA Director

U.S. Food and Drug Administration -
Office of Regulatory Affairs–Office of Human and Animal Food Operations (OHAFO)

OHAF-West Division 1: MN, ND, SD, WI
250 Marquette Ave., Suite 600
Minneapolis, MN 55401
Director of Compliance Branch:
Christopher VanTwuyver
Email: Chris.vanTwuyver@fda.hhs.gov
Office: 612-758-7112

Where can I find FDA Regulations?

Links can be accessed by clicking the blue text in the digital version of this document.

Code of Federal Regulations (CFR) – Title 21

eCFR :: 21 CFR Part 1 Subpart H -- Registration of Food Facilities
or www.ecfr.gov (search for the above section)

Title 21 → Chapter I → Subchapter A → Part 1 → Subpart H

PART 1—GENERAL ENFORCEMENT REGULATIONS
Subpart H—Registration of Food Facilities

FDA Industry Systems *Help Desk*
furls@fda.gov
1.800.216.7331
240.247.8804

General Provisions
§1.225 Who must register under this subpart?
§1.226 Who does not have to register under this subpart?
§1.227 What definitions apply to this subpart?
Procedures For Registration Of Food Facilities
§1.230 When must you register or renew your registration?
§1.231 How and where do you register or renew your registration?
§1.232 What information is required in the registration?
§1.233 Are there optional items included in the registration form?
§1.234 How and when do you update your facility's registration information?
§1.235 How and when do you cancel your facility's registration information?
Additional Provisions
§1.240 What other registration requirements apply?
§1.241 What are the consequences of failing to register, update, renew, or cancel your registration?
§1.242 What does assignment of a registration number mean?
§1.243 Is food registration information available to the public?
§1.245 Waiver request.
SOURCE: 68 FR 58960, Oct. 10, 2003, unless otherwise noted.

GENERAL PROVISIONS

§1.225 Who must register under this subpart?

(a) You must register your facility under this subpart if you are the owner, operator, or agent in charge of either a domestic or foreign facility, as defined in this subpart, and your facility is engaged in the manufacturing/processing, packing, or holding of food for consumption in the United States, unless your facility qualifies for one of the exemptions in §1.226.
(b) If you are an owner, operator, or agent in charge of a domestic facility, you must register your facility whether or not the food from the facility enters interstate commerce.
(c) If you are the owner, operator, or agent in charge of a facility, you may authorize an individual to register your facility on your behalf.

§1.226 Who does not have to register under this subpart?

This subpart does not apply to the following facilities:
(a) A foreign facility, if food from such facility undergoes further manufacturing/processing (including packaging) by another facility outside the United States. A facility is not exempt under this provision if the further manufacturing/processing (including packaging) conducted by the subsequent facility consists of adding labeling or any similar activity of a *de minimis* nature;
(b) Farms;
(c) Retail food establishments;
(d) Restaurants;
(e) Nonprofit food establishments in which food is prepared for, or served directly to, the consumer;
(f) Fishing vessels, including those that not only harvest and transport fish but also engage in practices such as heading, eviscerating, or freezing intended solely to prepare fish for holding on board a harvest vessel. However, those fishing vessels otherwise engaged in processing fish are subject to this subpart. For the purposes of this section, "processing" means handling, 1 of 10 storing, preparing, shucking, changing into different market forms, manufacturing, preserving, packing, labeling, dockside unloading,

holding, or heading, eviscerating, or freezing other than solely to prepare fish for holding on board a harvest vessel;
(g) Facilities that are regulated exclusively, throughout the entire facility, by the U.S. Department of Agriculture under the Federal Meat Inspection Act (21 U.S.C. 601 *et seq.*), the Poultry Products Inspection Act (21 U.S.C. 451 *et seq.*), or the Egg Products Inspection Act (21 U.S.C. 1031 *et seq.*);

§1.227 What definitions apply to this subpart

The definitions of terms in section 201 of the Federal Food, Drug, and Cosmetic Act apply to such terms when used in this subpart. In addition, for the purposes of this subpart:
Calendar day means every day shown on the calendar.

Facility means any establishment, structure, or structures under one ownership at one general physical location, or, in the case of a mobile facility, traveling to multiple locations, that manufactures/processes, packs, or holds food for consumption in the United States. Transport vehicles are not facilities if they hold food only in the usual course of business as carriers. A facility may consist of one or more contiguous structures, and a single building may house more than one distinct facility if the facilities are under separate ownership. The private residence of an individual is not a facility. Nonbottled water drinking water collection and distribution establishments and their structures are not facilities.
(1) *Domestic facility* means any facility located in any State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico that manufactures/processes, packs, or holds food for consumption in the United States.
(2) *Foreign facility* means a facility other than a domestic facility that manufactures/processes, packs, or holds food for consumption in the United States.

Farm means:
(1) Primary production farm. A primary production farm is an operation under one management in one general (but not necessarily contiguous) physical location devoted to the growing of crops, the harvesting of crops, the raising of animals (including seafood), or any combination of these activities. The term "farm" includes operations that, in addition to these activities:
(i) Pack or hold raw agricultural commodities;
(ii) Pack or hold processed food, provided that all processed food used in such activities is either consumed on that farm or another farm under the same management, or is processed food identified in paragraph (1)(iii)(B)(*1*) of this definition; and
(iii) Manufacture/process food, provided that:
(A) All food used in such activities is consumed on that farm or another farm under the same management; or
(B) Any manufacturing/processing of food that is not consumed on that farm or another farm under the same management consists only of:
(*1*) Drying/dehydrating raw agricultural commodities to create a distinct commodity (such as drying/dehydrating grapes to produce raisins), and packaging and labeling such commodities, without additional manufacturing/processing (an example of additional manufacturing/processing is slicing);
(*2*) Treatment to manipulate the ripening of raw agricultural commodities (such as by treating produce with ethylene gas), and packaging and labeling treated raw agricultural commodities, without additional manufacturing/processing; and
(*3*) Packaging and labeling raw agricultural commodities, when these activities do not involve additional manufacturing/processing (an example of additional manufacturing/processing is irradiation); or
(2) Secondary activities farm. A secondary activities farm is an operation, not located on a primary production farm, devoted to harvesting (such as hulling or shelling), packing, and/or holding of raw agricultural commodities, provided that the primary production farm(s) that grows, harvests, and/or raises the majority of the raw agricultural commodities harvested, packed, and/or held by the secondary activities farm owns, or jointly owns, a majority interest in the secondary activities farm. A secondary activities farm may also conduct those additional activities allowed on a primary production farm as described in paragraphs (1)(ii) and (iii) of this definition.

Food has the meaning given in section 201(f) of the Federal Food, Drug, and Cosmetic Act:
(1) Except for purposes of this subpart, it does not include:
(i) Food contact substances as defined in section 409(h)(6) of the Federal Food, Drug, and Cosmetic Act; or
(ii) Pesticides as defined in 7 U.S.C. 136(u).
(2) Examples of food include: Fruits, vegetables, fish, dairy products, eggs, raw agricultural commodities for use as food or as components of food, animal feed (including pet food), food and feed ingredients, food and feed additives, dietary supplements and dietary ingredients, infant formula, beverages (including alcoholic beverages and bottled water), live food animals, bakery goods, snack foods, candy, and canned foods.

Harvesting applies to farms and farm mixed-type facilities and means activities that are traditionally performed on farms for the purpose of removing raw agricultural commodities from the place they were grown or raised and preparing them for use as 2 of 10 food. Harvesting is limited to activities performed on raw agricultural commodities, or on processed foods created by drying/dehydrating a raw agricultural commodity without additional manufacturing/processing, on a farm. Harvesting does not include activities that transform a raw agricultural commodity into a processed food as defined in section 201(gg) of the Federal Food, Drug, and Cosmetic Act. Examples of harvesting include cutting (or otherwise separating) the edible portion of the raw agricultural commodity from the crop plant and removing or trimming part of the raw agricultural commodity (*e.g.,* foliage, husks, roots or stems). Examples of harvesting also include cooling, field coring, filtering, gathering, hulling, shelling, sifting, threshing, trimming of outer leaves of, and washing raw agricultural commodities grown on a farm.

Holding means storage of food and also includes activities performed incidental to storage of a food (*e.g.,* activities performed for the safe or effective storage of that food, such as fumigating food during storage, and drying/dehydrating raw agricultural commodities when the drying/dehydrating does not create a distinct commodity (such as drying/dehydrating hay or alfalfa)). Holding also includes activities performed as a practical necessity for the distribution of that food (such as blending of the same raw agricultural commodity and breaking down pallets), but does not include activities that transform a raw agricultural commodity into a processed food as defined in section 201(gg) of the Federal Food, Drug, and Cosmetic Act. Holding facilities could include warehouses, cold storage facilities, storage silos, grain elevators, and liquid storage tanks.

Manufacturing/processing means making food from one or more ingredients, or synthesizing, preparing, treating, modifying or manipulating food, including food crops or ingredients. Examples of manufacturing/processing activities include: Baking, boiling, bottling, canning, cooking, cooling, cutting, distilling, drying/dehydrating raw agricultural commodities to create a distinct commodity (such as drying/dehydrating grapes to produce raisins), evaporating, eviscerating, extracting juice, formulating, freezing, grinding, homogenizing, irradiating, labeling, milling, mixing, packaging (including modified atmosphere packaging), pasteurizing, peeling, rendering, treating to manipulate ripening, trimming, washing, or waxing. For farms and farm mixed-type facilities, manufacturing/processing does not include activities that are part of harvesting, packing, or holding.

Mixed-type facility means an establishment that engages in both activities that are exempt from registration under section 415 of the Federal Food, Drug, and Cosmetic Act and activities that require the establishment to be registered. An example of such a facility is a "farm mixed-type facility," which is an establishment that is a farm, but also conducts activities outside the farm definition that require the establishment to be registered.

Nonprofit food establishment means a charitable entity that prepares or serves food directly to the consumer or otherwise provides food or meals for consumption by humans or animals in the United States. The term includes central food banks, soup kitchens, and nonprofit food delivery services. To be considered a nonprofit food establishment, the establishment must meet the terms of section 501(c)(3) of the U.S. Internal Revenue Code (26 U.S.C. 501(c)(3)).

Packaging (when used as a verb) means placing food into a container that directly contacts the food and that the consumer receives.

Packing means placing food into a container other than packaging the food and also includes re-packing and activities performed incidental to packing or re-packing a food (*e.g.,* activities performed for the safe or effective packing or re-packing of that food (such as sorting, culling, grading, and weighing or conveying incidental to packing or re-packing)), but does not include activities that transform a raw agricultural commodity, as defined in section 201(r) of the Federal Food, Drug, and Cosmetic Act, into a processed food as defined in section 201(gg) of the Federal Food, Drug, and Cosmetic Act.

Restaurant means a facility that prepares and sells food directly to consumers for immediate consumption. "Restaurant" does not include facilities that provide food to interstate conveyances, central kitchens, and other similar facilities that do not prepare and serve food directly to consumers.

(1) Entities in which food is provided to humans, such as cafeterias, lunchrooms, cafes, bistros, fast food establishments, food stands, saloons, taverns, bars, lounges, catering facilities, hospital kitchens, day care kitchens, and nursing home kitchens are restaurants; and

(2) Pet shelters, kennels, and veterinary facilities in which food is provided to animals are restaurants.

Retail food establishment *means an establishment that sells food products directly to consumers as its primary function. The term "retail food establishment" includes facilities that manufacture, process, pack, or hold food if the establishment's primary function is to sell from that establishment food, including food that it manufactures, processes, packs, or holds, directly to consumers. A retail food establishment's primary function is to sell food directly to consumers if the annual monetary value of sales of food products directly to consumers exceeds the annual monetary value of sales of food products to all other buyers.*

The term **"consumers"** does not include businesses. A "retail food establishment" includes grocery stores, convenience stores, and vending machine locations. A "retail food establishment" also includes certain farm-operated businesses selling food directly to consumers as their primary function.

(1) Sale of food directly to consumers from an establishment located on a farm includes sales by that establishment directly to consumers:

(i) At a roadside stand (a stand situated on the side of or near a road or thoroughfare at which a farmer sells food from his or her farm directly to consumers) or farmers' market (a location where one or more local farmers assemble to sell food from their farms directly to consumers); (ii) Through a community supported agriculture program. Community supported agriculture (CSA) program means a program under which a farmer or group of farmers grows food for a group of shareholders (or subscribers) who pledge to buy a portion of the farmer's crop(s) for that season. This includes CSA programs in which a group of farmers consolidate their crops at a central location for distribution to shareholders or subscribers; and

(iii) At other such direct-to-consumer sales platforms, including door-to-door sales; mail, catalog and Internet order, including online farmers markets and online grocery delivery; religious or other organization bazaars; and State and local fairs.

(2) Sale of food directly to consumers by a farm-operated business includes the sale of food by that farm-operated business directly to consumers:

(i) At a roadside stand (a stand situated on the side of or near a road or thoroughfare at which a farmer sells food from his or her farm directly to consumers) or farmers' market (a location where one or more local farmers assemble to sell food from their farms directly to consumers);

(ii) Through a community supported agriculture program. Community supported agriculture (CSA) program means a program under which a farmer or group of farmers grows food for a group of shareholders (or subscribers) who pledge to buy a portion of the farmer's crop(s) for that season. This includes CSA programs in which a group of farmers consolidate their crops at a central location for distribution to shareholders or subscribers; and

(iii) At other such direct-to-consumer sales platforms, including door-to-door sales; mail, catalog and Internet order, including online farmers markets and online grocery delivery; religious or other organization bazaars; and State and local fairs.

(3) For the purposes of this definition, "farm-operated business" means a business that is managed by one or more farms and conducts manufacturing/processing not on the farm(s).

Trade name means the name or names under which the facility conducts business, or additional names by which the facility is known. A trade name is associated with a facility, and a brand name is associated with a product. *U.S. agent* means a person (as defined in section 201(e) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(e))) residing or maintaining a place of business in the United States whom a foreign facility designates as its agent for purposes of this subpart. A U.S. agent may not be in the form of a mailbox, answering machine or service, or other place where an individual acting as the foreign facility's agent is not physically present.

(1) The U.S. agent acts as a communications link between FDA and the foreign facility for both emergency and routine communications. The U.S. agent will be the person FDA contacts when an emergency occurs, unless the registration specifies another emergency contact.

(2) FDA will treat representations by the U.S. agent as those of the foreign facility, and will consider information or documents provided to the U.S. agent the equivalent of providing the information or documents to the foreign facility. FDA will consider the U.S. agent the equivalent of the registrant for purposes of sharing information and communications. The U.S. agent of a foreign facility may view the information submitted in the foreign facility's registration.

(3) Having a single U.S. agent for the purposes of this subpart does not preclude facilities from having multiple agents (such as foreign suppliers) for other business purposes. A firm's commercial business in the United States need not be conducted through the U.S. agent designated for purposes of this subpart.

You or registrant *means the owner, operator, or agent in charge of a facility that manufactures/processes, packs, or holds food for consumption in the United States.*

[80 FR 56141, Sept. 17, 2015, as amended at 81 FR 3715, Jan. 22, 2016; 81 FR 45950, July 14, 2016]

Links to FDA Regulations

Links can be accessed by clicking the blue text in the digital version of this document.

eCFR :: 21 CFR Part 1 Subpart H -- Registration of Food Facilities

This document details who is required to register with the FDA as a Food Facility. In addition to explaining who is required to register, begin here to navigate the rest of 21 CFR that includes sanitation, food safety, labeling and other federal food regulations.

Guidance & Regulation (Food and Dietary Supplements) | FDA
This web page section contains FDA guidance and regulatory information with links to Federal Register documents. You can also access information about food safety programs, manufacturing processes, industry systems, and import/export activities.

Guidance Documents & Regulatory Information by Topic

- **Guidance Documents:** Guidance documents represent FDA's current thinking on a topic. They do not create or confer any rights for or on any person and do not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations.
- **Regulatory Information:** FDA issues regulations to implement its statutory authority. The regulations can create binding obligations and have the force of law. Links to Federal Register documents (advance notices of proposed rulemaking, proposed rules, interim final rules, and final rules) are posted in this section.

FDA Food Safety Modernization Act (FSMA)
FSMA is the most sweeping reform of FDA's food safety authority in more than 70 years. This act gives FDA new and enhanced mandates and authorities to protect consumers and promote public health.

Food Facility Registration
Information on the requirement that owners, operators, or agents in charge of domestic or foreign facilities that manufacture, process, pack, or hold food for consumption in the United States must register with FDA.

Current Good Manufacturing Practices (CGMPs)
Descriptions of the methods, equipment, facilities, and controls for producing processed food and dietary supplements according to 21 CFR Part 117. Following CGMPs ensures the quality of processed foods and dietary supplements. It also ensures that processed food or dietary supplements are packaged and labeled as specified in the master manufacturing record.

Hazard Analysis & Critical Control Points (HACCP)
HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards. This includes raw material production, procurement and handling, manufacturing, distribution, and consumption of the finished product.

- HACCP Principles and Application Guidelines

Retail Food Protection
More than 3,000 state, local, and tribal agencies have primary responsibility to regulate the retail food and foodservice industries in the United States. FDA assists regulatory agencies and the industries they regulate by providing a model Food Code, guidance, training, program evaluation, and technical assistance.

Imports & Exports
Information on:

- Importing food products into the United States, including Prior Notice of Imported Food
- Exporting food products from the United States, including export certificates

WI Registration and Licensing of a Maple Operation

WI Registration and License both expire annually, March 31

Disclaimer: While DATCP has provided important information and feedback on this comprehensive guide, it has not reviewed or approved the final document. Information provided here represents the author's current understanding of the topic. Any discrepancies are subject to DATCP and Wisconsin Legislature. This document does not establish rights for any person and is not binding on DTCAP or the public. Alternative approaches are possible if the approach satisfies the requirements of the applicable statute and regulations. To discuss an alternative approach, contact DATCP staff as listed on the following page.

Who Needs a WI Food Processing License?

YES -Food Processing License Generally Required if:

- Processor sells to grocery stores, co-ops or otherwise wholesales more than 25% of their product.
- Processor obtains maple syrup from others for bottling, packaging, or processing
- Processor makes maple candy or other maple confections from maple syrup
- Process own or others' maple syrup by adding color, flavors, or other ingredients
- Annual wholesale (between April 1 and March 31) gross receipts from maple syrup and concentrated sap exceed $5000

NO - Food Processing License is NOT Required if ALL of the following are true:

- Processor sells maple syrup or concentrated maple sap only to other processors for further processing.
- Processor sells less than $5,000 during the license year. This includes sales for the combined gross receipts from all maple syrup, non-shelf-stable concentrated maple sap, and shelf-stable concentrated maple sap.
    - **Note:** This covers only wholesale product and the $5,000 does not include retail sales.Keeps a **written record** of every sale and retains that record for at least two years.
        - The record must be available for inspection and copying by DATCP upon request.
        - The record shall include the name and address of the purchasing processor, the date of sale, the amount of maple syrup or concentrated maple sap sold, and the sale price.
- Registers with DATCP before engaging in any processing activities in any license year ending March 31. A registration expires at the end of the license year. A processor shall register in writing using the Maple Sap Registration form (F-fd-346).

NO - License or Registration is NOT Required if:

- Unconcentrated Sap is collected and transported to another producer for concentration and processing into Maple Syrup

Complete details of licensing found here:
DATCP Home Selling Maple Syrup in Wisconsin

General WI Licensing Process:

1. Contact WI DATCP Licensing Consultant (608) 224-4923; DATCPDFSLicensing@wi.gov
2. Submit license application and license fee to the address on the license application.
3. Contact a lab to test your water for coliforms. They will send you instructions and a bottle for collecting. Laboratories | | Wisconsin DNR
4. Keep a copy of bacteriologically safe water supply sample results available for review by Sanitarian when they arrive
5. WDATCP Sanitarian will contact you to schedule a licensing inspection, once the license application and fee are received.
6. Prepare a system for tracking barrels, bottles, jugs, etc. and a recall plan ready for review by Sanitarian at license inspection. Recall Plan Template
7. On-site inspection of facility by WDATCP Sanitarian.
8. Begin operations.

For Further Questions On Licensing

Existing Licensees/Renewals: (608) 224-4720 - New Licensees: (608) 224-4923
Licensing Consultant: (608) 224-4923 - DATCPDFSLicensing@wi.gov

WI Registration (those who do not need a license)

Registration expires annually, on March 31

Forms were current as of July 2022. To be sure that your registration form is current, use this link to access the form from DATCP. https://datcp.wi.gov/Pages/Programs_Services/FSMapleSyrup.aspx

Maple Syrup Concentrated Sap Processor Registration Form (F-fd-346)

F-fd-346.docx (Rev. 10/21)

Wisconsin Department of Agriculture,
Trade and Consumer Protection
Division of Food and Recreational Safety
PO Box 8911, Madison, WI 53708-8911
Phone: (608) 224-4923

PLEASE PRINT.
Please mail completed registration to address at left.

OFFICE USE ONLY
REG. NO.
DATE RECEIVED

MAPLE SYRUP/CONCENTRATED SAP PROCESSOR REGISTRATION

For annual sales occurring between April 1 and March 31

THIS REGISTRATION FORM IS NOT REQUIRED FOR THE SALE OF UNCONCENTRATED MAPLE SAP

Wis. Stat. § 97.29, Wis. Adm. Code § ATCP 70.06(11)(e), Wis. Adm. Code § ATCP 87.12(1)

LEGAL ENTITY - Check one box below:

☐ Individual ☐ **Partnership ☐ Limited Partnership (LP) ☐ Limited Liability Partnership (LLP) ☐ Limited Liability Company (LLC)
☐ Cooperative ☐ Corporation ☐ Other _____ ** Requires evidence of a formal legal agreement

LEGAL ENTITY NAME	INDICATE STATE WHERE BUSINESS WAS FORMED:

DOING BUSINESS AS NAME OR TRADE NAME	BUSINESS E-MAIL	BUSINESS PHONE:
		( ) -

BUSINESS LOCATION STREET	CITY	STATE	ZIP

COUNTY	TOWN

MAILING ADDRESS STREET (if different than business address)	CITY	STATE	ZIP

CONTACT NAME	CONTACT E-MAIL	CONTACT PHONE:
		( ) -

MAPLE SYRUP or MAPLE SAP PROCESSING INFORMATION

Enter your total gross receipts from the sale of Maple Syrup or Concentrated Maple Sap to other processors in the current registration period April 1 – March 31: $ _____

Enter your anticipated total gross receipts from the sale of Maple Syrup or Concentrated Maple Sap to other processors for the next registration period April 1 – March 31: $ _____

Indicate the maple products you expect to sell to other processors: ☐ syrup ☐ concentrated maple sap

List the names and locations of the licensed food processors to whom you sell the maple syrup or concentrated maple sap that you produce:

PLEASE READ CAREFULLY

Please read the following information:

- **I understand the exemption from the requirement to hold a food processing plant license only covers my gross sales from maple syrup or concentrated maple sap to licensed food processors for further processing, not to exceed $5,000 during the year of registration.**
- **I understand I must keep written records of each sale to licensed food processors and hold these records for at least two years, and that the records shall include the name and address of the purchasing processor, the date of sale, the amount of maple syrup or concentrated maple sap and the sale price.**
- **This registration expires on March 31. I understand I must register every year to continue sales.**
- **No registration certificate will be issued.**

Operating without registering is a violation of Wisconsin law. The undersigned hereby certifies that this is a true, complete and accurate report for registration as a Maple Syrup Processor under Wis. Stat. § 97.29. Registrations are not transferable between persons or locations. The Department may inspect premises at any reasonable time. Records must be available to the department upon request. Personal information you provide may be used for purposes other than that for which it was originally collected. (Wis. Stat. § 15.04(1)(m)).

AUTHORIZED SIGNATURE	TITLE	DATE

This institution is an equal opportunity employer.

WI Food Processing Plant License Application

Wisconsin Department of Agriculture, Trade, and Consumer Protection

License expires annually, on March 31

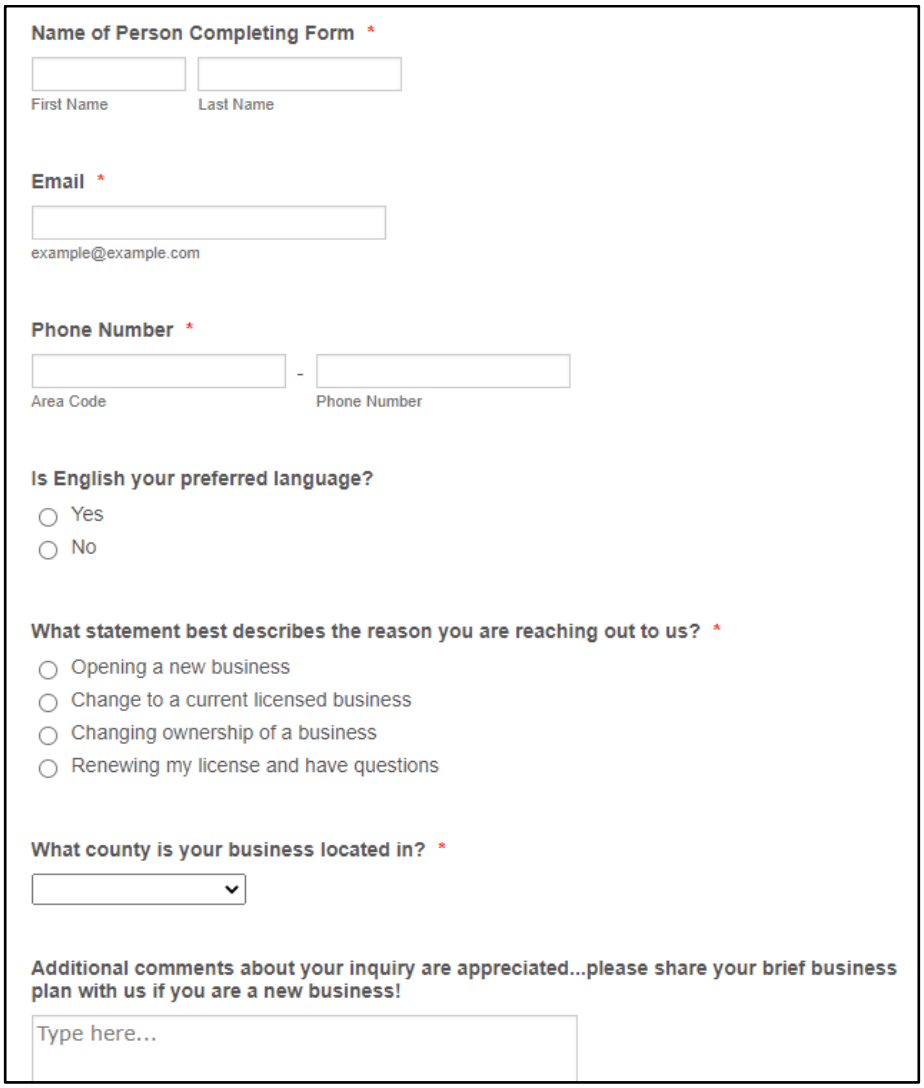
Forms were current as of Jan 2024. To be sure that your registration form is current, use the link provided to access the form from WI Dept. of Ag, Trade and Consumer Protection.

For Licensing help, first contact

Existing Licensees/Renewals: (608) 224-4720
New Licensees: (608) 224-4923
Licensing Consultant: (608) 224-4923
DATCPDFSLicensing@wi.gov

Fill out form on-line:
DATCP Home Getting Started with Food, Dairy and Recreational Licensing

SAMPLE



Name of Person Completing Form *

First Name Last Name

Email *

example@example.com

Phone Number *

Area Code - Phone Number

Is English your preferred language?

- Yes
- No

What statement best describes the reason you are reaching out to us? *

- Opening a new business
- Change to a current licensed business
- Changing ownership of a business
- Renewing my license and have questions

What county is your business located in? *

Additional comments about your inquiry are appreciated...please share your brief business plan with us if you are a new business!

Type here...

Sample Food Processing Plant Application (F-fd-89)
Wisconsin Department of Agriculture, Trade, and Consumer Protection

Use the on-line form or phone number listed on the previous page to contact a Licensing Consultant with WDATCP for the current version of the application and assistance.

F-fd-89 (Rev. 5/16) Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Food and Recreational Safety
PO BOX 93586, Milwaukee WI 53293-0586
Phone: (608)224-4720

PLEASE PRINT
Submit check payable to WDATCP with application to address at left.

OFFICE USE ONLY
LIC. NO.
DATE ISSUED
EXPIRES
SURCHARGE
FEE PAID

Food Processing Plant Application

s. 97.29, Wis. Stats.

LEGAL ENTITY - Check one box below:

☐ *Individual ☐ *Married Couple ☐ ** General Partnership ☐ Limited Partnership (LP) ☐ Limited Liability Partnership(LLP) ☐ Limited Liability Company (LLC)
☐ Cooperative ☐ Corporation ☐ Other: _____

*Individuals/Married couples applying for original license must submit SSN form (DMS-AD-11-DFS)
** Requires evidence of a formal legal agreement

LEGAL ENTITY NAME		TRADE NAME (d/b/a or "doing business as")		DFI NO. (OPTIONAL)	
BUSINESS LOCATION (if different mailing address)		CITY		STATE	ZIP CODE
COUNTY	TOWN	BUSINESS PHONE NO.	BUSINESS E-MAIL		
MAILING ADDRESS		CITY		STATE	ZIP CODE
CONTACT NAME.	TITLE	CONTACT PHONE NO.	CONTACT E-MAIL		
INDICATE STATE WHERE BUSINESS WAS FORMED _____	FDA FIRM ESTABLISHMENT IDENTIFIER (OPTIONAL)	FDA SHELL EGG REGISTRATION NO. (IF APPLICABLE) (SEE REVERSE SIDE)		PREMISES ID (IF APPLICABLE)	

REASON FOR APPLICATION – Check one box below:

☐ Original (Cannot operate until inspected)
Indicate first (anticipated) date of operation:
_____

☐ Amend – License # _____
Reason and date of occurrence (some
_____

BUSINESS DESCRIPTION- See back for definitions

Engaged in processing potentially hazardous food? ☐ YES ☐ NO | Engaged in canni

Dollar volume of production during the last 12 months, (if not operating that long, estimate for 12 months): $

INDICATE LICENSE FEE FROM FEE SCHEDULE

License Fee: $_____
Canning Operation: $_____
Additional Fee: $_____ ☐ Surcharge ☐ Late Fee ☐ Other: _____
Total Amount Paid $_____

Operating without a license is a violation of Wisconsin law. If you have been operating without a license, yo
certifies that this is a true complete and accurate application for a Food Processing Plant license under s. 97.29 Wis. Stats
between persons or locations. Licenses expire annually on March 31. The license fee is not prorated for partial license yea
originally collected s. 15.04(1)(m), Wis. Stats. **You are not licensed to operate until the Department conducts an inspe**

TEMPORARY LICENSE: Upon successful inspection, a temporary license will be issued for your convenience pendin
application within 40 business days after a complete application is received. If your application is denied, this temporary lic
license denial does not postpone the expiration of a temporary license. This temporary license is not transferable between
from producers. A producer is any person who produces and sells or who grows under contract raw or partly processed fa

AUTHORIZED SIGNATURE | TITLE

SHADED AREA FOR DEPARTMEN

Please check all PROCESSING OPERATIONS this establishment will be conducting during the cor

☐ Acidifying/ Pickling	☐ Canning	☐ Drying
☐ Bakery	☐ Confectionery	☐ Shell Eggs - Packing/Gradi
☐ Bottling	☐ Cooking	☐ Extracting
☐ Brewing	☐ Cutting/Slicing	☐ Fermenting/ Distilling

Please check all FINISHED PRODUCTS this establishment will be processing during the coming li

☐ Ale/ Beer	☐ Fountain Syrups/ Toppings	☐ Maple Syrup Products
☐ Bottled Water	☐ Fruits	☐ Molasses/ Sorghum
☐ Cereal Products	☐ Gelatin/ Dessert Mixes	☐ Nuts/ Seeds/ Grains/ Legun
☐ Chili/ Soups	☐ Ginseng	☐ Pickled Products/ Relishes
☐ Cider	☐ Honey & Products	☐ Pizza
☐ Cocoa/ Chocolate	☐ Ice	☐ Popcorn
☐ Coffee	☐ Jams/ Jellies	☐ Potatoes-Potato Products
☐ Dairy Related	☐ Juice	☐ Poultry- Poultry Products
☐ Eggs	☐ LACF (low acid canned foods)	☐ Rabbit
☐ Flour	☐ Malt	☐ RTE Foods

TEMPORARY LICENSE ISSUED BY

Sanitarian License Recommendation (Check One): Approve ☐ Full Status ☐ Condition
☐ Cancel app- State Reason:

Field Supervisor License Recommendation (Check One): Approve ☐ Full Status ☐ Condition
☐ Cancel app- State Reason:

SANITARIAN SIGNATURE AND NO. | DATE | FIELD SUPE

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DEFINITIONS:

Canning means the preservation and packaging in hermetically sealed containers of low-acid or acidified foods.

Food Processing means the manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking/curing, grinding, cutting, mixing, coating, stuffing, slicing, packing*, bottling or packaging* or through any other treatment or preservation process. ATCP 70.01(16), Wis. Adm. Code

Potentially Hazardous Food (time/temperature control for safety food) means a food that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation. Potentially hazardous foods include: meat, fish, poultry, dairy products (such as milk, cheese, ice cream, etc.) eggs, shellfish, etc. Basically, any readily perishable food requiring special storage conditions, refrigeration, or freezing is a potentially hazardous food.

NOTICE
A food processing plant buying vegetables from a Wisconsin producer shall not be licensed until the operator complies with applicable registration and producer security requirements under Ch. 126, Subchapter VI, Wis. Stats.

LICENSE DENIAL: If a license application is denied, the applicant has the right to request a hearing concerning the denial (s. 227.42, Wis. Stats.). The request must be made in writing and must be received by the Department at the central office within 10 days after the applicant receives notice of denial. License fees are not refundable if a license application is denied.

SHELL EGG HANDLER FEDERAL REGISTRATION NO.: All Shell Egg Handlers and Producer Packers that have a flock consisting of 3000 or more egg laying birds are required to register with the FDA under the Egg Safety Rule. Register at http://www.access.fda.gov or call (800) 216-7331.

*Packing / Packaging = placing finished food items into retail size packages or containers.

WI Food Processing Plant Lice

Forms were current as of August 2022. To be sure the form is current, use this link to access information from DATCP. https://datcp.wi.gov/Pages/Programs_Services/FSMapleSyrup.aspx

LICENSE FEE SCHEDULE: Food Processing Plant, Food Warehouse, Milk Distributor

F-fd-286.docx (Rev.04/21)

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Food and Recreational Safety,
P.O. Box 93586, Milwaukee, WI 53293-0586
Telephone: (608) 224-4720

LICENSE FEE SCHEDULE:
Food Processing Plant, Food Warehouse, Milk Distributor

Important Definitions and Information for Understanding this Form:

Food: A raw, cooked, or processed edible substance, ice, beverage or ingredient used or intended for use or for sale in whole or in part for human consumption, or chewing gum.

Food Processing: The manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking, grinding, cutting, mixing, coating, stuffing, slicing cheese/lunch meat, popping popcorn, scooping ice cream, packing, bottling or packaging or through any other treatment or preservation process.

License Denial: If a license application is denied, the applicant has the right to request a hearing concerning the denial *(Wis. Stat. § 227.42)*. The request must be made in writing and must be received by the Department at the central office within 10 days after the applicant receives notice of denial. ***License fees are not refundable if a license application is denied.***

License Fees: The license fees that are paid are not prorated or transferable from one location to another or from one owner to another.

License Surcharge Fee: Applicants found to be operating without a license within one year before submitting the license application shall pay a license fee surcharge. The applicant has the right to request a hearing concerning the surcharge *(Wis. Stat. § 227.42)*. The request must be made in writing and must be received by the Department at the central office within 10 days after the applicant receives notice of surcharge.

Potentially Hazardous Food: Any perishable food capable of supporting rapid and progressive growth of infectious or toxicogenic microorganisms. Potentially hazardous foods include: meat, fish, poultry, dairy products (such as milk, cheese, ice cream, etc.), eggs, shellfish, etc. Basically, any readily perishable food requiring special storage conditions, refrigeration, freezing or hot holding for food safety is a potentially hazardous food.

Re-inspection Fee: Establishments found operating in substantial noncompliance on a regularly scheduled inspection, may be re-inspected and charged under authority of administrative rule.

Review of Equipment and Plans: Upon request by any dairy or food establishment, the Department's Division of Food and Recreational Safety may review construction plans or equipment for compliance with applicable laws before a facility is constructed or equipment is installed. The Department may charge a fee to recover its cost for this review service, regardless of whether the review is required by law *(Wis. Stat. § 93.06(1w))*.

FOOD PROCESSING PLANT: License expires annually, March 31 Wis. Admin. Code ch. ATCP 70 & Wis. Stat. § 97.29

A food processing plant buying vegetables directly from a Wisconsin grower shall not be licensed until the operator complies with applicable registration and producer security requirements under *Wis. Stat. § 126.55*.

Dollar Volume of Production = (gross sales of product processed) + (inventory) value of any portion of product not sold.

Canning means the preservation and packaging in hermetically sealed containers of low-acid or acidified foods such as beans, corn or pickles (this does not include jams or jellies).

LICENSE DESCRIPTION	LICENSE FEE	LICENSE SURCHARGE	LICENSE LATE FEE	REINSPECTION FEE
Annual production of at least $1,000,000 and is engaged in processing potentially hazardous food or in canning.	$835	$100	$167	$525
Annual production of at least $500,000 but less than $1,000,000 and is engaged in processing potentially hazardous food or in canning.	$835	$100	$167	$525
Annual production of at least $250,000 but less than $500,000 and is engaged in processing potentially hazardous food or in canning.	$835	$100	$167	$525
Annual production of at least $1,000,000 and is not engaged in processing potentially hazardous food or in canning.	$520	$100	$104	$490

Annual production of at least $500,000 but less than $1,000,000 and is not engaged in processing potentially hazardous food or in canning.	$520	$100	$104	$490
Annual production of at least $250,000 but less than $500,000 and is not engaged in processing potentially hazardous food or in canning. (Mid to Large non-potentially hazardous)	$520	$100	$104	$490
Annual production of at least $25,000 but less than $250,000 and is engaged in processing potentially hazardous food or in canning.	$400	$100	$80	$255
Annual production of at least $25,000 but less than $250,000 and is not engaged in processing potentially hazardous food or in canning.	$160	$100	$32	$150
Annual production of less than $25,000 and is engaged in processing potentially hazardous food or in canning.	$95	$100	$19	$60
Annual production of less than $25,000 and is not engaged in processing potentially hazardous food or in canning.	$95	$100	$19	$60
Canning operations with at least $25,000 in annual production (additional to initial license fee).	***$320***	**-**	***$64***	**-**

FOOD WAREHOUSE: License expires annually, June 30 ***Wis. Admin. Code ch. ATCP 71 & Wis. Stat. § 97.27***

A food warehouse operating as a public storage warehouse must also comply with applicable license and security requirements under *ch. 99, Stats.*

LICENSE DESCRIPTION	LICENSE FEE	LICENSE SURCHARGE	LICENSE LATE FEE	REINSPECTION FEE
Stores potentially hazardous food and has at least 50,000 sq. ft.	$320	$100	$64	$300
Stores potentially hazardous food and has fewer than 50,000 sq. ft.	$120	$100	$24	$115
Does not store potentially hazardous food and has at least 50,000 sq. ft.	$160	$100	$32	$200
Does not store potentially hazardous food and has fewer than 50,000 sq. ft.	$80	$100	$16	$100

MILK DISTRIBUTOR: License expires annually, April 30 ***Wis. Admin. Code ch. ATCP 71 & Wis. Stat. § 97.21***

LICENSE DESCRIPTION	LICENSE FEE	LICENSE SURCHARGE	LICENSE LATE FEE	REINSPECTION FEE
Milk Distributor	$75	$100	$15	$30

What is required in order to get a WI Food Processing License?

Requirements of Facilities Processing Maple Syrup or Certain Other Maple Products

Disclaimer: While DATCP has provided important information and feedback on this comprehensive guide, it has not reviewed or approved the final document. Information provided here represents the author's current understanding of the topic. Any discrepancies are subject to DATCP and Wisconsin Legislature. This document does not establish rights for any person and is not binding on DTCAP or the public. Alternative approaches are possible if the approach satisfies the requirements of the applicable statute and regulations. To discuss an alternative approach, contact DATCP staff.

General requirements include:

1. Safe water
2. Proper wastewater disposal
3. Food grade containers for storage
4. Sanitary conditions
    a. construction/maintenance
    b. lighting
    c. ventilation
    d. toilet facilities
    e. handwashing facilities
    f. cleaning facilities
    g. plumbing
    h. garbage removal
    i. pest control
    j. fuel storage
    k. equipment and utensils
5. Personal hygiene
    a. high level of personal cleanliness
    b. handwashing
    c. do not work if sick with communicable disease
    d. avoid eating, drinking in food area
6. Temperature control for storage
7. Proper Grading
8. Recall plan (lot number identification for tracking)
9. Proper labeling for retail packaging

The following pages provide more information and sample documentation for the items listed above. These resources are meant to support syrup producers getting and maintaining a WI Food Processing License, as well as reflecting on and improving practices of their maple syrup operation.

Wholesale Food Manufacturing Guidance

Requirements of Facilities Processing Maple Syrup or Certain Other Maple Products

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) regulates processing of maple syrup and certain other maple products. The information in this section applies to all licensed food processing plants engaged in processing maple syrup or certain other maple products, including maple sap, maple sap water, shelf stable concentrated maple sap, non-shelf stable concentrated maple sap, and maple-derived water in Wisconsin.

These requirements come from Wis. Admin. Code § ATCP 87 (Honey and Maple Syrup). These licensed facilities also must meet requirements in Wis. Admin. Code § ATCP 70 (Wholesale Food Manufacturing), except for certain topics as summarized in the section at the end of this document, "Facilities Used Solely for Concentration of Maple Sap."

Definitions

Degrees Brix: The percentage by weight concentration of total soluble solids, mainly sugar, as measured using a refractometer calibrated at 68°F, and to which any applicable temperature correction has been made, or by any other method that gives equivalent results.

Liquid maple products: Includes maple syrup, shelf-stable concentrated maple sap, non-shelf-stable concentrated maple sap, or maple sap water.

Maple-derived water: Permeate that is removed by reverse osmosis, or water that is otherwise removed, from sap from trees of the genus Acer.

Maple sap water: Sap from the trees of the genus Acer that has not been concentrated to a solids content of more than 4%, or 4 degrees Brix, and is a potentially hazardous food as defined in Wis. Admin. Code § ATCP 70.02(33).

Maple syrup: The liquid food derived by concentrating and heating sap from the trees of the genus Acer, as defined in 21 CFR 168.140, having a solids content of not less than 66% by weight, or 66 degrees Brix, and not containing added sweeteners.

Non-shelf-stable concentrated maple sap: Sap from the trees of the genus Acer that has been concentrated using heating or other methods; has a solids content of more than 4% and less than 66% by weight, or from 4 to 66 degrees Brix; and will support microbial growth when stored at temperatures not lower than 41°F (5°C) or higher than 135°F (57°C).

Shelf-stable concentrated maple sap: Sap from the trees of the genus Acer that has been concentrated using heating or other methods; has a solids content of less than 66% by weight, or less than 66 degrees Brix; and will not support microbial growth when stored at temperatures not lower than 41°F (5°C) or higher than 135°F (57 °C).

Potentially hazardous food: A food that requires time or temperature control to limit pathogenic microorganism growth or toxin formation as defined in Wis. Admin. Code § ATCP 70.02(33).

Turbidity: The suspension of fine mineral particles in the maple syrup such that the syrup clarity is reduced.

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Licensing

Food Processing Plants

Facilities that make maple syrup and wholesale it to another processor or entity must have a food processing plant license unless an exemption applies. Solely gathering maple sap water is *not* food processing and does not require a license.

Your facility does *not* need a food processing plant license if you do all of the following:

- Sell the maple syrup or concentrated maple sap only to other processors for further processing.
- Sell less than $5,000 during the license year. This includes sales for the combined gross receipts from all maple syrup, non-shelf-stable concentrated maple sap, and shelf-stable concentrated maple sap. This covers only *wholesale* product, and the $5,000 does not include retail sales.
- Keep a written record of every sale and retain that record for at least two years. Keep in mind:
  - The record must be available for inspection and copying by DATCP.
  - The record must include the name and address of the purchasing processor, the date of sale, the amount of maple syrup or concentrated maple sap sold, and the sale price.
- Register with DATCP before engaging in any processing activities in any license year ending March 31. A registration expires at the end of the license year. A processor must register in writing using the maple sap processor registration form (F-fd-346).

Retail Food Establishments

If you sell maple syrup to a consumer, you must have a retail food establishment license. But, you do not need this license if both of the following apply:

- Your establishment only sells fresh fruits and vegetables, honey, cider, sorghum, or maple syrup.
- You produced the product sold to the consumer.

Food Warehouses

You must have a food warehouse license if you hold liquid maple products or other food for more than 24 hours at a location other than your licensed food processing plant or retail food establishment.

Variances

DATCP may issue a written waiver granting a variance from a construction, equipment, utensils, processing, or procedure standard if DATCP finds that the variance is reasonable and necessary under the circumstances, and that it will not compromise the purpose served by the standards. A variance application may be obtained from, and must be submitted through, your sanitarian.

Reasons for requesting a variance might include:

- You do not have a handwashing sink and instead use containers to supply water and dispose of wastewater in a sanitary manner, and you meet all other requirements for handwashing sinks.
- You do not have a 3-compartment sink on site and instead sanitize equipment and utensils by using a 2-compartment sink in conjunction with a finishing pan on site.
- You do not have a 3-compartment sink on site and instead use a 3-compartment sink that is located offsite at a different licensed facility and transport sanitized utensils in covered totes.
- You do not have a toilet room that is contiguous to the food processing plant and instead use a noncontiguous, conveniently located toilet.

Water Supply

Water for use as an ingredient or in other plant operations must:

- Comply with the health-related drinking water standards of Wis. Admin. Code § NR 809 (Safe Drinking Water).

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- Be obtained from a source that complies with Wis. Admin. Code § NR 811 (Requirements for the Operation and Design of Community Water Systems).
- Be obtained from a source that complies with Wis. Admin. Code § NR 812 (Well Construction and Pump Installation).

If water for use as an ingredient or in other plant operations is obtained from a privately owned source:

- You must sample that water at least every 12 months.
- You must have that sample tested by a certified lab for coliform bacteria.
- You must provide the test results during inspections.

When water for use as an ingredient or in other plant operations is transported in a bulk tanker or container the additional requirements of Wis. Admin. Code § ATCP 70.20(6) also must be met:

- It must be loaded, transported, and unloaded in a sanitary manner that prevents contamination.
- The bulk tanker or bulk container must be thoroughly cleaned and sanitized before filling.
- Suitable pumps, hoses, and fittings must be used to transfer drinkable water and drinkable liquids to and from bulk tankers and bulk containers.
- The bulk tanker or bulk container and each of its fittings and equipment must meet all of the following requirements:
    - It must be constructed properly and maintained to prevent contamination.
    - Food contact surfaces must comply with Wis. Admin. Code § ATCP 70.12(2).
    - It must be cleaned, sanitized, and inspected on a routine basis.
    - It may not be used to transport materials that may contaminate drinkable water or liquid that is subsequently transported in the bulk tanker or bulk container.
    - It must be sealed to protect the contents from contamination during transit.
    - It must be stored properly and serviced to prevent contamination.

    - When not in use, pumps, hoses, and fittings must be properly maintained, capped, stored, and protected from contamination.

Wastewater Disposal

Wastewater must be disposed of in a sanitary manner, and this disposal must be in compliance with applicable state and local regulations. If you will be disposing of water directly to the ground from your handwashing sinks, manual cleaning sinks, permeate from reverse osmosis, or other sources—and especially if it may runoff to surface water—you should contact a Wisconsin Department of Natural Resources (DNR) wastewater specialist, local zoning office, and/or township to ensure that you receive any required permits.

For more information, visit the DNR website at https://dnr.wi.gov/topic/wastewater/PermitsStaff.html.

Processing Liquid Maple Products or Maple-derived Water by Methods Other Than Concentration

- Liquid maple products might include flavored syrups, maple flavored beverages, or other liquid maple products.
- Equipment and utensils must meet applicable requirements in Wis. Admin. Code § ATCP 70.
- Personnel must meet applicable requirements in Wis. Admin. Code § ATCP 70.

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Packaging, Storing, and Transferring Liquid Maple Products or Maple-derived Water

- Containers for packaging must be stored in a manner to prevent contamination.
- Rooms used for filling containers intended for the consumer and rooms used for storage of packaged or unpackaged liquid maple products or maple-derived water must be constructed and maintained in accordance with Wis. Admin. Code § ATCP 70.08.
- Transfer methods must prevent contamination when transferring to another building or area.

Temperature Control

Non-shelf-stable concentrated maple sap, maple sap water, and maple-derived water are potentially hazardous foods. These must be handled, stored, and processed under temperature control at less than 41°F or greater than 135°F unless used as described next in, "Maple-derived Water Used for Cleaning."

Maple-derived Water Used for Cleaning

Maple-derived water obtained by the reverse osmosis treatment of maple sap may be used to clean evaporators or other equipment surfaces that contact maple sap before the maple sap is subjected to concentration by heating, if all of the following apply:

- The water does not have any objectionable odors, flavors, or slime. This water must be sampled daily for a physical evaluation, but no record is required.
- Chemical treatment of maple-derived water does not use any chemical to suppress bacterial growth in water, or to prevent off-tastes or odors in water, unless that chemical is approved for that purpose by the U.S. Environmental Protection Agency (EPA). Neither the chemical as applied, nor any compound produced by the chemical application, may contribute to the adulteration of food.
- The storage tank must be emptied, cleaned, and sanitized at least once every 24 hours.
- Lines and hoses used in conjunction with this water must be clearly identified.
- Atmospheric break and automatic controls must be used for temporary connections to food product vessels.

If you do not follow all of the above requirements and want to use maple-derived water to clean evaporators or food contact surfaces of other equipment, you must meet the rules for reclaimed water found in Wis. Admin. Code § ATCP 70.20(3)(b) which adds requirements including, but not limited to:

- Turbidity testing, automatic fail-safe monitoring device, and automatic diverter.
- Temperature control if holding for longer than 24 hours.
- Posting of instructions for use of lines and hoses.

Maple-derived Water as a Beverage or Used as an Ingredient in Other Food and Beverages

The process and equipment used for production of maple-derived water must be reviewed and approved by DATCP's Division of Food and Recreational Safety before use.

Maple-derived water may not be used as an ingredient in:

- Bottled drinking water
- Soda water beverages (commonly known as soft drinks or soda water)

Maple-derived water, when produced for use as ingredient water, must be meet certain standards:

- Less than 1 coliform bacterium per 100 mL.
- Standard plate count of not more than 500 colony-forming units per 500 mL.
- Turbidity of less than 5 units, or an organic content of less than 12 mg per liter.

Maple-derived water, when produced for use as ingredient water, must be tested annually by a lab certified under Wis. Admin. Code § ATCP 77 for the following:

- Coliform bacteria levels

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- Standard plate count
- Turbidity or organic content

The requirements for bottling establishments in sub chapter V of Wis. Admin. Code § ATCP 70 are not applicable to bottled maple-derived water.

Grading

If a facility has a food processing plant license, it must label its maple syrup product as one of the following: *Grade A, processing grade, substandard, or ungraded.* A product may only be labeled as ungraded if the product is sold in bulk to be further processed, or if the facility does not hold a food processing plant license.

Grade A

Maple syrup labeled as Grade A must meet the following characteristics:

- Is not more than 68.9% solids content by weight, or 68.9 degrees Brix.
- Has good uniform color, odor, flavor and intensity of flavor, or maple taste, normally associated with the color class for Grade A maple syrup.
- Is free from off flavors and odors considered as damage.
- Is clean and free from cloudiness, turbidity, and sediment.

The color class of Grade A maple syrup is determined by the percent of transmittance of light at a wavelength of 560 nanometers through the syrup, as measured with a spectrophotometer using matched square optical cells having a 10 mm light path. The color value is expressed as percent of light transmission, as compared to analytical grade glycerol fixed at 100%. Percent transmittance is denoted by %Tc. Any method that provides equivalent results may be used to determine Grade A maple syrup color class. Grade A maple syrup color classes and corresponding flavor descriptors are shown in Table 1.

Table 1. Maple Syrup Color Classes and Flavor Descriptors

Grade A Color Class	Flavor Descriptor	Percent Light Transmittance
Golden	Delicate	At least 75.0
Amber	Rich	50.0 – 74.9
Dark	Robust	25.0 – 49.9
Very Dark	Strong	Less than 25.0

Processing grade

Maple syrup labeled as processing grade must be packed in containers holding at least 5 gallons (18.925 liters) and must not be packaged in containers smaller than 5 gallons (18.925 liters) for retail sale. Processing grade maple syrup has all of the following characteristics:

- Fails to meet the requirements for Grade A maple syrup.
- Possesses a fairly good characteristic maple taste.
- Is fairly clean and fairly free of damage, turbidity, or cloudiness.
- May be in any color class and have any percent light transmittance.
- Not more than 68.9% solids content by weight, or not more than 68.9 degrees Brix.
- May contain off flavors and odors.
- May have a very strong taste.

Substandard grade

Maple syrup labeled as substandard does not meet the requirements for processing grade.

Ungraded

Any maple syrup that does not have a grade designation.

Geographical Designation

Providing a geographical designation for your product is optional.

A facility may label their product with a Wisconsin designation (such as "Made in Wisconsin") if the maple sap was concentrated in Wisconsin to meet the definition of maple syrup. If all sap was concentrated in Wisconsin, the geographical designation may precede any grade. If only *some* sap was concentrated in Wisconsin, it may only precede Grade A.

A facility may label its product as "Bottled in Wisconsin" or "Packaged in Wisconsin" if true.

Recall Plan

All food processing plants are required to have a written recall plan. You may request a recall plan template from your sanitarian.

Food Packaging and Labeling

Packaged food must be packaged and labeled according to all of the following, as applicable:

- FDA food labeling laws in 21 CFR § 101.
- Defoaming agents used in the production of maple syrup may not contain any major food allergens.
- If the packaged food contains a major food allergen, the ingredient statement on the package must disclose the common name of the major allergen. The disclosure must be equivalent in size and prominence to the rest of the ingredient statement. If an allergen originates from fish, crustacean shellfish, or tree nuts, the disclosure must include the common name of the source species. For example, if a food product includes an allergen that originates from fish, the ingredient statement must disclose the common species name such as bass, flounder, or cod. If the allergen originates from crustacean shellfish, the ingredient statement must disclose the common species name such as crab, lobster, or shrimp. If the allergen originates from tree nuts, the ingredient statement must disclose the common species name such as almond, pecan, walnut, or coconut.

More information about the legal requirements for packaging and labeling can be found in Wis. Admin. Code § ATCP 70.26.

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Requirements of Facilities Used Solely for Concentration of Maple Sap

This section only applies to facilities (e.g., buildings, areas) and certain equipment used solely for concentration of maple sap. This section provides a summary of key requirements in Wis. Admin. Code § ATCP 87 (Honey and Maple Syrup).

Facilities used for other activities, such as prepackaging or bottling maple syrup that is intended to be sold at retail or directly to the consumer, must meet requirements for these topics as applicable in Wis. Admin. Code § ATCP 70 and Wis. Admin. Code § ATCP 87.

Construction and Maintenance

- Floors must be smooth, cleanable, and durable.
- Gravel floors are not allowed, as the processor must be able to effectively clean the floors.
- Floor coving, light-colored walls and ceilings, and impervious materials are not required.
- The buildings and facilities must have tightly sealed walls and ceilings.
- The area around the building must be well drained and kept free of potential health nuisances.

Doors, Windows, and Other External Openings

- These external openings must be screened or protected against the entry of pests.
- External doors do not need to be self-closing, but they must be kept closed when not in use.

Lighting

- There must be at least 10-foot candles (108 lux) of illumination in all areas.

Ventilation

- Ventilation must be sufficient to prevent condensation.
- There are no requirements for air intake filters or positive pressure.

Toilet Facilities

- Employees must have convenient access to a sanitary toilet complying with applicable local law.
- This may include a self-contained portable toilet maintained in compliance with Wis. Admin. Code § NR 113.

Handwashing Facilities

At least one handwashing sink must be conveniently located for the toilet room and processing area. All handwashing sinks must be provided with:

- Drinkable water under pressure.
- A sanitary single service means of drying hands.
- An easily cleanable covered trash bin.
- Soap in a soap dispenser.

Also see "Variances" section.

Cleaning Facilities

If equipment, utensils, or containers are cleaned or sanitized manually:

- A 3-compartment sink is required to be conveniently located in the food processing area.
- This 3-compartment sink must be supplied with hot and cold running water under pressure, such

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as water from a gravity pressurized system, pressure tank, or other pressurized system.

Also see "Variances" section.

Plumbing Systems and Sewage Disposal

- All sewage and liquid waste must be disposed of in a sanitary manner.
- This may include using a private on-site wastewater treatment system or a portable toilet.

Garbage and Refuse

- These must be held in durable, leak-proof, easily cleanable, and pest-resistant containers.
- These containers must be kept covered with tight-fitting lids, cleaned and maintained to not attract or harbor pests, and emptied daily or kept in a separate room or designated area.
- If burning garbage and refuse, it must be done in compliance with state and local laws.

Control of Pests

- Insect, rodents, and other pests must be kept out of food processing areas.
- All animals, including pets and livestock, must be kept out of these areas as well.
- Pesticides:
  - Must be approved for use in food processing facilities.
  - Must be used according to label directions.
  - May not be stored in a manner that may contaminate food.

Fuel Storage

- Fuel must be stored outside, but enough fuel for one day's production may be kept inside.

Condensate from the Thermal Concentration of Maple Sap

- Re-use for doing more than cleaning non-food contact surfaces involves additional requirements.
- It does not need to be tested for turbidity or have an automatic fail-safe diverter.

Equipment and Utensils

- Food contact surfaces of equipment and utensils must be cleaned as often as necessary to remove visible debris and must be sanitized after cleaning and before contacting food.
- Lead or lead-alloy soldering may not be used in food-contact surfaces.
- Copper and copper alloys such as brass and bronze may not be used in contact with a food that has a pH below 6. Maple syrup and some saps have a pH below 6.
- A frame encasing an evaporator hood must be made of smooth, cleanable, food-grade material.
- Vessels only holding maple sap before concentration of maple syrup do not need to be covered but must be protected from contamination.
- Filtering material such as socks and presses must be in a clean condition before use.
- Filter papers may not be reused.
- Filtering agents such as diatomaceous earth must be nontoxic.

Personnel Standards

- Maintain a high degree of personal cleanliness and observe good hygienic practices.
- Wash hands before beginning work and upon returning to work.
- Do not work in the facility if you have a reportable communicable disease, any symptom of acute gastrointestinal illness, or an open wound on exposed portions of your body.
- Do not eat, drink, or use tobacco in the food processing area.

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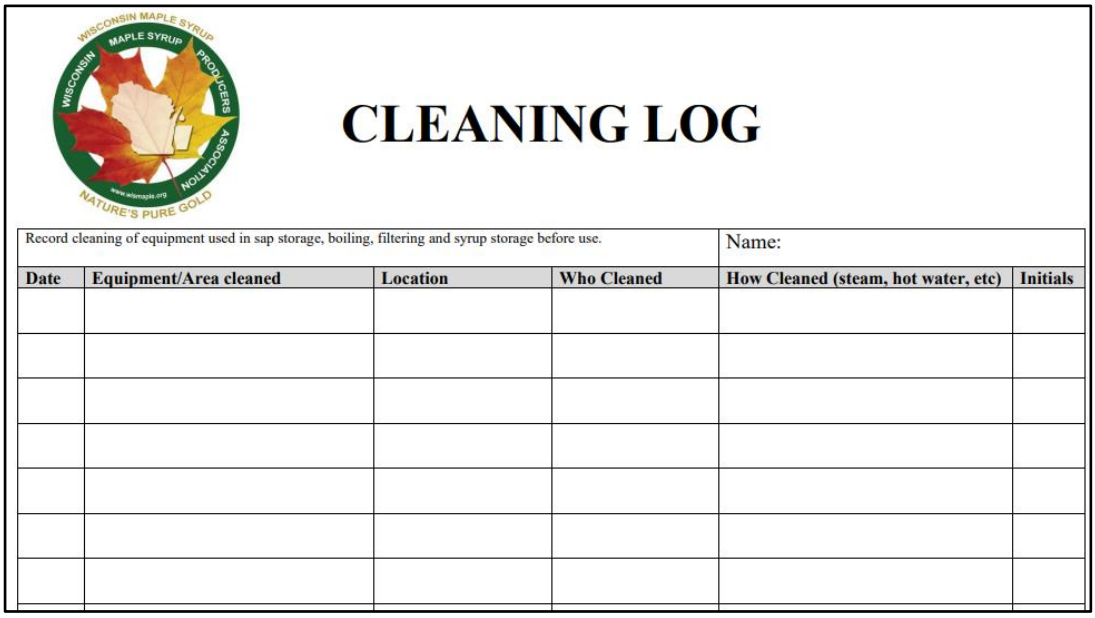
Certified Water Testing Labs

A list of Wisconsin certified labs for testing water prior to getting a license and starting operations can be found here. Laboratories | | Wisconsin DNR

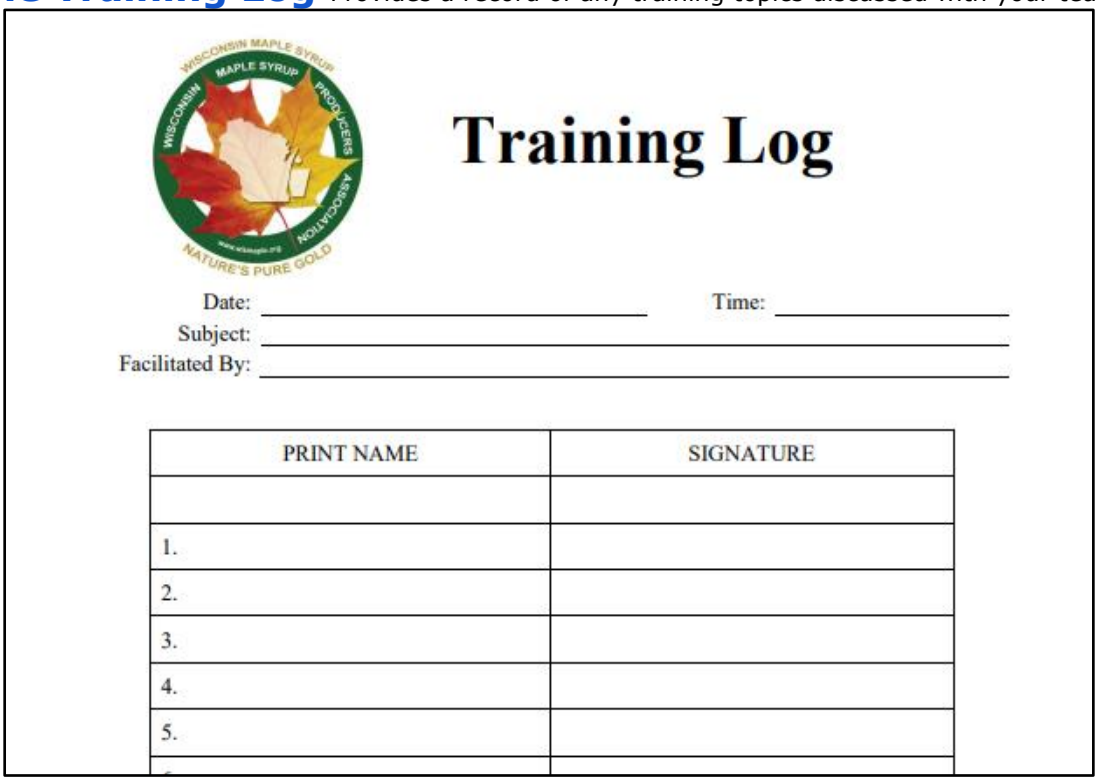
Sample Cleaning Log This log can be used to record the cleaning done in your syrup operation. This documentation may be helpful to provide evidence of cleaning.



CLEANING LOG

Record cleaning of equipment used in sap storage, boiling, filtering and syrup storage before use.				Name:	
Date	**Equipment/Area cleaned**	**Location**	**Who Cleaned**	**How Cleaned (steam, hot water, etc)**	**Initials**

Sample Training Log Provides a record of any training topics discussed with your team.



Training Log

Date: _____ Time: _____

Subject: _____

Facilitated By: _____

PRINT NAME	SIGNATURE
1.	
2.	
3.	
4.	
5.	

Sample Training Outline (Hygiene and Food safety)

Personal Hygiene and Food Safety in the Sugar house

Personal Hygiene:

Hands	Clothing	General practices
Wash hands with soap and water before beginning work and upon returning to work	Wear clothes that do not pose a contamination risk to the syrup. (ex. without anything that could fall into syrup, basically clean)	Do not work around food if you are sick (fever, stomach issues, etc)
Wipe hands with a sanitary, single use means of drying (ex. paper-towel)		Cover open wounds
Throw paper towel in an easily cleanable, covered trash bin.		Eat, drink or use tobacco OUTSIDE of the food processing area.

Keep everything clean:

Construction/maintenance	Washing equipment, utensils, containers	
Keep floor as clean as possible. Floor should be smooth, easy to clean and durable (no dirt floors)	A 3-compartment sink is used for cleaning and is supplied with hot and cold running water under pressure.	Protect sap from contamination. Store it in a way that keeps foreign materials out.
Walls and ceilings should be tightly sealed and easy to clean when needed. Remove cob-webs, dirt, etc. above open containers and pans.	Clean food contact surfaces as often as needed to remove visible debris. Sanitize after cleaning.	Be sure filtering materials are clean and in good condition before use. Filter papers may not be reused.
Area around the building should be as well drained as possible.		Store defoamer in a labeled container. Be sure it does not contain any food allergens.

Keep possible contamination out:

Pests	Garbage	Fuel/Chemical storage
Screen external openings to protect against pest entry.	Store garbage in easy to clean, pest-resistant container.	Store fuel outside of the cooking area (one day's worth of wood/fuel may be stored inside)
Keep animals out of food processing areas.	Garbage container should be kept covered with a tight-fitting lid (to prevent pests).	Store cleaning chemicals or pesticides away from cooking area (in a different room if possible).
If traps or pesticides are used to keep pests out of the food processing area, check them regularly and empty/replace as needed.		

I have read and understand the practices listed above.

Name: _____ Date: _____

Recall Plan Requirement

Referencing recall regulations in Wisconsin State Legislature– ATCP 70 , a food processing plant operator must have a written plan for identifying and recalling food produced at that plant, should a food recall become necessary. The operator shall update the plan as necessary, and shall make it available to the department for inspection and copying upon request.

Plan Contents as listed in ATCP 70

A recall plan shall do all of the following:

(a) Identify key individuals or positions that are responsible for planning, approving and implementing recalls on behalf of the food processing plant operator.

(b) Identify key individuals or entities to be contacted or consulted in connection with a recall.

(c) Include procedures for the routine identification, dating and tracking of food production lots, so that affected lots can be identified and distinguished from unaffected lots in the event of a recall.

(d) Include procedures to enable routine identification, dating and tracking of food shipments from the food processing plant. Tracking shall identify shipment recipients and contents, cross-referenced to production lots, so that recipients of affected lots can be contacted in the event of a recall.

(e) Include procedures for determining the nature and scope of a recall, including affected food production lots, shipments and shipment recipients.

(f) Include procedures for identifying and communicating with affected persons, including suppliers, food shipment recipients, down-line buyers, consumers, government agencies and others.

(g) Identify potential target audiences for recall information, including consumers, distributors and government agencies.

(h) Identify potential methods for communicating with target audiences.

(i) Identify key information, including the identity of the affected food, the reason for the recall, and suggested actions to be taken by affected persons, which may need to be communicated in the event of a recall.

Actual recall procedures may deviate from the recall plan as circumstances warrant.

Further Food Recall Emergency Information
Food Emergency Response Coordinator: (608) 224-4665
Food Emergency Response Hotline: (608) 224-4700

It is recommended that organizations carry out "mock recall" exercises at least annually in order to evaluate the ability to carry out the process if ever needed. Document the date and results of the exercise for your records.

Sample Recall Plan *(find fillable form here)*

RECALL PLAN

Please note that this is a template that meets the minimum requirements of Wis. Admin. Code ch. ATCP 70 and is intended to be filled in and modified as needed to apply to your specific business. Additional federal requirements may apply.

Plant Name _____

Plant Address _____

Plant License Number _____

Plant's Recall Coordinator: _____

Name: _____

Title: _____

Phone Number: _____

If the recall involves a positive pathogen and/or toxin test result for ready-to-eat food products that have left your facility's control, the Wisconsin Department of Agriculture, Trade and Consumer Protection (Department) shall be contacted within 24 hours.

Contact the Recall and Emergency Response Coordinator at the Department for assistance if needed.
Phone Number: 608-224-4714
Email: datcpfoodcomplaintsemergencyresponse@wisconsin.gov

Identify customers to be contacted in the event of a recall. A suggestion is to maintain a list of names, phone numbers, mail addresses, and email for contacts.

Describe and explain your system for determining which ingredients went into which products:
_____
_____
_____

Describe and explain your system of any lot coding applied to finished products. If lot coding will not be used, indicate by stating "none":
_____
_____
_____

Personal information that you provide may be used for purposes other than that for which it was originally collected (Wis. Stat. §15.04(1)(m)). Completion of this template is voluntary.¶

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Food and Recreational Safety
2811 Agriculture Dr., P.O. Box 8911, Madison, WI 53708
https://www.datcp.wi.gov

F-fd-73 (7/21)

Describe and explain your system for documenting distribution of your finished products. If there is no system in place, indicate by stating "none":

How would you be notified of any recalls for the ingredients that you use?

How will you contact the customers who received affected products?

Identify information to be communicated in the event of a recall such as:
(to be completed with relevant detail in the event of recall)

- Identity of the affected food:
- Reason for recall:
- Suggested actions to be taken by affected persons:

Plan Implementation and Revision Date:

Signature of Responsible Party:

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Further Information on Conducting a Food Product Recall

Links can be accessed by clicking the blue text in the digital version of this document.

Pure Maple Syrup is regulated by the US Food and Drug Administration as well as the Food Codes set by the Wisconsin State Legislature. Food businesses in Wisconsin at some time may be required to recall a potentially contaminated or misbranded product. It is important to have a response plan in place prior to a food safety event occurring; in addition, a written recall plan is required by **ATCP 70.32**

Contact the DATCP for more information about food product recalls.DATCP Home Food Recalls

When the DATCP determines that a food may be contaminated during inspection and observation; sampling and testing; or a food borne illness outbreak the manufacturer will be advised to conduct an industry initiated recall to remove the product from commerce. In the event a food must be removed from commerce, DATCP will contact the most responsible individual at that business and provide assistance as needed during the industry initiated recall.

As a food manufacturer you are required to contact DATCP when your internal system discovers an adulterated/misbranded food that has left your control. DATCP will assist you in determining the scope of the response required.

It is always in the best interest of the company to have drafted a direct customer recall notification letter and a recall press release for future use when deemed necessary. Press release recalls are used when the recalled food can be purchased by the general public and may result in serious injury or death.

Public Notification

Basic information that should be included in a recall press release would include:

Company Name

Company Contact Person Name and Phone

Date, Company Name, City and State is recalling [product name(s)] because [name exact reason for recall, how it was discovered and name the pathogen, foreign object or allergen] distributed [name states and distribution type]. This recall is limited to the following product(s) [effected lot codes and best by/use by dates]

Provide consumers with instructions e.g. Consumers who have this product in their home should not eat it and can discard it or return it to the place of purchase for a refund. For more information, consumers can contact [your name and number here].

Provide consumers with pathogen, allergen or foreign object symptom information [name adulteration or misbranding] and [explain illness symptoms]

In the event there have been no reported illnesses associated with the recall it is appropriate to state that fact. DATCP will assist in Press distribution to ensure the release reaches the intended consumer market.

Conduct With The Press And Public

Here are some points to remember in preparing talking points to share with the press and public:

- Have a representative available to explain the recall action to the news media and the public
- Have a telephone answering machine, call forwarding, or other mechanisms available to ensure easy access to the company by the public.
- Explain the recall plan with any employees involved in the recall process.
- Consult the Division of Food Safety's public information officer for help to prepare for answering questions from the news media.

Be prepared to answer specific questions about:

- What are all of the locations the affected product was distributed?
    - What should be done with the affected product (such as "Return it to point of purchase for a refund" or "Send the label to us and we will mail a refund to you"?)
    - The safety of other products (such as "The only recalled product is the chocolate ice cream in 1-gallon containers, with the code number of 01233, stamped on top lid of container in black ink. All other SFICC ice cream is NOT being recalled.")
- The cause of the problem that prompted the recall
- What is being done to correct that problem?

Food producers who must recall contaminated products must also consider their communication with the public when product has been sold to the public.

- Consumers might ask the following questions:
- Can I get my money back? How?
- What do I do with the contaminated product?
- Is it safe to eat your other products?
  (See also the specific questions for news media, above)

For all instances of communication concerning the recall, have a written document prepared in order to be consistent in disseminating information. At the same time, be prepared to answer specific questions not covered by the document.

Direct Customer Recall Notification Letter

It is also in the best interest of the company to have a draft direct customer notification developed to issue a recall notice to those customers that may use your product as an ingredient or will further distribute. This is not a public notice and should include the following information:

Model Recall Letter to be Sent by Recalling Firm to Direct Accounts

Initial phone and email notification should be followed by a letter sent by CERTIFIED MAIL. Document all phone contact with date, time and person contacted. Save all email correspondence for your records.

Recall Letter

Name, Address, & Telephone Number of Recalling Firm Date

Name & Address of Customer

Customer Contact Name and Phone Number Dear [customer contact name]:

Our firm is initiating a recall of [brand/name of product] due to [reason for recall].

Our records show that your firm purchased [amount] case(s) of above product from us in the past [months/years]. Discontinue selling and remove from sale your existing stock of [brand/name of product] and [provide customer with disposition instructions] of the recalled product as soon as possible. In addition, if you have further distributed this product, please identify your customers and notify them at once of this product recall to ensure they are implementing their recall plan.

In order to advise [regulatory authority; DATCP and/or FDA] about the effectiveness of this recall, please inform us of the quantity of the above product on hand immediately after you receive this recall letter. Please sign and send by FAX [FAX number] or email [email address] this letter back to us as soon as possible.

Thank you for your cooperation in this recall. If you have any question regarding this recall, please feel free to contact [firm's contact person] at [contact person's telephone number].

A second page of the letter should include a stock accountability document similar to the example below; to be returned to you.

Quantity on Hand:___ Cases/Cans/Packages (Circle One)

Disposition: ___Did not receive ___Segregated for pick up
___Followed Disposition Instructions ___Sold Out

[Most Responsible Persons Name], [Signature], and [Date]
Sincerely,
[Recall Firm Representative]

Businesses that decide not to initiate a recall for products determined to be adulterated or misbranded may be the subject of a Consumer Advisory press release and distributed to the news media. This consumer advisory will name the manufacturer, the food and the reason consumers should not consume the product. This consumer advisory will state that the manufacturer is not being cooperative and has refused to issue a recall for the named contaminated food(s).

Action taken by the DTCAP, charged with protecting the state’s food supply and its consumers, may include holding orders, Special Orders, and/ or Summary License Suspension to stop the production, distribution and sale of food produced, stored or sold by the implicated business. This action may be limited in scope or comprehensive to the entire business.

It is always in the best interest of the company to initiate their own recall. There will always be open communication between all parties involved to review the supporting scientific or

epidemiological evidence for each incident prior to issuing either a recall or consumer advisory notification.

What to Expect

From Regulators:
In the case of food product adulteration/misbranding, the regulatory agencies will likely ask the following questions:

Is the affected product out of your control?
Has it entered manufacturing commerce?
Has it entered retail commerce?
What was your immediate corrective action?
How much of the affected product has been produced?
How did you determine how much product has been affected?

Provide a complete distribution list of all of your customers that received the affected product, this list must include the customer name, address, contact name, phone number and email address. Has the product been distributed to a customer that further distributes?
Provide copies of all label information from the recalled product(s). Identify the root cause that created the problem.

Keeping reliable records of sanitation, ingredient sources, production records, sale and distribution will aid to limit the scope of a recall making it more efficient and effective. For example, a lot code system and dating to link your receiving documents, production records and shipping invoices will make tracing adulterated/misbranded shipments of food product more effectively traceable.

Some questions to consider are:

Where will the adulterated/misbranded food be segregated or stored?
How will the food be controlled to prevent accidental reintroduction into commerce?
What will be the disposition of the product, e.g. disposal or reprocessing?
Create a plan to describe your disposition process.
In the case of disposal, how and where will that occur?
In the case of reprocessing, will the intended use be for animal or human consumption?

If a product is considered for reprocessing prior approval by the regulating authority may be required. You must maintain ownership of the recalled product until reprocessing is complete and the reprocessing has been confirmed effective by DATCP prior to the product reentering commerce. Disposition must be documented.
Can your customers provide adequate documentation of disposition, e.g. photos, landfill receipt, or disposal document from their regulatory authority?

Food producers should also be aware that a recall might involve multiple regulatory agencies, especially if contaminated products have been sent out of Wisconsin. These may include local health departments, the FDA and/or USDA. DATCP will work in conjunction with these agencies to provide you with a single point of communication in an attempt to eliminate duplication of all resources.

It is recommended that organizations carry out "mock recall" exercises at least annually in order to evaluate the ability to carry out the process if ever needed. Document the date and results of the exercise for your records.

FDA Guidance on Conducting a Food Product Recall

Helpful information can be found in the FDA guidance documents for conducting food product recalls at the following web-site. https://www.google.com/url?q=https://www.fda.gov/safety/recalls-market-withdrawals-

safety-alerts/industry-guidance-recalls&sa=D&source=docs&ust=1663203757357925&usg=AOvVaw0vV30iKPnv2X25EIF81I6S

What about Flavored and Infused Syrups?

Links can be accessed by clicking the blue text in the digital version of this document.

According to WI DATCP found at DATCP Home Selling Maple Syrup in Wisconsin

Only water, salt, chemical preservatives, and defoaming agents may be added to maple syrup for the finished product to be labeled only as maple syrup. Once any other ingredient is added to maple syrup, it no longer meets the standard of identity for maple syrup and must be labeled as something else.

When the product no longer meets the standard of identity due to addition of ingredients it must be evaluated for safety. *What* is added and *how much* is added will affect the controls necessary for food safety and regulations that apply. Operators can start by obtaining samples of their finished product from at least two separate batches and having them analyzed for water activity. If the water activity is above 0.85 additional controls will be needed, such as acidification or refrigeration to address the concern of Clostridium botulinum.

For example, addition of whole, dried cinnamon sticks or vanilla beans are not likely to increase the water activity of maple syrup. However, addition of a few slices of hot peppers or other vegetables could significantly increase the water activity of the finished product. In both examples, testing samples for water activity from at least two different batches will provide information to guide the development of appropriate food safety controls. If your operations are licensed as a retail food establishment, you might be required to keep infused or flavored maple syrup that you manufacture refrigerated and use it within seven days or obtain a product assessment to determine whether it is a time/temperature control for safety food. A person who is a process authority may be helpful to evaluate the safety of your finished product, and knowing the water activity is likely critical to their evaluation.

For more information see the following regulations:

- §168.140, Maple Sirup
- §168.180, Table Sirup
- 21 CFR 114, Acidified Foods
- Wisconsin Food Code

A list of process authorities by state:

- Process Authorities by State (adfo.org)
- Manufacture of Acidified Canned Foods (wisc.edu)

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Where Can I find Wisconsin Regulations?

Links can be accessed by clicking the blue text in the digital version of this document.

Summary of Chapter ATCP 87 Honey and Maple Syrup; Subchapter II – Maple Syrup

Wisconsin Department of Agriculture Trade and Consumer Protection

Purpose: This document summarizes regulatory requirements for Maple Syrup. This rule does not apply to cane syrup, sorghum syrup or table syrup.

ATCP 87.11 Definitions

LIQUID MAPLE PRODUCTS: are maple syrup, concentrated maple sap (whether or not it is shelf-stable), and "maple sap water" (maple sap that has not been concentrated or has been concentrated to not more than 4 degrees Brix; this is a potentially hazardous food).

MAPLE-DERIVED WATER: is the permeate water removed from maple sap by reverse osmosis or other methods.

MAPLE SAP WATER: means sap from the trees of the genus Acer that has not been concentrated to a solids content of more than 4 percent, or 4 degrees Brix, and is potentially hazardous food as defined in s. ATCP 70.02(22).

ATCP 87.12 Licensing

FOOD PROCESSING PLANT LICENSE: Food processing license is required unless exempt as indicated below. A facility may hold only one license if they have a facility that is used solely for the concentration of maple syrup that is in the general premises of a facility that is also used for other food processing

EXEMPT: ATCP 70.03(7)(e) if all apply:

1. Sells maple syrup or concentrated maple sap only for further processing.
2. Gross sales within 1 year is less than $5,000.
3. Processer keeps written records for 2 years AND makes records available.
    a. Records must include: name and address of purchasing process or the date of sale, the amount of maple syrup or concentrated maple sap sold, and sale price.
4. Registers with the department using form F-fd-346.

RETAIL FOOD ESTABLISHMENT LICENSE: No changes

FOOD WAREHOUSE LICENSE: Is required if a licensed food processing plant that makes liquid maple products or maple-derived water, and receives, holds for more than 24 hours and then sells, without further processing, liquid maple products or maple-derived water obtained from another processor.

Requirements That Apply to Facilities Used Solely For Concentration of Maple Syrup

Facilities (a **separate** building or room) used **solely for concentration of maple sap** have specific requirements in ATCP 87. These facilities are often known as "sugar houses" and the concentration is done by heating, with or without a preceding reverse osmosis step. If other processing is done in the same facility in which concentration is done, ATCP 70 requirements **may** apply

ATCP 87.14 – General Requirements

CONSTRUCTION AND MAINTENANCE: no requirements for impervious materials, floor coving (sealed between floor and wall), or light-colored walls. The standard is a smooth, cleanable, and durable floor (no gravel floors; gravel floors must be cleanable), and tightly sealed walls and ceiling.

***If bottling is occurring under the same roof as concentration for maple syrup, 87.14(1) does not apply to the bottling area and the area must follow ATCP 70.04(2).

LIGHTING: must have at least 10 foot candles (108 lux) in all areas. Artificial lighting shall be equipped with protective shields.

VENTILATION: the standard is enough ventilation to prevent condensation.

TOILET AND HANDWASHING FACILITIES: A conveniently located, self-contained portable toilet meeting NR 113 requirements is allowed. Must have a hand-wash sink. If hand-wash sink is not located directly adjacent to the toilet facility, the facilities is required to have hand sanitizer available by toilet facility.

ALL facilities must have a handwashing sink in the food processing area.
English Hand Washing Sign: https://datcp.wi.gov/Documents/HandWashSignEnglish.pdf
Spanish Hand Washing Sign: https://datcp.wi.gov/Documents/HandWashSignSpanish.pdf

*** If bottling is occurring under the same roof as concentration for maple syrup, 87.14(5) does not apply to the bottling area and the area must follow ATCP 70.

CLEANING FACILITIES: A 3-compartment sink and drain boards are required in the food processing area. The operator may wash equipment in a 3-compartment sink at another DATCP or Agent licensed location as long as all of the following are met:

1. Written Standard Operating Procedure (SOP) including the following:
    a. Name and Location of the Licensed Facility.
    b. Procedure of washing, rinsing and sanitizing equipment.
    c. Procedure of how the facility will sanitarily transfer clean equipment back to the food processing plant.
2. Maintain records documenting date, time, and concentration of sanitizer used when sanitizing equipment. Records shall be retained for at least one year after they are made and shall be available to the department for inspection and copying upon request.

PLUMBING SYSTEMS AND SEWAGE DISPOSAL: Greywater (does not contain human waste) shall not be disposed of directly into the ground. Must be disposed of in a sanitary manner. This may include a POWTS (Private on-site wastewater treatment system) or a port a john. Greywater in a facility may include water from a hand-wash sink or a 3-compartment wash sink.

CONTROL OF PEST: Animals, including domesticated animals, shall be kept out of maple sap concentration areas.

FUEL STORAGE: Fuel must be stored outside the facility.

ATCP 87.26 Equipment and utensils

CONSTRUCTION AND MAINTENANCE; GENERAL:

- Lead or lead-alloy soldering may not be used in the construction or repair of food-contact surfaces.
- A frame encasing an evaporator hood connected to a vent shall be made of smooth, cleanable, food-grade material.
- Filtering material such as socks and presses shall be in a clean condition before use. Filter papers may not be re-used.

COVERING OF VESSELS CONTAINING MAPLE PRODUCTS: Vessels only holding maple sap before concentration of maple syrup do not need to be covered but need to store maple sap in a way to otherwise prevent contamination.

Authors note: This is flexible, but a covering is the best way to prevent contamination (ie. insects, birds, bats, etc. flying over and leaving deposits). Check with your sanitarian for coving material (i.e. roof over vat, poly sheeting, etc).

FILTERING AND DEFOAMING AGENTS: Filtering agents such as diatomaceous earth shall be non-toxic. If foaming and filtering agents contain any of the major food allergens (milk, eggs, wheat, peanuts, soybeans, tree nuts, fish, crustacean shellfish, sesame) this must be identified on the label.

ATCP 87.28 Personnel Standards

CLEANLINESS: Personal should adhere to a high level of cleanliness. Wash hands frequently but are not required to wear hair or beard restraints.

Applies to All Maple Facilities

ATCP 87.18 Processing, storing and packaging liquid maple product or maple-derived water

TEMPERATURE CONTROL**:** Non-shelf-stable concentrated maple sap, maple sap water, and maple derived water are potentially hazardous foods and shall be handled, stored and processed under temperature control if NOT being used to produce maple syrup.

ATCP 87.24 Maple-derived water

Maple-derived water obtained by the reverse osmosis treatment of maple sap may be used to clean evaporators or other equipment surfaces that contact maple sap before the maple sap is subjected to concentration by heating if **all** of the following apply:

1. Does not have any objectionable odors, flavors, or slime. This shall be sampled daily for organoleptic evaluation (smell, taste, sight, touch) but no record is needed.
2. Chemical treatment complies with Wisconsin Legislature: ATCP 70.20(4)
3. Storage tank shall be emptied, cleaned and sanitized at least once every 24 hours or when emptied if meeting ATCP 70.12.
4. May not be stored more than 24 hours.
    a. If storing more than 24 hours the temperature of the maple-derived water must be less than 45°F or greater than 145°F.
5. Hoses shall be clearly identified according to their intended use.

*** If the facility does not follow all of the above requirements and wants to use maple-derived water to clean evaporators or other equipment they must meet ATCP 70.20(3)(b)

ATCP 87.34 Recall Plan

RECALL PLAN: all food processing plants are required to have a written recall plan. See sample plan in the previous section

ATCP 87.36 Grading Requirement

Summary: DATCP Home Selling Maple Syrup in Wisconsin

Grading guidelines follow current USDA Grading Standards.
Standards can be found within this document or at Wisconsin Legislature: ATCP 87.36

FOOD PROCESSING PLANT LICENSED FACILITY GRADING REQUIREMENTS: If a facility has a food processing plant license, they MUST label their product as Grade A, processing grade, or substandard.

EXEMPT FACILITIES AND RETAIL ESTABLISHMENT GRADING REQUIREMENTS: If a facility does not hold a food processing plant license, they MAY label their product as Grade A, processing grade, substandard, or ungraded.

GRADE A MUST ACCOMPANY DESCRIPTIVE INFORMATION: e.g. "golden delicate", "amber rich", "dark robust", or "very dark strong". In other words, the descriptive information can only be used to describe Grade A syrup.

PROCESSING GRADE: Maple syrup labeled as processing grade must be packaged in containers greater than 5 gallons and labeled as Processing Grade.

SUBSTANDARD: Maple syrup that doesn't meet the requirements for processing grade would be in the substandard category.

BEARING GEOGRAPHICAL DESIGNATION

- WISCONSIN: a facility may label their product with a Wisconsin Designation (such as Made in Wisconsin) if the maple sap was concentrated in Wisconsin to meet the definition of Maple Syrup.
- U.S: a facility may not label their product as Wisconsin Designation if the maple sap was not concentrated in Wisconsin to meet the definition of Maple Syrup. However, they may label the product as "Bottled in Wisconsin" or "Packaged in Wisconsin" if bottling or packaging were done in Wisconsin.

Wisconsin Legislature: ATCP 70.26 Food Packaging and Labeling

FOOD PACKAGING AND LABELING: Packaged food shall be packaged and labeled according to ATCP 70.26. and Federal guidelines in 21 CFR part 101

ENTIRE Chapter ATCP 87 Honey and Maple Syrup; Subchapter II – Maple Syrup

Information current as of July, 2022. To be sure this information is current, use the link provided to access the form from WI State Legislature. Links can be accessed by clicking the blue text in the digital version of this document.

Chapter ATCP 87

HONEY AND MAPLE SYRUP

Subchapter I — Honey has been removed for the purpose of this document

Subchapter II — Maple Syrup and Certain Other Maple Products

ATCP 87.11 Definitions.
ATCP 87.12 Licensing.
ATCP 87.14 Food processing plant facilities used solely for concentration of maple sap.
ATCP 87.16 Food processing plant facilities for pre-package processing of maple syrup and shelf-stable concentrated maple sap.
ATCP 87.18 Processing, storing, and packaging liquid maple products or maple-derived water.
ATCP 87.20 Containers for packaging liquid maple products or maple-derived water.
ATCP 87.22 Operations water at food processing facilities used solely for the concentration of maple sap.
ATCP 87.24 Maple-derived water.
ATCP 87.26 Equipment and utensils used in food processing plant facilities used solely for concentration of maple sap.
ATCP 87.28 Personnel standards in food processing plant facilities used solely for concentration of maple sap.
ATCP 87.30 Processing liquid maple products or maple-derived water by methods other than concentration.
ATCP 87.32 Production of maple-derived water.
ATCP 87.34 Recall plan.
ATCP 87.36 Description and use of grade designations, terminology, and geographical designations to label containers of maple syrup.
ATCP 87.38 Enforcement.

Note: Chapter Ag 92 was renumbered chapter ATCP 157 under s. 13.93 (2m) (b) 1., Stats., Register, April, 1993, No. 448.

Subchapter II — Maple Syrup and Certain Other Maple Products

Note: Subchapter II of Chapter ATCP 87 was repealed and a new Subchapter II created in Register May 2017 No. 737.

ATCP 87.11 Definitions. In this chapter:

(1) "Clean" refers to maple syrup that is free from visible foreign material such as pieces of bark, soot, dust, or dirt.

(2) "Damage" means any defects that materially affect the appearance, edibility, or quality of maple syrup. Damaged maple syrup may be badly scorched, fermented, or have one or more off flavors or odors.

(3) "Degrees Brix" means the percentage by weight concentration of total soluble solids, mainly sugar, as measured using a refractometer calibrated at 68°F, and to which any applicable temperature correction has been made, or by any other method that gives equivalent results.

(4) "Delicate taste" means a maple flavor of mild intensity.

(5) "Department" means the Wisconsin department of agriculture, trade and consumer protection.

(6) "Division" means the division of food and recreational safety in the department.

(7) "Liquid maple products" means maple syrup, shelf-stable concentrated maple sap, non-shelf-stable concentrated maple sap, or maple sap water.

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

(9) "Maple sap water" means sap from the trees of the genus Acer that has not been concentrated to a solids content of more than 4 percent, or 4 degrees Brix, and is a potentially hazardous food as defined in s. ATCP 70.02 (33).

(10) "Maple syrup" means the liquid food derived by concentrating and heating sap from the trees of the genus Acer, as defined in 21 CFR 168.140, having a solids content of not less than 66 percent by weight, or 66 degrees Brix, and not containing added sweeteners.

(11) "Non-shelf-stable concentrated maple sap" means sap from the trees of the genus Acer that has been concentrated using heating or other methods, has a solids content of more than 4 percent and less than 66 percent by weight, or from 4 to 66 degrees Brix, and will support microbial growth when stored at temperatures not lower than 41°F (5°C) or higher than 135°F (57°C).

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

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

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

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

(16) "Shelf-stable concentrated maple sap" means sap from the trees of the genus Acer that has been concentrated using heating or other methods, has a solids content of less than 66 percent by weight, or less than 66 degrees Brix, and will not support microbial growth when stored at temperatures not lower than 41°F (5°C) or higher than 135°F (57 °C).

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

(18) "Taste" means the intensity of maple flavor.

(19) "Turbidity" means the suspension of fine mineral particles in the maple syrup such that the syrup clarity is reduced.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; corrections in (3), (11), (16) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (9) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.12 Licensing.

(1) Food processing plant license. Unless exempted in s. ATCP 70.06 (11) (e), no person shall process and sell at wholesale liquid maple products, or maple-derived water, without a valid license issued by the department for a food processing plant under s. 97.29, Stats. The person holding a food processing plant license shall meet all applicable requirements of ch. ATCP 70 and this subchapter. A single food processing plant license may apply to a location with a street address and an additional location, without a street address, used solely for concentration of maple sap.

(2) Retail food establishment license. Unless exempted in s. ATCP 75.063 (5), no person shall process and sell to consumers liquid maple products, or maple-derived water, without a valid license issued by the department for a retail food establishment under s. 97.30, Stats. The person holding a retail food establishment license shall meet all requirements of s. ATCP 75.03.

(3) Food warehouse license. Unless exempted in ss. ATCP 71.01 (4) and 71.02 (1), a person operating a licensed food processing plant that makes liquid maple products, or maple-derived water, and receives, holds for more than 24 hours, and then sells, without further processing, liquid maple products or maple-derived water obtained from another processor, shall hold a food warehouse license under s. 97.27, Stats.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; corrections in (3) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (1), (2) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.14 Food processing plant facilities used solely for concentration of maple sap.

(1) Construction and maintenance; general. Buildings and facilities at a licensed food processing plant used to process liquid maple products, or maple-derived water by methods other than concentration shall be constructed and maintained in accordance with s. ATCP 70.08. Buildings and facilities at a licensed food processing plant used solely for concentration of maple sap shall be of sound construction, and shall be constructed with tightly sealed walls and ceiling to exclude pests. The floor of the food processing facility shall be finished with a smooth, cleanable, and durable material, and shall be maintained in a clean condition. The premises immediately adjacent to the facility shall be well drained and kept free of accumulations of garbage, refuse, and other potential health nuisances.

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

(3) Lighting.

(a) Lighting in every area of the maple sap concentration facility, whether natural or artificial, shall be not less than 10 foot candles, or 108 lux.

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

(4) Ventilation. Ventilation in the maple sap concentration facility shall be sufficient to prevent condensation.

(5) Toilet and handwashing facilities. All employees working in the maple sap concentration facility shall have convenient access to a sanitary toilet in a toilet room, complying with applicable local law, or a self-contained portable toilet maintained in compliance with ch. NR 113. Each maple sap concentration area shall be equipped with a conveniently located handwashing sink and each sink shall be provided at all times with potable water under pressure, soap in a soap dispenser, a sanitary single-service means of drying the hands, and an easily cleanable covered trash receptacle. A single handwashing facility may also service areas in which pre-package processing, storage, and packaging of liquid maple products and maple-derived water are done, provided the handwashing sink is conveniently located for employee use.

(6) Cleaning facilities.

(a) If equipment, utensils, or containers are cleaned or sanitized manually, the maple sap concentration facility shall be equipped with a sink comprised of at least 3 compartments that is suitable for all manual cleaning and sanitizing operations. Sinks shall be conveniently located and adequate in number. Each sink shall be constructed of stainless steel or of one or more other materials approved by the department.

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

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

(d) Brushes and cleaning tools shall be constructed of materials that can be cleaned and sanitized, and shall be kept clean, and in good repair. Wiping cloths used to clean equipment and utensils shall be cleaned, sanitized, and dried after each day's use, and shall be stored in an approved sanitizing solution between uses during the processing day. Sanitizing solutions for wiping cloths shall be changed frequently enough to maintain an effective concentration of sanitizing chemical or at least daily, whichever is more frequent. Sanitizers shall be used in accordance with the manufacturer's instructions. Wiping cloths used to clean food contact surfaces of equipment and utensils shall not

be used for any other purpose. Single service disposable towels may be used in place of re-usable cloths if they are discarded after use.

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

(7) Plumbing system and sewage disposal. Sewage and waste materials from the maple sap concentration facility shall be removed in a sanitary manner, in compliance with applicable state and local regulations. All plumbing, plumbing fixtures, and equipment shall be designed, installed, and maintained to prevent backflow, backsiphonage, cross-connections, and contamination.

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

(8) Garbage and refuse disposal.

(a) Garbage and refuse shall not be allowed to accumulate in or around the maple sap concentration facility. Garbage and refuse shall be removed as often as necessary to maintain the premises in a clean and sanitary condition.

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

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

(d) Garbage and refuse may not be burned on the premises, except in compliance with state and local laws. Garbage, refuse, and building materials shall not be burned on the premises if burning may contaminate liquid maple products or maple-derived water produced at the facility.

(9) Control of pests.

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

(b) Animals, including domesticated animals, shall be kept out of maple sap concentration areas.

(10) Storage of fuel for maple sap evaporator. Evaporation equipment may be fueled by natural gas, oil, or wood. All fuel shall be stored outside the maple sap concentration facility.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044; cr. Register May 2017 No. 737, eff. 6-1-17; corrections in (5) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register May 2021.

ATCP 87.16 Food processing plant facilities for pre-package processing of maple syrup and shelf-stable concentrated maple sap. Facilities for pre-package processing of maple syrup and shelf-stable concentrated maple sap shall be constructed and maintained in accordance with s. ATCP 70.08.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.18 Processing, storing, and packaging liquid maple products or maple-derived water.

(1) Transfer to another building or area. After maple sap concentration is done, liquid maple products and maple-derived water may be transferred from one building or area, to another building or area, operated under a food processing plant license, provided that the transfer vessels meet the requirements of s. ATCP 70.12 and the transfer method prevents contamination.

(2) Unpackaged product storage rooms. Any room, used for storage of unpackaged liquid maple products or maple-derived water, shall be constructed and maintained in accordance with s. ATCP 70.08.

(3) Container-filling and packaged-product storage rooms. Any room in which containers are filled with liquid maple products or maple-derived water, or in which these packaged products are stored, shall be constructed and maintained in accordance with s. ATCP 70.08.

(4) Temperature control. Non-shelf-stable concentrated maple sap, maple sap water, and maple-derived water are potentially hazardous foods as defined in s. ATCP 70.02 (33) and shall be handled, stored, and processed in compliance with s. ATCP 70.26 (1) to (3).

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; corrections made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.20 Containers for packaging liquid maple products or maple-derived water. All containers for packaging liquid maple products or maple-derived water shall be stored in a manner to prevent contamination and shall comply with the requirements of s. ATCP 70.26.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.22 Operations water at food processing facilities used solely for the concentration of maple sap.

(1) Operations water as defined in s. ATCP 70.02 (31) used at food processing plant facilities used solely for the concentration of maple sap shall be obtained from a source that complies with ch. NR 811 or 812.

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

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

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

(5) Operations water, transported from elsewhere to the maple sap concentration facility, shall be transported in compliance with the requirements of s. ATCP 70.20 (6).

(6) Condensate from the thermal concentration of maple sap may be collected for re-use, provided the collection equipment does not contaminate, or have the potential to contaminate, the water. The condensate shall be collected and stored in containers that meet the requirements of s. ATCP 70.26. Reclaimed condensate from the thermal concentration of maple sap may be used to clean non-food-contact surfaces. Reclaimed condensate from the thermal concentration of maple sap may be used to clean evaporators and other equipment food-contact surfaces if approved by the division in accordance with s. ATCP 70.20 (3).

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; corrections in (3) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (1), (5), (6) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.24 Maple-derived water. Maple-derived water obtained by the reverse osmosis treatment of maple sap may be used to clean evaporators or other equipment surfaces that contact maple sap before the maple sap is subjected to concentration by heating if all of the following apply:

(1) The maple-derived water does not have any objectionable odors, flavors, or slime. The maple sap concentration facility operator shall sample and organoleptically evaluate the maple-derived water daily.

(2) Chemical treatment of the maple-derived water complies with s. ATCP 70.20 (4).

(3) Any storage tank used to hold maple-derived water shall be constructed to meet the requirements of s. ATCP 70.12 (2) and shall be emptied, cleaned, and sanitized at least once every 24 hours.

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

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

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (2), (3) made under s. 13.92 (4) (b) 7., Stats., Register May 2025 No. 785.

ATCP 87.26 Equipment and utensils used in food processing plant facilities used solely for concentration of maple sap.

(1) Construction and maintenance; general.

(a) Equipment and utensils used at a licensed food processing plant in processing maple syrup or shelf-stable concentrated maple sap using methods other than concentration, or in processing non-shelf-stable concentrated maple sap, maple sap, and maple-derived water, shall be constructed, used, and maintained in accordance with s. ATCP 70.12. Equipment and utensils used solely for concentration of maple sap including tanks, bulk containers, filters, hydrometers, thermometers, and skimmers, shall be of sanitary design and construction. Lead or lead-alloy soldering may not be used in the construction or repair of food-contact surfaces. Equipment and utensils used solely for concentration of maple sap shall be readily accessible for cleaning and inspection and shall be constructed so that items can be easily cleaned. Equipment and utensils used solely for concentration of maple sap shall be kept clean and in good repair.

(b) Food contact surfaces of equipment and utensils shall be constructed of stainless steel or of one or more other food-grade materials that are smooth, impervious, nontoxic, non-corrodible, nonabsorbent, and durable under normal use conditions. Food contact surfaces shall be easily cleanable, and shall be free of breaks, open seams, cracks, or similar defects. Food contact surfaces shall not impart any odor, color, taste, or adulterating substance to food. Food contact surfaces shall be readily accessible for manual cleaning. A frame encasing an evaporator hood connected to a vent shall be made of a smooth, cleanable, food-grade material.

(c) Single-service articles shall be stored in the original containers in which they were received, or in other closed containers which will protect them from contamination before use. Single-service articles may not be reused.

(d) Filtering materials such as socks and presses shall be in a clean condition before use. Filter papers may not be re-used.

(2) Covering of vessels containing maple products. Vessels holding liquid maple products or maple-derived water shall be covered to prevent contamination. This provision does not apply to vessels only holding maple sap before concentration of the maple sap.

(3) Ultraviolet lights. Ultraviolet light sources shall be shielded or shatterproof.

(4) Filtering and defoaming agents. Filtering agents such as diatomaceous earth shall be non-toxic. Foaming agents and other processing aids shall be food grade and shall not contain any ingredient originating from milk, eggs, wheat, peanuts, soybeans, tree nuts, fish, or crustacean shellfish.

(5) Location and installation of equipment. Equipment that cannot be easily moved shall be installed in a manner that prevents liquid or debris from accumulating under or around the equipment. Equipment shall be installed so that there is adequate clearance on all sides for cleaning and maintenance.

(6) Cleaning and sanitizing equipment and utensils; general.

(a) All food contact surfaces of equipment and utensils shall be cleaned as often as necessary to remove visible debris and the equipment shall be sanitized before the next contact with maple sap or maple syrup. When seasonal processing is completed, equipment and utensils shall be cleaned and stored in a sanitary manner.

(b) Reverse osmosis equipment shall be cleaned according to the manufacturer's directions.

(c) Sanitizers and methods used to sanitize equipment under this section shall comply with s. ATCP 70.28.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; corrections in (1) (b), (c), (6) (c) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (1), (6) (c) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.28 Personnel standards in food processing plant facilities used solely for concentration of maple sap.

(1) **General.** Personnel, in a licensed food processing plant facility used solely for concentration of maple sap to produce maple syrup and shelf-stable concentrated maple sap, shall meet the requirements of this section.

(2) Cleanliness. Persons engaged in concentrating maple sap shall maintain a high degree of personal cleanliness, and shall observe good hygienic practices during all working periods. Persons engaged in concentrating maple sap shall wash their hands before beginning work and upon returning to work after using toilet facilities, eating, smoking, or engaging in other activities that may contaminate the hands.

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

(a) A reportable communicable disease.

(b) Any symptom of an acute gastrointestinal illness.

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

(4) Consumption of food or beverages, and use of tobacco. No person may consume food or beverages or use tobacco in any licensed food processing plant facility used solely for concentration of maple sap or in any area where food processing equipment or utensils are cleaned or stored, except in designated areas which are separated from the processing area. This subsection does not prohibit a sanitary drinking water fountain in a processing, storage, or packaging area.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (3) (c) made under s. 35.17, Stats., Register May 2017 No. 737.

ATCP 87.30 Processing liquid maple products or maple-derived water by methods other than concentration.

(1) Equipment and utensils used at a licensed food processing plant in processing liquid maple products or maple-derived water using methods other than concentration shall be constructed, used, and maintained in accordance with s. ATCP 70.12

(2) Equipment and utensils, described in sub. (1), shall be cleaned and sanitized in accordance with ss. ATCP 70.14 (7) to (10).

(3) Personnel, in licensed food processing plants processing the products listed in this section, shall meet the requirements of s. ATCP 70.10.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (2) made under s. 35.17, Stats., Register May 2017 No. 737; corrections made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.32 Production of maple-derived water.

(1) Prohibited for use in certain beverages. Maple-derived water may not be used as an ingredient in bottled drinking water or a soda water beverage, as defined in s. 97.34 (1), Stats.

(2) Exemption from bottled water requirements. The requirements for bottling establishments in subch. V of ch. ATCP 70 are not applicable to bottled maple-derived water.

(3) Division approval required. The process and equipment used for production of maple-derived water shall meet the requirements of s. ATCP 70.24 (1) to (3), and be reviewed and approved by the division before use.

(4) Annual testing. The operator of a food processing plant producing maple-derived water as ingredient water, as defined in s. ATCP 70.02 (26), shall collect a sample of maple-derived water at least annually and have the sample analyzed at a laboratory that is certified under ch. ATCP 77 to perform analysis of water for coliform bacteria levels, standard plate count, and either turbidity or organic content, as specified in s. ATCP 70.20 (3) (a) 4.

(5) Standards. The maple-derived water shall contain less than 1 coliform bacterium per 100 mL, have a standard plate count of not more than 500 colony-forming units per 500 mL, and either turbidity of less than 5 units or organic content of less than 12 mg per liter, as measured by the c**hemical oxygen demand or permanganate-consumed tests, as specified in s. ATCP 70.20 (3) (a) 4.**

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (2) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (3) to (5) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.34 Recall plan.

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

(2) Plan contents. A plan pursuant to sub. (1) shall meet the requirements of s. ATCP 70.32.

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (1), (2) made under s. 35.17, Stats., Register May 2017 No. 737; correction in (2) made under s. 13.92 (4) (b) 7., Stats., Register May 2021 No. 785.

ATCP 87.36 Description and use of grade designations, terminology, and geographical designations to label containers of maple syrup.

(1) Grading requirement and use of grading terminology and geographical designations. A person processing maple syrup, who is required under s. ATCP 87.12 (1) to hold a food processing plant license, shall label maple syrup containers for sale, with the grade designation in subs. (3) to (5), accurately describing the maple syrup in the containers. Other persons processing maple syrup may label maple syrup containers for sale with the grade designation in subs. (3) to (5) or the term "ungraded" that accurately describes the maple syrup in the containers. If the label on containers of maple syrup contains one or more of the Grade A color class terms or flavor descriptors in sub. (6), then the label must include the grade designation in subs. (3) to (5) or the term "ungraded" that accurately describes the maple syrup in the containers. The Wisconsin geographical designation may precede the grade designations in subs. (3) to (5) or the term "ungraded", if all maple syrup in the container was produced in Wisconsin by concentrating maple sap. If some of the maple syrup in the container was produced by concentrating maple sap outside of Wisconsin, the U.S. geographical designation may precede the grade designation in sub. (3), but shall not precede the grade designations in subs. (4) and (5). If some of the maple syrup in the container was produced by concentrating maple sap outside of Wisconsin but the container was filled and sealed in Wisconsin, the container may be labeled "Bottled in Wisconsin" or "Packaged in Wisconsin."

(2) Standards. The following grade designations shall be used to label containers of maple syrup, when such labeling is required under sub. (1), provided the product in the container is accurately described by the definition of one of the stated grade designations in subs. (3) to (5) and the grade A color class in sub. (6), if applicable. The grade of a lot of maple syrup shall be determined by using the procedures in 7 CFR parts 52.1 to 52.83.

(3) Grade A. No deviants for damage shall be labeled as Grade A. The grade designation Grade A may be applied to maple syrup that has all of the following characteristics:

(a) Is not more than 68.9 percent solids content by weight, or 68.9 degrees Brix.
(b) Has good uniform color.
(c) Has good flavor and odor, and intensity of flavor, or maple taste, normally associated with the color class in sub. (6).
(d) Is free from off flavors and odors considered as damage.
(e) Is free from cloudiness, turbidity, sediment, and is clean.

(4) Maple syrup for processing (Processing Grade). Maple syrup bearing the grade designation maple syrup for processing, or processing grade, shall be packed in containers holding at least 5 gallons (18.925 liters) and shall not be packaged in containers smaller than 5 gallons (18.925 liters) for retail sale. Processing grade syrup is maple syrup that has all of the following characteristics:
(a) Fails to meet the requirements for grade A maple syrup.
(b) Possesses a fairly good characteristic maple taste.
(c) Is fairly clean and fairly free of damage, turbidity, or cloudiness.
(d) May be in any color class and have any percent light transmittance.
(e) Has not more than 68.9 percent solids content by weight, or not more than 68.9 degrees Brix.
(f) May contain off flavors and odors.
(g) May have a very strong taste.

(5) Substandard. Maple syrup bearing the grade designation substandard is syrup that fails to meet the requirements in sub. (4) for processing grade maple syrup.

(6) Color classes for grade a maple syrup. The color class of grade A maple syrup is determined by the percent of transmittance of light at a wavelength of 560 nanometers through the syrup, as measured with a spectrophotometer using matched square optical cells having a 10 mm light path. The color value is expressed as percent of light transmission, as compared to analytical grade glycerol fixed at 100 percent. Percent transmittance is denoted by %Tc. Any method that provides equivalent results may be used to

determine grade A maple syrup color class. Grade A maple syrup color classes and corresponding flavor descriptors are shown in Table 1. - See PDF for table

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17; correction in (title), (1), (2), (4) (c) made under s. 35.17, Stats., Register May 2017 No. 737.

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

History: EmR 1704: emerg. cr., eff. 3-7-17; CR 16-044: cr. Register May 2017 No. 737, eff. 6-1-17.

WI Regulations Chapter ATCP 70- Food Processing Plants

Information current as of July, 2022. To be sure this information is current, use the link provided to access the form from WI State Legislature. Links can be accessed by clicking the blue text in the digital version of this document.

Chapter ATCP 70
WHOLESALE FOOD MANUFACTURING

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Note: Chapter Ag 40 as it existed on October 31, 1989, was repealed and a new chapter Ag 40 was created effective November 1, 1989; Chapter Ag 40 was renumbered ch. ATCP 70 under s. 13.93 (2m) (b) 1., Stats., Register, April, 1993, No. 448; **Chapter ATCP 70 as it existed on January 31, 2020, was repealed and a new chapter ATCP 70 was created effective February 1, 2020**.

Subchapter I — Scope and Definitions

ATCP 70.01 Scope. This chapter applies to all food processing plants, as defined in s. ATCP 70.02 (23).

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

ATCP 70.02 Definitions. As used in this chapter:

(1) " Alcohol beverage" means an alcohol beverage as defined in s. 125.02 (1), Stats.

(2) " Approved sanitizing solution" means a substance or compound approved by the department for the sanitizing of equipment or utensils under s. ATCP 70.28 (5).

(3) " Bakery" means any place where bread, cookies, crackers, pasta, or pies, or any other food product for which flour or ground meal is the principal ingredient, are baked, cooked, or dried, or prepared or mixed for baking, cooking, or drying, for sale as food.

(4) " Bottle" means the immediate package or container in which bottled drinking water, soda water beverage, or alcohol beverage is sold or distributed for consumption. "Bottle" includes a bottle cap or other seal for a bottle.

(5) " Bottled drinking water" means all water packaged in bottles or similar containers and sold or distributed for drinking purposes. "Bottled drinking water" includes distilled water, artesian water, spring water, and mineral water, whether carbonated or uncarbonated.

(6) " Bottling establishment" means any place where drinking water, soda water beverage, or alcohol beverage is manufactured or bottled for sale. "Bottling establishment" does not include a retail establishment either engaged in the preparation and sale of beverages, under a license issued under s. 125.26 or 125.51, Stats., or licensed under s. 97.30 or s. 97.605, Stats.

(7) " C-I-P system" means equipment which is designed, constructed, and installed to be cleaned in place by the internal circulation of cleaning and sanitizing solutions onto product contact surfaces. "C-I-P System" includes separate equipment used to store or deliver cleaning and sanitizing solutions to the food contact surfaces.

(8) " Canning" means the preservation and packaging in hermetically sealed containers of low-acid or acidified foods.

(9) " Cold-process smoked fish" or "cold-process smoke flavored fish" means fish which is treated with smoke or smoke flavoring to give it a smoked flavor, but which is not fully cooked or heat treated to

coagulate protein in fish loin muscle. “Cold-process smoked fish” or “cold-process smoke flavored fish” may not be heated above 90° F during processing because the safety of the treatment is partially dependent on the survival of harmless microorganisms indigenous to the fish.

(10) “ Confectionary" means any place where candy, fruit, nut meats, or any other food product is manufactured, coated, or filled with saccharine substances for sale as food.

(11) “ Continuous operation” means operating without interruption beyond 24 hours, with no interruptions after 24 hours longer than a period approved by the department.

(12) “ Critical control point" means a step in food processing at which a failure to monitor a food safety parameter such as pH, temperature, time, or water activity (aw), or a failure to control any food safety parameter within critical limits or according to specific criteria, may result in the unacceptable risk of a potentially adverse impact on human health.

(13) “ Department" means the state of Wisconsin department of agriculture, trade and consumer protection.

(14) “ Equipment" means an implement, vessel, machine, or apparatus, other than a utensil, which has one or more food contact surfaces and is used in the handling or processing of food at a food processing plant. “Equipment" includes C-I-P systems.

(15) “ Facility” as used in s. ATCP 70.04 has the meaning given in 21 CFR 117.3.

(16) “ Fish" means fresh or saltwater finfish; crustaceans; forms of aquatic life other than birds or mammals including, but not limited to, alligators, frogs, aquatic turtles, jellyfish, sea cucumber, sea urchin, and their roe; and all mollusks, if intended for human consumption.

(17) “ Fish processing plant" means a food processing plant which produces processed fish or fishery products.

(18) “Fishery product” means any human food product in which fish is a characterizing ingredient.

(19) “ Food" means:

(a) Articles ingested as food or drink by persons.

(b) Chewing gum.

(c) Components of articles specified in pars. (a) and (b).

(20) “ Food contact surface" means any surface of equipment, utensils, or food packages with which food normally comes in direct contact, or from which materials may drain, drip, or otherwise be drawn into or onto food.

(21) “ Food package" means the immediate container in which food is sold or shipped from a food processing plant. “Food package" includes a bulk container or shipping container which has one or more food contact surfaces.

(22) “ Food processing" means the manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking, grinding, cutting, mixing, coating, stuffing, packing, bottling or packaging, or through any other treatment or preservation process. “Food processing" includes the activities of a bakery, confectionary, vending machine commissary licensed under s. 97.605, Stats., or bottling establishment, and also includes the receipt and salvaging of distressed food for sale or use as food. It also includes the packaging of seeds that have been harvested, and dried after the harvest for sale as food. These seeds include unpopped popcorn whether shelled or on the cob, black beans, wild rice, sunflower seeds, pumpkin seeds, and soybeans. “Food processing" does not include any of the following:

(a) Activities performed under a dairy plant license issued under s. 97.20, Stats.

(b) Activities performed under a meat establishment license issued under s. 97.42, Stats.

(c) The retail preparation and processing of meals for sale directly to consumers or through vending machines if the preparation and processing is covered under a retail food establishment license issued under s. 97.30, Stats., or other license issued under s. 97.605, Stats.

(d) Activities inspected by the United States department of agriculture under 21 USC 601 et seq. or 21 USC 451 et seq.

(e) The extraction of honey from the comb, or the production and sale of raw honey or raw bee products by a beekeeper from their own apiaries.

(f) The washing and packaging of fresh fruits and vegetables if the fruits and vegetables are not otherwise processed at the packaging establishment.

(g) The receipt and salvaging of distressed food for sale or use as food if the food is received, salvaged, and used solely by a charitable organization, and if contributions to the charitable organization are deductible by corporations in computing net income under s. 71.26 (2) (a), Stats.
(h) The collection, packing, and storage of eggs from a flock of not more than 150 laying birds by an egg producer who only sells the eggs directly to consumers at the premises where the eggs were laid, at a farmers' market, or on an egg-sales route as defined in s. ATCP 88.01.
(i) The collection, packaging, and storage of nest-run eggs, as defined in s. ATCP 88.01, from a flock of laying birds by an egg producer who is registered with the department in accordance with s. ATCP 88.02 and who sells the nest-run eggs to an egg handler.
(j) The packaging of seeds that have not been harvested until they have dried naturally in the field and are only handled by harvesting, storing, and packaging for sale as food.
(23) " Food processing plant" means any place used primarily for food processing, where the processed food is not intended to be sold or distributed directly to a consumer. "Food processing plant" does not include any mobile establishment, retail food establishment subject to the requirements of s. 97.30, Stats., or any restaurant or other establishment holding a license under s. 97.605, Stats., to the extent that the activities of that establishment are covered by s. 97.30, Stats., or the license under s. 97.605, Stats.
(24) " Hazard analysis and critical control point plan" or "HACCP plan" means a food processing plan under which a food processing plant operator effectively identifies, and prevents, controls, or eliminates food safety hazards by monitoring food safety parameters at critical control points, and by controlling those parameters within critical limits.
(25) " Hot-process smoked fish" or "hot-process smoke flavored fish" means fish that is either of the following:
(a) Fully cooked or heat treated, or sold or represented as being fully cooked or heat treated, so that the internal temperature of the fish has been maintained for at least 30 minutes at not less than 145° F (62.8° C) or an equivalent process validated for lethality against pathogenic organisms.
(b) Fully cooked or heated in accordance with par. (a) and treated with smoke or smoke flavoring to give it a smoked flavor.
(26) " Ingredient water" means water used by a food processing plant as an ingredient for food.
(27) " Juice" means aqueous liquids expressed or extracted from fruits or vegetables, purées of the edible portions of fruits or vegetables, or combinations or concentrates of those liquids or purées, which are used as whole beverages or beverage ingredients.
(28) " Loin muscle" means the longitudinal quarter of the great lateral muscle of a fish, freed from skin, scales, visible blood clots, bones, gills, and viscera, and from the non-striated part of such muscle, which part is known anatomically as the median superficial muscle.
(29) " Major food allergen" includes any food or food ingredient, other than highly refined oil or an ingredient derived from highly refined oil, which contains protein derived from milk, eggs, finfish, crustacean shellfish, tree nuts, wheat, peanuts, or soybeans. "Major food allergen" does not include a food that is exempted by the secretary of the United States department of health and human services pursuant to 21 USC 321 (qq) (2).
(30) " Official Methods of Analysis" means the *Official Methods of AOAC International*, eighteenth edition revision 2 (2007).
Note: Those portions of the "Official Methods of Analysis" cited in this chapter are on file with the department and the legislative reference bureau. The Official Methods of Analysis of AOAC International may be obtained from the AOAC International, 2275 Research Blvd., Rockville, MD 20850.
(31) " Operations water" means water used by a food processing plant for cleaning equipment and utensils, transporting food, handwashing, or other cleaning or sanitizing purposes.
(32) " Organoleptic quality" means quality as assessed by means of sight, smell, touch, or taste.
(33) " Potentially hazardous food" also means "TCS (time/temperature controlled for safety) Food", and has the meaning given in ch. ATCP 75 Appendix (Wisconsin Food Code), part 1-201.10 (B).
(34) " Processed fish" means fish that is preserved for human consumption by means of hot or cold smoking, curing, salting, drying, marinating, pickling, fermenting, or related processes. "Processed fish" does not include fish processed in accordance with ss. ATCP 70.36 or 70.38.
(35) " Qualified facility" as used in s. ATCP 70.04 has the meaning given in 21 CFR 117.3.
(36) "Ready-to-eat food" has the meaning given in ch. ATCP 75 Appendix (Wisconsin Food Code), part 1-201.10 (B).

(37) " Reduced oxygen packaging" has the meaning given in ch. ATCP 75 Appendix (Wisconsin Food Code), part 1-201.10 (B).
(38) " Retail" means selling food or food products directly to any consumer only for consumption by the consumer or the consumer's immediate family or non-paying guests.
(39) "Roe" as used in s. ATCP 70.48 means fish eggs, including fish eggs that are still enclosed in the ovarian membrane.
(40) " Safe temperatures" for the holding or storage of potentially hazardous foods means one of the following as appropriate:
(a) Temperatures at or above 135° F (57° C) for heated foods.
(b) Temperatures at or below 41° F (5° C) for refrigerated foods, except as provided in par. (c).
(c) Temperatures at or below 38° F (3.4° C) for refrigerated, raw fish, cold smoked fish, or raw fish products, that are vacuum packed and have only refrigeration as a critical control point.
(d) Temperatures that maintain frozen food in a constantly frozen condition.
(41) " Salt content" means the percent salt (sodium chloride) as determined by the method described in sections 18.034 and 18.035 of the *Official Methods of Analysis*, multiplied by 100 and divided by the sum of the percent salt (sodium chloride) and the percent moisture in the finished product as determined by the method described in section 24.002 of the *Official Methods of Analysis*.
(42) " Sanitize" means the application of cumulative heat or chemicals that, when evaluated for efficacy, is sufficient to yield a reduction of 5 logs, which is equal to a 99.999% reduction of representative disease-causing microorganisms of public health importance on a food contact surface that has been previously cleaned of all soil, residue, and visible contaminants.
(43) " Single-service" means any utensil, container, or package, or any part of a utensil, container, or package, which is designed to be used only once.
(44) " Smoked fish" means any food obtained by subjecting fresh fish, frozen fish, dried fish, or cured fish to the direct action of smoke or smoke flavor, whether by burning wood or a similar burning material, or by applying a smoke-flavored solution, for the primary purpose of imparting the flavor and color of smoke to fish. This includes both cold-process smoked and hot-process smoked fish, and is considered "fish processing".
(45) " Soda water beverage" means all beverages commonly known as soft drinks or soda water, whether carbonated, uncarbonated, sweetened, or flavored. "Soda water beverage" does not include alcohol beverages.
(46) " Utensil" means a hand-held or similarly portable container or device, such as a set of tongs, spatula, strainer, or scoop, which has one or more food contact surfaces and is used in the processing or handling of food at a food processing plant. "Utensil" does not include a food package.
(47) " Wholesale" means the sale of any food to a person or commercial entity who will either resell it, distribute it for resale, or use it as an ingredient in a product that will be then offered for sale. "Wholesale" includes those activities in which the processor relinquishes control of the food. "Wholesale" does not include the movement of food between two food processing plants or retail food establishments licensed to the same licensee, except for the movement of dairy products as specified in s. ATCP 65.04.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (16), (22) (j), (29), (33), (40) (c), (47) made under s. 35.17, Stats., Register January 2020 No. 769.

Subchapter II — General Requirements

ATCP 70.04 Federal and record keeping requirements.

(1) Facilities and qualified facilities. A food processing plant that is also a facility or a qualified facility shall comply with the requirements of this chapter and applicable requirements of 21 CFR part 117.
(2) Record requirements and retention.
(a) The operator of a food processing plant that is a facility shall create all records to meet the requirements for records in 21 CFR 117.305, unless otherwise specified in this chapter or in 21 CFR part 120 or 21 CFR part 123.

(b) All records generated under par. (a) shall be retained and made available to the department, in accordance with the provisions set forth in 21 CFR 117.315, unless otherwise specified in this chapter or in 21 CFR part 120 or 21 CFR part 123.

(c) The license holder shall maintain on site at the food processing plant, and make available to the department or its agent when requested, all applicable approvals, variances, waivers, plans, and licenses pertaining to the operation and maintenance of the plant.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1), (2) (a), (b) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.06 Food processing plants; licensing; fees.

(1) License required. Except as provided under sub. (11), no person may operate a food processing plant without a valid license issued by the department for that food processing plant under s. 97.29, Stats. A food processing plant license expires on March 31 annually. A license is not transferable between persons or food processing plants.

(2) License application. Application for an annual license to operate a food processing plant shall be made on a form provided by the department. The application shall include applicable fees required under this section.

(3) Annual license fee. An applicant for a license to operate a food processing plant shall pay an annual license fee. Except as provided in sub. (4), the fee amount is as follows:

(a) For operating a food processing plant that has an annual production of at least $25,000 but less than $250,000, and the operator is engaged in processing potentially hazardous food or in canning, an annual license fee of $400.

(b) For operating a food processing plant that has an annual production of at least $250,000, and the operator is engaged in processing potentially hazardous food or in canning, an annual license fee of $835.

(c) For operating a food processing plant that has an annual production of at least $25,000 but less than $250,000, and the operator is not engaged in processing potentially hazardous food or in canning, an annual license fee of $160.

(d) For operating a food processing plant that has an annual production of at least $250,000, and the operator is not engaged in processing potentially hazardous food or in canning, an annual license fee of $520.

(e) For operating a food processing plant that has an annual production of less than $25,000, an annual license fee of $95.

(4) Canning operations; license fee surcharge. If an operator of a food processing plant is engaged in canning operations and has annual food sales of more than $25,000, the operator shall pay an annual license fee surcharge of $320, which shall be added to the license fee under sub. (3).

(5) Surcharge for operating without a license. An applicant for a license under sub. (1) shall pay a license fee surcharge of $100 if the department determines that, within one year prior to submitting the license application, the applicant operated the food processing plant without a license in violation of sub. (1). Payment of this license fee surcharge does not relieve the applicant of any other civil or criminal liability which results from the unlicensed operation of the food processing plant, but does not constitute evidence of a violation of any law.

(6) Reinspection fee.

(a) If the department reinspects a food processing plant because the department has found a violation of ch. 97, Stats., or this chapter, on a regular inspection, the department shall charge the licensee the reinspection fee specified under par. (b). A reinspection fee is payable when the reinspection is completed, and is due upon written demand from the department. The department may issue a demand for payment when it issues a license renewal application form to a licensee.

(b) The reinspection fee required under par. (a) is as follows:

1. For a license holder of a food processing plant that has an annual production of less than $250,000, and the license holder is engaged in processing potentially hazardous food or in canning, the reinspection fee is $255.

2. For a license holder of a food processing plant that has an annual production of at least $250,000, and the license holder is engaged in processing potentially hazardous food or in canning, the reinspection fee is $525.

3. For a license holder of a food processing plant that has an annual production of less than $250,000, and the license holder is not engaged in processing potentially hazardous food or in canning, the reinspection fee is $150.
4. For a license holder of a food processing plant that has an annual production of $250,000 or more, and the license holder is not engaged in processing potentially hazardous food or in canning, the reinspection fee is $490.
5. For a license of a food processing plant that has an annual production of less than $25,000, the reinspection fee is $60.
(7) Action on license application. The department shall grant or deny a license application within 30 business days after the department receives a complete application. If the department denies the license application, the department shall notify the applicant, in writing, of the reasons for the denial. Except as provided under sub. (9), the department may conditionally grant a license application by issuing a temporary license under sub. (8).
(8) Temporary license.
(a) The department may issue a temporary license, for a period not to exceed 40 business days, pending final action on an application for an annual food processing plant license. The department shall grant or deny the annual license application before the temporary license expires. If the department denies an annual license application before the applicant's temporary license expires, the temporary license is automatically terminated when the applicant receives written notice of the denial.
(b) The holder of a temporary license may not procure raw agricultural products as defined in s. 97.01 (14), Stats., from producers, except as specifically authorized by the department in writing. The department may not authorize an operator to procure farm products from producers unless the operator complies with subch. VI of ch. 126, Stats.
(c) The holder of a temporary license acquires no license rights beyond those conferred by the temporary license. A temporary license may not be issued in response to a renewal application by the holder of an existing license.
(9) Pre-license inspection. The department may inspect a food processing plant, as the department deems necessary, before issuing a license to operate the food processing plant. The department may not issue a license or temporary license to operate a new food processing plant until the department inspects the new food processing plant for compliance with this chapter. A previously licensed food processing plant may not be considered a new food processing plant under this subsection solely because of a change of ownership.
(10) Denial, suspension, or revocation of license; conditional license. The department may deny, suspend, or revoke a license, or impose conditions on a license as provided under s. 93.06 (7) and (8), Stats. Except as otherwise provided by statute or rule, the suspension or revocation of a license shall comply with the prior notice requirements of s. 227.51, Stats.
(11) License exemptions. A license to operate a food processing plant is not required under s. 97.29, Stats., or this section for:
(a) An operator of a retail food establishment engaged in food processing if all of the following apply:
1. The operator is licensed by the department under s. 97.30, Stats., or by an agent, as defined in s. ATCP 74.01 (1) under ss. 97.30 and 97.41, Stats.
2. Wholesale receipts from food processing operations at the retail food establishment comprise no more than 25% of gross annual food sales from the retail food establishment. If the operator of a licensed retail food establishment is also licensed to operate a dairy plant under s. 97.20, Stats., or to operate a meat establishment under s. 97.42, Stats., sales of dairy or meat and poultry products processed at the establishment shall be excluded from the calculation of food sales receipts under this subdivision.
3. The operator is not engaged in canning of food products at the retail food establishment.
4. The operator may move food between retail food establishments licensed to the same operator.
(b) A license holder under s. 97.605, Stats., operating a retail food establishment serving meals, if all of the following apply:
1. The operator does not process food for wholesale distribution in excess of 25% of total food sales and is not engaged in canning of food products. The operator may brew fermented malt beverages at the retail food establishment serving meals under the provisions in s. 125.295, Stats.

2. The operator of the retail food establishment is licensed and exempt from licensing as a food processing plant under par. (a).

(c) Food processing operations conducted at a dairy plant licensed under s. 97.20, Stats., if both of the following apply:

1. Receipts from non-dairy food processing operations at that location comprise no more than 25% of gross annual dairy and non-dairy food sales from that location.

2. The operator of the dairy plant is not engaged in canning foods other than dairy products, or the processing of fish.

(d) Food processing operations conducted at a meat establishment, by the operator of the meat establishment, if all of the following apply:

1. The operator of the meat establishment is licensed under s. 97.42, Stats., or inspected under 21 USC 601 et seq. or 21 USC 451 et seq.

2. The operator is also licensed at the meat establishment to operate a retail food establishment under s. 97.30, Stats., and not engaged in the canning of food products other than meat or poultry products canned under s. 97.42, Stats., or the production of cold-smoked fish or fishery products.

(e) The processing of maple sap to produce maple syrup or concentrated maple sap if all of the following apply:

1. The processor sells the maple syrup or concentrated maple sap only to other processors for further processing.

2. The processor's combined gross receipts from all sales under subd. 1. during the license year total less than $5,000.

3. The processor keeps a written record of every sale under subd. 1., retains that record for at least 2 years, and makes the record available for inspection and copying by the department upon request. The record shall include the name and address of the purchasing processor, the date of sale, the amount of maple syrup or concentrated maple sap sold, and the sale price.

4. The processor registers with the department before engaging in any processing activities under this paragraph in any license year ending March 31. A registration expires at the end of the license year. A processor shall register in writing on a form provided by the department, or shall register online at http://datcp.wi.gov. The registration shall include information reasonably required by the department, including the registrant's name and address and information related to the nature, location, and scope of the registrant's processing activities and product sales. There is no fee to register, and the registrant is not required to hold a registration certificate from the department.

Note: A registration form under subd. 4. may be obtained by contacting the department at the following address:
Department of Agriculture, Trade and Consumer Protection
Division of Food and Recreational Safety
P.O. Box 8911
Madison, WI 53708

(f) The operator of a licensed food warehouse under s. 97.27, Stats., at which one or more of the following activities are the only food processing activities performed:

1. Reshipping marine molluscan shellfish, provided that the licensed warehouse operator holds a licensee dealer certification as required by the U.S. food and drug administration's *Guide for the Control of Molluscan Shellfish, The Model Ordinance*, that annual inventory value of molluscan shellfish reshipped at the licensed warehouse does not exceed 25% of the gross annual inventory value of the food warehouse, and the licensed food warehouse meets all of the applicable requirements of subch. IV of ch. ATCP 70.

2. Packing food items that are already packaged and labeled for retail sale into containers for further distribution.

3. Combining 2 or more food items that are already individually packaged and labeled for retail sale into a combination package for retail sale, if the label on each individual item inside the combination package remains visible or if the package of combined items is labeled for retail sale. All packaging and labels shall comply with s. ATCP 70.26.

4. Manufacturing ice for use in the shipment of foods, or to cool or keep foods cold while in transit or stored in the warehouse. Ice used for this purpose must meet the standards in s. ATCP 70.20 (8). Ice must be made on site in a commercial ice machine and may not be bagged, distributed or sold separately from food items that it is used to cool.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; corrections in (11) (a) 1. made under ss. 13.92 (4) (b) 7. and 35.17, Stats., and corrections in (11) (b) 1., (f) 1. made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.08 Construction and maintenance.

(1) Construction and maintenance; general. Food processing plants shall be soundly constructed and maintained in order to prevent adulteration as defined in s. 97.02, Stats. The license holder shall maintain in a clean and sanitary condition all buildings, facilities, and equipment used in food processing operations. The interior and exterior portions of a food processing plant, and the premises on which the food processing plant is located, shall be maintained in a sanitary condition in compliance with this chapter.
(2) Floors, walls, ceilings, and service sinks.
(a) Walls and ceilings in processing areas shall be light colored.
(b) Floors, walls, and ceilings in processing areas, toilet rooms, and areas used for the cleaning or storage of equipment or utensils shall be constructed of smooth, impervious, and easily cleanable materials. This does not prohibit the use of easily cleanable anti-slip floors.
(c) All floors, walls, and ceilings shall be kept clean and in good repair.
(d) A food processing plant constructed or altered in a manner that changes the dimensions of a processing area after June 30, 1989, or a food processing plant that is initially licensed or is licensed to a new operator after June 30, 1989, shall conform to the following requirements:
1. The junctions of walls and floors in processing areas shall be coved, or otherwise constructed so that each junction does not form a right angle, to facilitate cleaning.
2. Floors that are water flushed for cleaning, or on which water or fluid wastes are discharged, shall have an adequate number of floor drains and be adequately sloped to ensure proper drainage to the floor drains.
3. An adequate number of service sinks or curbed floor drains shall be provided for use in the cleaning of mops or wet floor cleaning tools, and for the disposal of mop water or similar liquids.
(3) Processing area separated.
(a) Within a food processing plant, food processing areas shall be separated by partition or be located at an adequate distance from other operations which may contaminate unpackaged food, so that contamination is effectively precluded. No processing may be conducted in a room used as living or sleeping quarters. If a food processing area shares one or more walls with adjacent living or sleeping quarters, processing operations shall be separated from the adjacent living or sleeping quarters by a tight-fitting, self-closing door.
(b) If an operator of a retail establishment serving meals also engages in food processing, under the exemption in s. ATCP 70.06 (11) (a) or (b), that processing shall only be done in specifically designated areas and not in areas accessible to the public such as the retail area of a grocery store or the dining room of a restaurant.
(4) Doors and windows. Doors, windows, skylights, transoms, and other openings to the outside shall be tight-fitting, and effectively screened or protected against the entry of rodents, insects, birds, and other animals. Exit doors, other than overhead doors in delivery areas, shall open outward and shall be self-closing. External doors shall be kept closed when not in use.
(5) Lighting.
(a) Lighting in every area of a food processing plant, whether natural or artificial, shall be sufficient for the purpose for which the area is used. Artificial lights in processing areas shall be equipped with protective shields or shatter resistant bulbs.
(b) There shall be not less than 20 foot candles (215 lux) of illumination on all processing surfaces. On surfaces used to inspect washed returnable food packages prior to repackaging, there shall be not less than 100 foot candles (1075 lux) of illumination.
(c) Except as provided in par. (b), the interior of a food processing plant shall be illuminated to the following levels measured 3 feet above the floor:
1. Not less than 20 foot candles (215 lux) in processing areas, equipment and utensil cleaning areas, handwashing areas, and toilet areas.
2. Not less than 10 foot candles (108 lux) in food storage areas.
(6) Ventilation. There shall be adequate ventilation in all areas where food is processed, handled, or stored; in all areas where equipment or utensils are cleaned or sanitized; and in all dressing rooms, locker

rooms, toilet rooms, employee break rooms, and garbage or rubbish storage areas. Ventilation shall be adequate to remove excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes. Ventilation systems shall be positioned so that exhaust air is not vented onto exposed food, or onto clean food packages, equipment, or utensils. Intake fans shall be equipped with filters that are readily removable for cleaning and replacement. Intake filters shall be capable of removing at least 85% of particulate matter that is 5 microns or larger in size, or greater than 6 MERV (maximum efficiency reporting value) rating. Exhaust fans, intake fans, ventilation ducts, and filters shall be kept clean and in good repair, and shall be screened or louvered to prevent contamination of food by dust, dirt, insects, or other contaminants. Systems used to ventilate any area of a food processing plant where exposed potentially hazardous food is handled shall be capable of maintaining positive pressures in that area.

(7) Toilet facilities.

(a) The operator shall provide sanitary toilets in sufficient number to accommodate employees, in accordance with applicable state and local regulations.

(b) The sanitary toilets shall be in toilet rooms that are completely enclosed, well-lighted, and equipped with tightfitting self-closing doors. Toilet rooms constructed, substantially reconstructed, or extensively altered after June 30, 1989, or, if they are located in a food processing plant that is initially licensed or licensed to a new operator after June 30, 1989, shall be separately vented to the outside, shall be equipped with an exhaust fan capable of creating a negative pressure within the toilet room, and may not open directly into a food processing area.

(c) The sanitary toilets, toilet rooms, and fixtures shall be easily cleanable, and shall be kept clean and in good repair.

(d) When a toilet room is available for use by employees, it shall be equipped with an easily cleanable covered trash receptacle and an adequate supply of toilet tissue.

(e)

1g. Toilet rooms serving a food processing plant shall be contiguous to the food processing plant if they are installed after February 1, 2020, or if the food processing plant is initially licensed or is licensed to a new operator after February 1, 2020.

1r. Toilet rooms serving a food processing plant may be noncontiguous to the food processing plant if they were installed before February 1, 2020, and if the food processing plant is initially licensed or is licensed to a new operator before February 1, 2020.

2. Noncontiguous toilet rooms shall be conveniently adjacent and accessible to the food processing plant, and meet all applicable state and local regulations.

(f) Handwashing facilities shall be located in or adjacent to every toilet room. Handwashing facilities serving toilet rooms shall include hot and cold running water, soap in a soap dispenser, and a sanitary single-service means of drying the hands. A sign directing employees to wash their hands shall be prominently posted in every toilet room used by employees. Handwashing facilities serving a toilet room shall comply with all of the following requirements if they are installed, substantially reconstructed, or extensively altered after November 1, 2009, or if they are located in a food processing plant that is initially licensed or licensed to a new operator after November 1, 2009:

1. Handwashing facilities shall be served by hot and cold running water provided through a mixing valve or combination faucet, or by potable tempered water.

2. Faucets shall be of a type that is not hand-operated. If a self-closing, slow-closing, or metering faucet is used, that faucet shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet.

(8) Locker and linen facilities. The operator shall provide lockers or comparable facilities for employees to store clothing and other personal items. The locker facility shall not be in food processing or food storage areas, or in areas where food, packages, equipment, or utensils are cleaned or stored. Protective clothing worn during processing shall be stored in an orderly and sanitary manner. Soiled linen and clothing shall be kept in non-absorbent containers or laundry bags until removed for laundering. Soiled linen and clothing shall be removed as often as necessary to prevent unsanitary conditions.

(9) Handwashing facilities for processing areas.

(a) The operator shall provide handwashing sinks, with available hot and cold running water, for use by all persons working in food processing areas. The sinks shall be conveniently located for use, and shall be kept in a clean and sanitary condition. A supply of soap or detergent, and sanitary single-service means for

drying hands shall be kept available at the sink. If disposable towels are used, a clean, covered waste receptacle with other than hand operation for the lid shall be provided for their disposal.

(b) A handwashing sink serving a food processing area shall comply with all of the following requirements if it is installed, substantially reconstructed, or extensively altered after November 1, 2009, or if it is located in a food processing plant that is initially licensed or licensed to a new operator after November 1, 2009:

1. It shall be located in the processing area.

2. It shall be served by hot and cold running water provided under pressure, through a mixing valve or combination faucet, or by potable and tempered water.

3. It shall not be hand operated.

(c) An automatic handwashing device may be substituted for a handwashing sink if the automatic handwashing device operates in a safe and effective manner.

(d) No handwashing sink may be used to clean, sanitize, or store equipment or utensils.

(10) Cleaning facilities.

(a) If equipment, utensils, or food packages are cleaned or sanitized manually, the food processing plant shall be equipped with wash and rinse sinks which are suitable for all manual cleaning and sanitizing operations. Sinks shall be conveniently located and adequate in number. Each sink shall be constructed of stainless steel or other approved materials. Each sink shall have at least 2 compartments. A sink installed after June 30, 1989, or a sink in a food processing plant that is initially licensed or is licensed to a new operator after June 30, 1989, shall have at least 3 compartments for washing, rinsing, and sanitizing equipment and utensils.

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

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

(d) Brushes and cleaning tools shall be kept clean and in good repair. Wiping cloths used to clean equipment and utensils shall be cleaned and sanitized daily and stored in an approved sanitizing solution between uses. Sanitizing solutions for wiping cloths shall be changed at least daily. Wiping cloths used to clean food contact surfaces of equipment and utensils shall not be used for any other purpose. Single service disposable towels may be used in place of reusable cloths if they are discarded after each use.

(e) If a mechanical system is used to clean or sanitize equipment, utensils, or food containers, the mechanical system shall be designed, installed, and maintained so that it is fully effective for the purpose used.

(11) Exterior premises. The premises surrounding a food processing plant shall be well drained and shall be kept in a clean and orderly condition. The premises shall be kept free of accumulations of garbage and refuse, and other potential health nuisances. Driveways and parking lots shall be surfaced or maintained to minimize airborne dust and dirt.

(12) Plumbing system and sewage disposal. Sewage and waste materials from a food processing plant shall be removed in a sanitary manner, in compliance with applicable state and local regulations. All plumbing, plumbing fixtures, and equipment shall be designed, installed, and maintained to prevent backflow, back siphonage, and cross-connections.

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

(13) Garbage and refuse disposal. Garbage and refuse shall not be allowed to accumulate in or around a food processing plant. Garbage and refuse shall be removed as often as necessary to maintain the premises in a clean and sanitary condition. Garbage storage areas shall be constructed and maintained so that they do not attract or harbor insects, rodents, or other animals. Garbage and refuse shall be held in durable, leak-proof, easily cleanable, and pest-resistant containers. Containers shall be kept covered with tight-fitting lids, and shall be cleaned when necessary to prevent insanitary conditions. Garbage and refuse shall not be burned on the premises, except in compliance with state and local laws. Garbage and refuse shall not be burned on the premises if burning may contaminate food.

(14) Control of pests. The operator shall take effective measures, as necessary, to control insects, rodents, and other pests in a food processing plant. Pesticides and other hazardous substances shall not be stored or used in a manner which may contaminate food, or which may constitute a hazard to employees or the public. Pesticides shall not be stored, handled, or used in a manner inconsistent with label directions, or in a negligent manner.

Note: Pesticide storage and use must comply with ss. 94.67 to 94.71, Stats., and ch. ATCP 29. Pesticides must be registered for use by the U.S. environmental protection agency or by the department.

(15) Construction; plan review. Before a food processing plant is constructed, substantially reconstructed, or extensively altered, the operator shall notify the department in writing. Plans and specifications for the construction, reconstruction, or alteration may be submitted to the department for review before the work is begun. Plans and specifications shall be available for review by the department upon request.

(16) Egg handling facilities. Egg handling facilities shall meet the requirements in ss. ATCP 88.06 and 88.08.

(17) Maple sap concentration facilities. A facility licensed as a food processing plant and used solely for the concentration of maple sap, shall meet the requirements of s. ATCP 87.14.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (6), (7) (b), (10) (d) made under s. 35.17, Stats., and (7) (e) (intro.) and 1. renum. to (7) (e) 1g. and 1r. under s. 13.92 (4) (b) 1., Stats., Register January 2020 No. 769.

ATCP 70.10 Personnel standards.

(1) Cleanliness.

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

(b) Paragraph (a) does not apply to an operator of a maple sap concentration facility licensed to operate a food processing plant that is required to meet the provisions of s. ATCP 87.28.

(2) Hand contact with food.

(a) Except as provided in par. (d), individuals engaged in food processing or handling may not contact ready-to-eat food with their bare hands but shall use suitable food handling aids such as deli-tissue, spatulas, tongs, single-use gloves, or dispensing equipment to avoid bare-hand contact.

(b) If used, finger cots or gloves shall be:

1. Made of impermeable materials, except where the use of such material is inappropriate or incompatible with the work being done.

2. Sanitized at least twice daily or more often if necessary.

3. Properly stored until used.

4. Maintained in a clean, intact, and sanitary condition prior to use.

(c) Hands shall be washed prior to putting on gloves, and upon changing gloves if the person wearing the gloves will be performing a different function or if the gloves are being replaced because hands have become soiled or contaminated due to failure of glove integrity.

(d) Individuals may contact ready-to-eat food with their bare hands if that contact is reasonably necessary, and does not contaminate food. The individuals shall be trained in, and shall follow, written policies and procedures to ensure safe use of bare hands. The policies and procedures shall identify all of the following:

1. The individuals or positions authorized to contact ready-to-eat food with bare hands.

2. The specific tasks for which bare-hand contact is authorized.

3. The types of ready-to-eat food that may be contacted with bare hands.

4. The procedures that authorized individuals are required to follow in order to prevent food contamination from bare-hand contact.

(e) The operator shall provide prior training on procedures and policies that cover pars. (a) to (d) to all individuals who may contact ready-to-eat food with their bare hands. The operator shall have a written training plan that identifies all of the following:

1. The individuals or positions responsible for implementing the training, maintaining training records, and ensuring compliance with training requirements.
2. The content of the training, including the written procedures required under par. (d).
3. The form of initial training, and the form and frequency of follow-up training, if any.
4. Monitoring and control procedures to ensure that individuals are trained before they contact ready-to-eat food with bare hands.
5. Procedures to evaluate training effectiveness.
(f) The operator shall review the training program under par. (e) at least annually.
(g) The operator shall maintain records to document compliance with this subsection. Records shall be retained for at least one year after they are made, and shall be available to the department for inspection and copying upon request.
(3) Clothing and jewelry. Persons in food processing areas or handling unpackaged food shall wear clean, washable outer garments and effective hair restraints, including effective hair restraints for beards longer than 1/2 inch. Hair restraints may include hair nets, caps, and snoods, but do not include hairsprays, visors, or headbands. Persons working in food processing areas or handling unpackaged food shall remove all jewelry from their hands, fingers, and arms before having any direct manual contact with food or food contact surfaces. Jewelry shall not be worn in any part of the body in a manner which creates a risk of food contamination. This subsection does not apply to plain band wedding rings.
(4) Employee health. No person who, by medical examination or supervisory observation, has or is reasonably suspected of having any of the following conditions may work in a food processing plant in any capacity that may result in the contamination of food, or in the contamination of equipment or utensils used to process or handle food:
(a) One or more reportable symptoms of communicable disease as defined in ch. ATCP 75 Appendix, 2-201.11 (A).
(b) One or more symptoms of an acute gastrointestinal illness.
(c) A discharging or open wound, sore, or lesion on the hands, arms, or other exposed portions of the body.
(5) Food contamination. No person who has received a reportable diagnosis of communicable disease, as defined in ch. ATCP 75 Appendix, part 2-201.11 (A) (2), may work in a food processing plant in any capacity that may contaminate food products.
(6) Consumption of food, beverages, and tobacco. No person may consume food, beverages, or tobacco in any food processing area, or in any area where food processing equipment or utensils are cleaned or stored. Employees may not consume food, beverages, or tobacco except in designated areas which are separated from food processing areas. This subsection does not prohibit a sanitary water fountain in a processing area, nor does it prohibit on-line quality control sampling in accordance with quality control procedures written and followed by the license holder.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1) (b), (2) (e) 3. made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.12 Equipment and utensils.

(1) Construction and maintenance; general. Equipment and utensils shall be of sanitary design and construction. Equipment and utensils shall be readily accessible for cleaning and inspection and shall be constructed so that they can be easily cleaned. Equipment and utensils shall be kept clean and in good repair. This subsection does not apply to a maple sap concentration facility licensed as a food processing plant that is required to meet the provisions of s. ATCP 87.26.
(2) Food contact surfaces. Food contact surfaces of equipment and utensils shall be constructed of stainless steel or other materials which are smooth, impervious, nontoxic, noncorrosive, nonabsorbent, and durable under normal use conditions. Food contact surfaces shall be easily cleanable, and shall be free of breaks, open seams, cracks, or similar defects. Food contact surfaces shall not impart any odor, color, taste, or adulterating substance to food. Food contact surfaces, other than food contact surfaces of approved C-I-P systems, shall be readily accessible for manual cleaning. Joints and fittings shall be of sanitary design and construction.

Note: Hard maple or other material which is non-absorbent may be used for cutting blocks, boards, and bakers' tables. Sanitary wooden paddles in good condition may be used in confectionaries.

(3) C-I-P systems. C-I-P systems shall be of sanitary design and construction, and shall be installed and maintained for sanitary operation. A C-I-P system shall be installed and maintained so that cleaning and sanitizing solutions can be circulated throughout all interior product contact surfaces of the system. C-I-P systems shall be equipped with adequate inspection ports or other access points. C-I-P systems shall be self-draining, or shall be capable of being easily and completely drained. A temperature recording device, which accurately records the return temperatures of cleaning and sanitizing solutions, shall be installed in all circuits through which cleaning and sanitizing solutions are circulated. Cleaning records shall be kept for at least 90 days after they are created.

(4) Location and installation of equipment. Equipment that cannot be easily moved shall be installed in a manner preventing liquid or debris from accumulating under or around the equipment. Equipment shall be installed so there is adequate clearance on all sides for cleaning and maintenance. This does not apply to that portion of a tank or container designed and installed to protrude into or through the wall or ceiling of a food processing plant. Air intake vents for food or ingredient storage containers shall be located in processing areas or shall be properly filtered.

(5) Measuring devices and controls. Every freezer and cold storage compartment used to store or hold potentially hazardous food shall be equipped with a thermometer or other device accurately indicating the temperature in the compartment. Instruments and controls used for measuring, regulating, and recording temperatures, pH, acidity, water activity, or other conditions that control or prevent the growth of undesirable microorganisms in food shall be accurate and adequate for their intended use.

(6) Lubrication. Equipment shall be designed and constructed so gear and bearing lubricants do not come in contact with food or food contact surfaces. Only food grade lubricants may be used in equipment if incidental food contact may occur.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

ATCP 70.14 Cleaning and sanitizing equipment and utensils.

(1) General. Except as provided in ss. ATCP 70.16 and 70.40, the operator shall do all of the following:

(a) Comply with provisions in s. ATCP 70.28 for sanitizers and methods used to sanitize equipment and utensils.

(b) Except as provided in pars. (c), (d) and (e), clean all food contact surfaces of equipment and utensils after each day's use, and before any change in use that may cross-contaminate food with major food allergens or other contaminants. If wet cleaning occurs, surfaces must also be sanitized.

(c) Clean and sanitize tanks, used to store potentially hazardous food or potentially hazardous food ingredients, at least once after the food processing plant operator empties those tanks.

(d) Clean and sanitize all food contact surfaces of equipment used for the distillation of alcohol products, such as distilled spirits, after each distillation batch. This paragraph does not apply to equipment used to distill smoke for the manufacture of liquid smoke products.

(e) Request alternative cleaning and sanitizing procedures for department approval, under ss. ATCP 70.16 and 70.18, as provided in those sections.

(2) Cleaning and sanitizing c-i-p systems. C-I-P systems shall be cleaned and sanitized in compliance with manufacturer specifications. Cleaning and sanitizing records shall be maintained for all C-I-P systems. The records shall identify every C-I-P system which has been cleaned or sanitized, the date and time when each C-I-P system was cleaned and sanitized, the temperature of the cleaning and sanitizing solutions, and the length of time for which the C-I-P system was exposed to each cleaning and sanitizing solution. Records shall be signed or initialed by a responsible person, maintained on file for at least 90 days, and made available for inspection and copying by the department upon request.

(3) Cleaning compounds, detergents, and sanitizers: storage and labeling. Cleaning compounds, detergents, and sanitizers shall be clearly labeled. When they are not being used, they shall be stored in designated areas and in an appropriate manner so that they do not contaminate food products, ingredients, equipment, or utensils.

(4) Storage of clean equipment and utensils. Equipment and utensils, unless stored in an approved sanitizing solution, shall be stored so as to drain dry. Equipment and utensils shall be protected from contamination prior to use.

(5) Single-service articles. Single-service articles shall be stored in the original containers in which they were received, or in other closed containers which will protect them from contamination prior to use. Single-service articles shall not be re-used.
(6) Equipment and utensils in egg handling facilities. Equipment for candling, grading, and weighing eggs shall meet the requirements of s. ATCP 88.12 (5).
(7) Equipment and utensils in maple sap concentration facilities. The equipment and utensils in a facility used solely for the concentration of maple sap shall conform to the applicable regulations in s. ATCP 87.26.
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1) (b) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.16 Cleaning and sanitizing equipment and utensils; exemptions.

(1) Approval required for an alternative cleaning and sanitizing frequency.
(ag) Except as provided in sub. (2) or s. ATCP 70.40, if an operator seeks to clean and sanitize equipment and utensils at a frequency other than that required in s. ATCP 70.14 (1), because the equipment and utensils are used with food products, processes, or conditions reducing the risk of foodborne illness or presence of major food allergens, then the operator shall submit to the department, for written approval, an alternate cleaning and sanitizing procedure that includes a monitoring and recording requirement in compliance with s. ATCP 70.18.
(ar) Factors reducing the risk of foodborne illness may include competitive microorganisms, intended use or targeted consumer demographic, inhibitory compounds, temperatures, and any other factors that reduce the risk of pathogenic organism growth or toxin formation.
(b) After review by the department, the proposed process may be denied and the department shall issue a letter of denial. If the alternate cleaning and sanitizing procedure is approved, the department shall issue a letter of approval, applicable for not more than 5 years, which shall be maintained on file at the food processing plant.
(c) If a change is planned for the product or any process that affects the critical factors ensuring the safety of that product, the operator shall inform the department in writing prior to making a change.
(2) No approval required for an alternative cleaning and sanitizing frequency. An operator is not required to obtain written department approval for use of an alternative equipment and utensil cleaning and sanitizing frequency for the following equipment, provided that the operator cleans and sanitizes the equipment according to manufacturer specifications or according to a validated cleaning process filed with the department:
(a) Drying equipment.
(b) Cloth-collector systems.
(c) Dry product packaging equipment and storage containers.
(d) Equipment used in brining, aging, curing, and dry product blending processes.
(e) Food contact surfaces of equipment used solely to process foods or food ingredients with low water activity (≤ 0.85), or foods which are considered non−Potentially Hazardous Food (non−PHF/non−TCS) foods based on (2) (b) Table A or Table B for Potentially Hazardous Food (time/temperature control for safety food) in par. 1−201.10 (B) of ch. ATCP 75 Appendix, such as chocolate, fats and oils, liquid nutritive sweeteners, peanut butter, or similar foods.

(f) Ice makers maintained in a cold/frozen state.
(g) Food contact surfaces of equipment used for brewing or fermentation of alcohol-containing beverages, such as beer brewing or wine fermentation, so long as the operator cleans and sanitizes equipment used following each brewing or fermentation batch.
(h) Surfaces of aseptic processing equipment that contact food after the food has been sterilized, as long as system sterility is maintained. If system sterility is lost, an operator shall clean, sanitize and re-sterilize equipment.
(i) Equipment used for food fermentations such as the manufacture of sauerkraut or cucumber pickles, development of one or more pure bacterial cultures, or development of starter cultures, so long as the operator cleans and sanitizes all equipment following each fermentation batch.

(j) Equipment used for processing of products with a natural pH ≤ 4.0, so long as the operator cleans and sanitizes all equipment at the end of a continuous operation, not to exceed 30 days (720 hours).

(k) Equipment used for maple syrup processing, so long as the operator cleans and sanitizes all equipment at the end of a continuous operation, not to exceed 40 days (960 hours).
(L) Equipment used for bottled water processing, so long as the operator cleans and sanitizes all equipment at the end of a continuous operation, not to exceed 30 days (720 hours).
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; (1) (intro.), (a) renum. to (1) (ag), (ar) under s. 13.92 (4) (b) 1., Stats., Register January 2020 No. 769.

ATCP 70.18 Obtaining approval of alternative cleaning and sanitizing frequency.

(1) Submission of request for approval of alternative cleaning and sanitizing frequency.
(am) An operator may submit a written request for the department to approve alternative cleaning and sanitizing procedures. The request shall include all of the following, and any other information required by the department:
1. A clear and complete description of the affected food processing equipment and utensils, including any continuously-operated equipment. The description shall identify sanitary design features relevant to the proposed cleaning and sanitizing procedures.
2. The types of food produced with the affected equipment or utensils, the purposes for which the food will be used, and the temperatures at which the food will be prepared, stored, and distributed.
3. A clear and complete description of the alternative cleaning and sanitizing procedure, including cleaning and sanitizing equipment, frequency, methods, materials, and relevant process parameters such as time and temperature. The description shall include a flow diagram of the cleaning and sanitizing procedure.
4. A written statement, by the operator, that the alternative cleaning and sanitizing procedure has been determined by competent authority, such as evaluated by a process authority or validated by a published or unpublished peer-reviewed article, challenge studies, or regulatory standards, to be effective in preventing food contamination and ensuring the microbiological safety of food.
5. A written plan, used to ensure that the alternative cleaning and sanitizing procedure will be effective in preventing food contamination and ensuring the microbiological safety of food, that identifies and assess foreseeable hazards, identifies critical control points, identifies critical safety parameters and limits, and identifies monitoring procedures and controls to ensure that the procedure is effective and appropriately implemented.
(bm) The department may approve a proposal for an alternative cleaning and sanitizing procedure that does not comply with par. (am) if the operator can show that the procedure will be effective in preventing food contamination and ensuring the safety of food. The department shall give its approval in writing.
(2) Department decision on request for approval of alternative cleaning and sanitizing frequency. The department shall grant or deny a request under sub. (1) or (4) within 60 days after it receives a complete request, except that the department may give written notice extending the action deadline for reasons stated in the notice.
(3) Qualifications, limits, and withdrawal of department approval. The department may qualify or limit its approval under sub. (2), as it deems appropriate. The department may withdraw its approval for cause, including obtaining information that casts doubt on the efficacy or consistent implementation of the approved procedure or observing changes in operations that could affect the validity of the procedures or process.
(4) Expiration of department approval of alternative cleaning and sanitizing frequency.
(a) All approvals granted under this section shall expire 5 years from the date of issuance.
(b) A license holder who wishes to continue to use an alternative cleaning and sanitizing frequency after the expiration of the approval shall file a request with the department for reissuance of the approval at least 180 days prior to its expiration, unless permission for a later date has been granted by the department.
(c) When a license holder has made timely and sufficient application for the reissuance of an approval of alternative cleaning and sanitizing frequency, or for the approval of a new request with reference to any activity of a continuing nature, the existing approval does not expire until the application has been finally

acted upon by the department, or, if the application is denied or the terms of the new request are limited, until the last day for seeking review of the agency decision or a later date fixed by order of the reviewing court.

(d) Approval shall be reissued by the department if the proposal continues to meet the criteria in sub. (1) or if the food processing plant operator updates the original proposal to ensure compliance with the criteria in sub. (1).

(5) Operation of an alternative cleaning and sanitizing frequency. An operator that implements an alternative cleaning and sanitizing procedure approved under sub. (2) shall do all of the following:

(a) Control and monitor the procedure to ensure that it is strictly implemented as approved, and is effective in preventing food contamination and ensuring the microbiological safety of food.

(b) Promptly notify the department of any material deviation from the approved procedure, and any information that casts doubt on the efficacy of the procedure.

(c) Collect and retain data and records to document, on a continuing basis, the implementation and efficacy of the approved procedure. The operator shall retain the data and records for at least 90 days, and shall make them available upon request for inspection and copying by the department.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; (1) (intro.) and (a) to (f) renum. to (1) (am), 1. to 5., and (b) under s. 13.92 (4) (b) 1., corrections in (1) (am) 5., (f), (2), (4) (a) made under s. 35.17, Stats., and correction in (1) (bm) made under s. 13.92 (4) (b) 7., Stats., Register January 2020 No. 769.

ATCP 70.20 Water supply.

(1) Operations water.

(a) Operations water, other than water reclaimed according to sub. (3), shall be obtained from a source that complies with ch. NR 811, for municipal water systems, or ch. NR 812, for private or non-community water systems.

(b) Operations water shall be available in consistently adequate quantity, and shall not exceed the maximum contaminant levels set forth in the drinking water standards in s. NR 809.07.

(c) Operations water sourced from either municipal, private, or non-community water systems shall comply with the microbiological standards under s. NR 809.30. Operations water from a privately owned water system shall be sampled by the operator not less than once every 12 months and be tested at a laboratory that is certified to perform the appropriate tests.

(d) An operator shall keep on file, for at least one year, the results of all microbiological and other tests conducted on operations water sampled at the food processing plant.

(e) Operations water used to wash field soil from raw fruits or vegetables may be reused for the following purposes if it is first filtered to remove soil and other particulate matter:

1. Washing subsequent deliveries of raw fruit or vegetables at the food processing plant if the fruit or vegetable will undergo canning.

2. Flushing floors and gutters in the receiving areas for raw fruit or vegetables in the food processing plant.

(f) This subsection does not apply to food processing plants processing liquid maple products, as defined in s. ATCP 87.11 (7), or maple sap water, as defined in s. ATCP 87.11 (9), that are required to meet the provisions of s. ATCP 87.24.

(2) Ingredient water.

(a) Ingredient water, other than water reclaimed according to sub. (3), shall be obtained from a source that complies with ch. NR 811, for municipal water systems, or ch. NR 812 for private or non-community water systems. Water reclaimed from food processing operations may not be used as an ingredient in bottled drinking water or in any beverage where water is a characterizing ingredient.

(b) Ingredient water obtained from either municipal, private, or non-community water systems shall not exceed the maximum contaminant levels set forth in the drinking water standards in s. NR 809.07, the microbiological standards in s. NR 809.30, and the health-related enforcement standards in s. NR 140.10. At the department's request, an operator shall provide documentation to the department that the water complies with the microbiological standards of s. NR 809.30. Documentation may consist of results from tests performed at a laboratory certified under ch. ATCP 77 for the entity providing the water.

(c) If ingredient water is obtained from a privately owned water system, the operator shall sample the water at least once every 12 months, and have the sample tested at a laboratory that is certified to perform the appropriate tests.

(d) An operator shall keep on file, for at least 5 years, the results of all microbiological and other tests conducted on ingredient water sampled at the food processing plant.

(3) Reclaimed water.

(a) Water reclaimed from a heat exchanger process, from a compressor cooling unit, from the condensation of food products, or from other food processing plant systems or processes may be used as ingredient water if all of the following apply:

1. The water is reclaimed by means of evaporation, reverse osmosis, ultra-filtration, a heat exchanger, or another method approved by the department.

2. The reclaimed water has less than 1 coliform bacterium per 100 ml. of water.

3. The standard plate count of the reclaimed water does not exceed 500 per ml. of water and complies with the bacteriological standards of s. NR 809.30.

4. The water, if reclaimed from the condensation of food products, has a standard turbidity of less than 5 units or organic content of less than 12 mg. per liter, as measured by the chemical oxygen demand or permanganate-consumed test specified in *Standard Methods for the Examination of Water and Wastewater*, twenty-first edition (2005), published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation. The operator shall use an automatic fail-safe monitoring device to identify, and automatically divert to a waste water system, any reclaimed water that fails to comply with this subdivision.

Note: Copies of the *Standard Methods for the Examination of Water and Wastewater*, twenty-first edition (2005), published by the American Public Health Association (APHA), the American Water Works Association, and the Water Environment Federation, are on file with the department and the legislative reference bureau. Copies may be obtained by contacting the "APHA Bookstore" at www.apha.org/publications/bookstore/.

5. The reclaimed water is of satisfactory organoleptic quality and has no off-odors, off-flavors, or slime. The operator shall sample and organoleptically test reclaimed water at weekly intervals.

6. Chemical treatment of the reclaimed water, if any, complies with sub. (4).

7. The reclaimed water is stored in a properly constructed tank. The tank shall be constructed of a material that will not contaminate the water and can be easily cleaned.

8. The operator tests the reclaimed water for compliance with subds. 1. to 4. at least once during any 6 month interval. The operator shall test the reclaimed water daily for 14 working days after the department approves the reclamation system under subd. 1., and for at least 7 working days after any repairs or alterations to the system.

9. There are no cross-connections between reclaimed water lines and any public or private water system.

(b) Water reclaimed from a heat exchanger process, from a compressor cooling unit, from the condensation of food products, or from other food processing plant systems or processes may be used as operations water with department approval if the water complies with par. (a) or if all of the following apply:

1. The water is reclaimed by means of evaporation, reverse osmosis, ultra-filtration, a heat exchanger, or another method approved by the department.

2. The water, if reclaimed from the condensation of food products, has a standard turbidity of less than 5 units, an electrical conductivity maintained in correlation with organic content of less than 12 mg. per liter, or an organic content of less than 12 mg. per liter, as measured by the chemical oxygen demand or permanganate-consumed test as specified in *Standard Methods for the Examination of Water and Wastewater*, twenty-first edition (2005), published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation. The operator shall use an automatic fail-safe monitoring device to identify, and automatically divert to a waste water system, any reclaimed water that fails to comply with this subdivision.

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3. The reclaimed water is of satisfactory organoleptic quality and has no off-odors, off-flavors, or slime. The operator shall sample and organoleptically test reclaimed water at weekly intervals.

4. Chemical treatment of the reclaimed water, if any, complies with sub. (4).

5. The reclaimed water is stored in a properly constructed tank. The tank shall be constructed of a material that will not contaminate the water and can be easily cleaned.

6. There are no cross-connections between reclaimed water lines and any public or private water system, except for lines with backflow preventers that meet the requirements of chs. SPS 382 and 384.

7. The reclaimed water, if held for more than 24 hours, is at all times held at a temperature of at least 145°F (63° C) or is chemically treated under sub. (4) to suppress bacterial growth.
8. Distribution lines and hose stations used to distribute the reclaimed water are clearly identified as "limited-use reclaimed water."
9. The operator posts clear instructions for the use of the reclaimed water. The operator shall post the instructions so that they will be seen and understood by persons using the reclaimed water. The instructions shall disclose the limited purposes for which the reclaimed water may be used.
10. Water lines distributing the reclaimed water are not permanently connected to food product vessels. If a water line is temporarily connected to a food product vessel, there shall be an atmospheric break and automatic controls to prevent the reclaimed water from contacting food products.
(c) Water reclaimed from food processing operations may be used for cleaning or other purposes but may not be used for any purpose involving contact with food or food contact surfaces except as provided in par. (a) or (b).
(4) Water treatment.
(a) An operator may not use any chemical to suppress bacterial growth in water, or to prevent off-tastes or odors in water, unless that chemical is approved for that purpose by the U.S. environmental protection agency. Neither the chemical as applied, nor any compound produced by the chemical application, may adulterate food in the food processing plant in which it was used.
(b) An operator shall apply chemicals, under par. (a), according to label directions using an automatic proportioning device. Treated water shall be held for the period of time specified on the chemical label before it is used as ingredient water or operations water. An operator shall conduct a daily testing program for any chemical added to water, to ensure that the chemical concentration does not adulterate food.
(5) Re-circulated water systems.
(a) If re-circulated water used in a cooler or heat exchanger may come in contact with any food product or food contact surface, the re-circulated water shall be all of the following:
1. Obtained from a source that complies with chs. NR 811 or 812, as applicable.
2. Bacteriologically safe.
3. Protected from contamination.
4. Tested by the operator for compliance with subd. 2. at 6 month intervals.
(b) If a re-circulating water system, under par. (a), becomes contaminated, that system may not be used until it is properly treated and analytical results indicate that the contamination has been eliminated.
(c) Freezing point depressants used in re-circulating water systems, under par. (a), shall be nontoxic.
(6) Water and potable liquids transported in bulk.
(a) Water transported to a food processing plant in a bulk tanker or bulk container, for use as an ingredient or in other plant operations, shall be potable and shall be obtained from a source that complies with ch. NR 811 or 812.
(b) Whenever potable water or another potable liquid is transported to or from a food processing plant in a bulk tanker or bulk container, it shall be loaded, transported, and unloaded in a sanitary manner that prevents contamination. The bulk tanker or bulk container shall be thoroughly cleaned and sanitized before being filled. Suitable pumps, hoses, and fittings shall be used to transfer potable water and potable liquids to and from bulk tankers, and bulk containers, and shall be cleaned and sanitized prior to use.
(c) Whenever potable water or another potable liquid is transported to or from a food processing plant in a bulk tanker or bulk container, the bulk tanker or bulk container and each of its fittings and equipment shall meet all of the following requirements:
1. It shall be properly constructed and maintained to prevent contamination of the potable water or potable liquid. Water contact surfaces shall comply with s. ATCP 70.12 (2).
2. It shall be cleaned, sanitized, and inspected on a routine basis.
3. It may not be used to transport materials that may contaminate potable water or potable liquid that is subsequently transported in the bulk tanker or bulk container.
4. It shall be effectively sealed to protect the potable water or potable liquid from contamination during transit.
Note: Effective sealing systems include manhole cover gaskets and seals.
5. It shall be properly stored and serviced to prevent contamination. When not in use, pumps, hoses, and fittings shall be properly maintained, capped, stored, and protected from contamination.

(7) Culinary steam. Water used to produce culinary steam shall be potable. Water reclaimed from food processing operations may not be used to produce culinary steam unless it complies with sub. (3) (a) or (b). In boilers used to produce culinary steam, boiler water additives shall comply with 21 CFR 173.310.

(8) Ice. Ice used to cool or maintain the temperature of foods shall be made from potable water. Ice used to cool or maintain the temperature of ready-to-eat foods shall not have been previously used for any other purpose. Ice shall be received, handled, and stored in a manner to prevent contamination or adulteration. Any ice which is not made on site shall be inspected upon receipt, and rejected if it is delivered in a way that has not adequately protected the ice from contamination.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1) (c), (2) (c), (6) (a) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.22 Food ingredients.

(1) General. Food ingredients shall be safe, wholesome, and unadulterated, and shall comply with applicable standards of identity under s. 97.09, Stats. Raw agricultural commodities and other food ingredients shall be segregated and examined as necessary to determine whether they are clean and fit for processing. Processed foods and dairy products which are used as food ingredients shall be obtained from sources which comply with applicable licensing and inspection requirements.

(2) Eggs and egg products. Only clean whole eggs, pasteurized eggs in liquid, frozen or dry form, or pasteurized egg products may be used in food processing. Eggs and egg products may be pasteurized during processing. Clean whole eggs shall be equivalent to USDA Grade B or better with shells intact.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

ATCP 70.24 Food handling and storage.

(1) General. Food shall be protected from contamination and decomposition while being processed, handled, conveyed, or held at a food processing plant. Food shall be processed and held in a manner which keeps the food in a safe, wholesome, and unadulterated condition. Potentially hazardous foods shall be processed and held at temperatures, or in a manner, which minimizes the potential for growth of undesirable microorganisms.

(2) Food storage. Food storage areas shall be maintained in a clean, sanitary, and orderly condition, free from conditions which may result in the adulteration of food. Potentially hazardous foods shall be stored at safe temperatures. Storage areas shall be constructed and maintained so that waste water and other waste liquids do not drain into, or accumulate in, any storage area. Food shall not be stored in a manner which may attract or harbor pests.

(3) food processing.

(a) Food processing shall be conducted under appropriate conditions and controls to minimize the potential for growth of undesirable microorganisms, or the contamination of food.

Note: One way to comply with this requirement is to follow a HACCP plan which monitors and controls food safety variables at critical control points in the manufacturing process. Monitoring and controlling food safety variables such as time, temperature, humidity, water activity (aw), pH, pressure, and flow rate at critical control points can ensure that mechanical breakdowns, time delays, temperature fluctuations, and other conditions do not contribute to the decomposition or contamination of food.

(b) If potentially hazardous food is heated, refrigerated, or frozen in the course of processing, the internal temperature of the food shall be accurately monitored, as necessary, to ensure that safe temperatures are promptly attained and maintained.

(c) Potentially hazardous frozen foods, if thawed for processing, shall be thawed by one of the following methods:

1. By placing the frozen food in a refrigerated space at a temperature of not more than 41° F (5° C).

2. Placing the frozen food under potable running water, at a temperature of not more than 70° F (21° C), for no more time than is needed to thaw the food. Water velocity shall be sufficient to agitate loose particles and drain or float them away from the food being thawed.

3. By microwave heating, if the food is fully cooked in the microwave oven, or if cooking is immediately completed in another cooking facility.

4. In any cooking facility, as part of the process by which the food is fully cooked.

(4) Bulk flour handling systems.

(a) Food contact surfaces of bulk flour handling equipment shall comply with the provisions of s. ATCP 70.12 (2). Pneumatic systems using storage bins constructed of semi-permeable cloth material are exempt from the requirement that surfaces be smooth and nonabsorbent, provided the surfaces can be effectively cleaned. Attachment mechanisms for holding inspection port covers, access doors, delivery pipe caps, or other removable accessories shall have no loose parts. Delivery pipe caps shall be kept in place, and secured against removal, except when a bulk flour handling system is in use. Outside installations shall be watertight or suitably covered to prevent entry of water and foreign material.
(b) Intake air used in pneumatic flour handling systems shall be filtered to exclude particles of 50 microns or larger. Air discharged from the system shall be filtered so that no visible dust escapes. Filters shall be readily removable for cleaning or replacement. Straight runs of pneumatic conveyors shall comply with the provisions of s. ATCP 70.12 (1), except that piping which is self-purging is exempt from accessibility requirements.
(5) Raw ingredients and finished products; separate handling. Effective measures shall be taken to prevent cross contamination between raw ingredients and finished food products. Raw ingredients shall not be handled simultaneously with finished products in any part of a food processing plant if either the raw materials or the finished products are uncovered or unprotected, and if the handling may result in contamination.
(6) Salvaging distressed food.
(a) In this subsection:
1. “Distressed food" means processed food exposed to a fire, flood, transportation accident, refrigeration breakdown, or other unusual condition which may affect its safety or suitability as human food. “Distressed food” does not include food or food packages damaged during normal conditions of food and food product handling, transit, or storage.
2. “Reconditioned food" means packaged distressed food distributed or offered for sale as human food after its package is repaired or relabeled without being opened.
3. “Reprocessed food" means distressed food subsequently processed in accordance with the requirements under this chapter and distributed or offered for sale as human food.
(b) An operator shall notify the department within 3 days after the operator takes possession of any distressed food, or within 3 days after food in the operator's custody becomes distressed food. The operator shall notify the department before the operator reprocesses or reconditions the distressed food.
(c) An operator shall identify distressed food as such, and shall separate it from other food. No operator may store distressed food in a processing area, or under conditions which may lead to the contamination of other food, equipment, utensils, or packaging materials.
(d) No operator may do either of the following:
1. Reprocess for sale, as human food, any distressed food which is unwholesome or adulterated.
2. Offer for sale, sell, or distribute food in packages that are damaged to such an extent that the food may have been exposed or subjected to possible contamination, including packages with bulging ends, ruptures, hairline fractures, breakage along critical seams, or openings which may have exposed food to contamination.
(e) No operator may sell or distribute reprocessed or reconditioned food at wholesale unless the operator gives the purchaser or recipient written notice that the food is reprocessed or reconditioned. The notice shall also include the name and address of the person who reprocessed or reconditioned the distressed food. The notice may be included on an invoice, bill of lading, or other documentation of the sale or distribution of the food.
(f) An operator shall keep, for the period of time set forth in 21 CFR 117.315, all of the following records related to distressed food handled by that operator:
1. A description of the distressed food, including the type of food, the package or container style, and the amount of the food.
2. The source of the distressed food, or the conditions which caused it to become distressed food.
3. The date on which the operator received the distressed food.
4. The nature of any reprocessing or reconditioning which the operator performed on the distressed food.
5. The final disposition of the distressed food if the distressed food was not sold directly at retail. That record shall include the name and address of the person, such as the food wholesaler, food distributor,

waste disposal firm or waste disposal site operator, to whom the food processing plant operator delivered the food.

(7) Food irradiation. Irradiation in the production, processing, and handling of food shall comply with applicable federal regulations under 21 CFR part 179.

(8) Egg cleaning and storage. Cleaning and storage of eggs shall be done in compliance with the requirements of s. ATCP 88.20.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (7) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.26 Food packaging and labeling.

(1) General. Food packages shall be of sanitary design and construction, so as to protect food contents from reasonably foreseeable risks of contamination. Food packages shall be clean, sanitary, and free of any extraneous or deleterious substance. Food shall not be sold or distributed in packages which are damaged to the extent that food contents may be adulterated as a result of the damage. A sealed food package is damaged within the meaning of this subsection if the package or seal is broken or bulged.

(2) Cleaning and sanitizing returnable food packages. Returnable or multi-use food packages, including returnable bottles, shall be effectively cleaned and sanitized before being reused. Cleaning and sanitizing processes shall remove all extraneous matter and potential adulterants from a food package before the food package is reused. Sanitizing methods shall comply with s. ATCP 70.28. No food package may be reused unless it is specifically designed and constructed for that purpose.

(3) Inspection of returnable food packages. Returnable or multi-use packages, after being cleaned and sanitized, shall be inspected before being reused. Inspection shall be adequate to detect extraneous material and visible adulterants, and any damage to product contact surfaces. Inspection shall be performed on surfaces lighted in compliance with s. ATCP 70.08 (5) (b).

(4) Single-service food packages. Single-service food packages, including bottle caps and other single-service articles used to package food, shall be made from clean, sanitary materials. Single-service food packages shall be clean and sanitary at the time of use. Single-service food packages shall be protected from contamination prior to use, and shall be handled in a sanitary manner. Single-service food packages, including single-service bottles and bottle caps, shall not be re-used.

(5) Food package labeling. Packaged food shall be packaged and labeled according to all of the following, as applicable:

(a) 21 CFR part 101.

(b) Section 97.09, Stats., and federal regulations incorporated by reference in s. 97.09, Stats.

(c) Chapter ATCP 90.

(d) Chapter ATCP 75 Appendix, part 3-201.11(C).

(e) If the packaged food contains a major food allergen, the ingredient statement on the package shall disclose the common name of the major food allergen. The disclosure shall be equivalent in size and prominence to the rest of the ingredient statement. If an allergen originates from finfish, crustacean shellfish, or tree nuts, the disclosure shall include the common name of the source species.

Note: For example, if a food product includes an allergen that originates from finfish, the ingredient statement must disclose the common name such as bass, flounder, or cod. If the allergen originates from crustacean shellfish, the ingredient statement must disclose the common name such as crab, lobster, or shrimp. If the allergen originates from tree nuts, the ingredient statement must disclose the common name such as almond, pecan, walnut, or coconut.

(6) Egg packaging and labeling. The packaging and labeling of eggs shall be done in compliance with the requirements of ss. ATCP 88.32, 88.34, and 88.38.

(7) Alcohol restrictions and labeling. If a product contains more than 1.0% but less than 7.0% alcohol it is regulated by the labeling provisions of this subsection and the alcohol would be declared as an ingredient in normal descending order of predominance. If the alcohol is part of other ingredients such as a flavoring, and it is less than 0.5% of the finished product by volume, then it is considered an incidental ingredient.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; corrections in (5) (a) to (e) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.28 Sanitizers and sanitizing methods.

(1) Sanitizing methods. All returnable or multi-use food packages, and all food contact surfaces of equipment and utensils used to handle foods, shall be effectively sanitized prior to each use.

(2) Chemical sanitizers; requirements. The operator shall use only chemical sanitizers that are specified as acceptable for use in 21 CFR 178.1010, are registered with the U.S. environmental protection agency, are applied according to manufacturer's instructions, are labeled for use in food processing plants on food contact surfaces, and do not leave an unacceptable residue on the food contact surface when used appropriately.

(3) Baking and cooking containers; exemption. Subsection (1) does not apply to baking and cooking containers if heating time and temperature combinations meet industry standards and are adequate to destroy pathogenic microorganisms, provided that the containers are cleaned, stored, and used in a manner which prevents contamination of food.

(4) Sanitizers; maximum concentrations. The operator shall use sanitizers and cleaning compounds so no toxic or otherwise unacceptable residue is left on any food contact surface. Sanitizing solutions shall not exceed the maximum concentrations established by the food and drug administration, United States department of health and human services, under 21 CFR 178.1010. A test kit or other device that measures the concentration of sanitizing solutions in parts per million shall be used as necessary to ensure compliance with this subsection.

(5) Sanitizers; department approval.

(a) Sanitizers approved by the U.S. environmental protection agency and labeled for use on food contact surfaces are also accepted by the department for use according to their labels. The department may approve other sanitizers and sanitizing methods that it finds to be safe and effective for the purpose used.

(b) The department may deny or withdraw approval of any sanitizer or sanitizing method if the department determines that the sanitizer or sanitizing method is not safe or effective for the purpose or under the conditions used, or that it adversely affects the sanitary characteristics of equipment, utensils, or food packages.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (2), (3) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.30 Ready-to-eat foods; reporting pathogens and toxins.

(1) Requirement. Except as provided under sub. (2), an operator shall report to the department the results of any microbiological test or laboratory analysis which indicates that any ready-to-eat food produced by that operator contains pathogenic organisms, toxins resulting from the growth of pathogenic organisms, or any other adulterant capable of causing disease or injury if ingested. The operator shall report to the department within 24 hours after the operator obtains the test results. The operator may report orally, electronically, or in writing.

Note: The State of Wisconsin's Emergency Management phone number is (800) 943-0003. The general number of the Division of Food and Recreational Safety is (608) 224-4700, and its FAX number is (608) 224-4710.

(2) Exemption. An operator is not required to report test results under sub. (1) if all of the following apply:

(a) The ready-to eat-food is identified by a product code or production lot number.

(b) The operator has not yet sold or distributed any of the ready-to-eat food represented by the product code or production lot number under par. (a), but retains direct control over all of that ready-to-eat food.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

ATCP 70.32 Recall plan.

(1) Plan required. An operator shall have a written plan for identifying and recalling food produced at that plant, should a food recall become necessary. The operator shall update the plan as necessary, and shall make it available to the department for inspection and copying upon request.

(2) Plan contents. A plan, under sub. (1), shall do all of the following:

(a) Identify key individuals or positions that are responsible for planning, approving, and implementing recalls on behalf of the operator.

(b) Identify key individuals or entities to be contacted or consulted in connection with a recall.

(c) Include procedures for the routine identification, dating, and tracking of food production lots, so that affected lots can be identified and distinguished from unaffected lots in the event of a recall.

(d) Include procedures to enable routine identification, dating, and tracking of food shipments from the food processing plant. Tracking shall identify shipment recipients and contents, cross-referenced to production lots, so that recipients of affected lots may be contacted in the event of a recall.
(e) Include procedures for determining the nature and scope of a recall, including affected food production lots, shipments, and shipment recipients.
(f) Include procedures for identifying and communicating with affected persons, including suppliers, food shipment recipients, down-line buyers, consumers, government agencies, and others.
(g) Identify potential target audiences for recall information, including consumers, distributors, and government agencies.
(h) Identify potential methods for communicating with target audiences under par. (g).
(i) Identify key information, including the identity of the affected food, the reason for the recall, and suggested actions to be taken by affected persons, which may need to be communicated in the event of a recall.

(3) Deviations from plan. Actual recall procedures may deviate from the recall plan under sub. (1), as circumstances warrant.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

Subchapter III — Canning Operations; Supplementary Requirements

ATCP 70.34 General.

(1) Applicable requirements. Operators engaged in canning operations shall comply with applicable provisions of subch. II. Operators engaged in canning operations shall also comply with this subchapter and shall file processes, as required, with the U.S. food and drug administration according to the provisions in 21 CFR part 108.

(2) Restrictions on sale, distribution, and donation of home-canned foods. Home-canned low-acid or acidified foods may not be donated to charitable organizations, food banks, food pantries, or other non-profit organizations that will distribute or sell the home-canned foods. The individual canning processor may not sell the home-canned foods at a food bank or food pantry, or on behalf of a charitable or non-profit organization, unless exempted by statute or rule.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1) made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.36 Low-acid foods packaged in hermetically sealed containers. The operator of a food processing plant that processes and packages low-acid foods in hermetically sealed containers shall comply with applicable federal regulations under 21 CFR 108.35 (c) and 21 CFR part 113.

Note: Section ATCP 70.36 applies to all low-acid foods processed and packaged in hermetically sealed containers, including thermally processed and aseptically processed low-acid foods.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.38 Acidified foods. Persons who process acidified foods shall comply with applicable federal regulations under 21 CFR 108.25 (c) and 21 CFR part 114.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.40 Facilities and equipment; cleaning.

(1) Equipment design, construction, and accessibility. The operator of a food processing plant facility handling raw agricultural commodities to prepare the commodities for canning shall use product-handling equipment that is kept clean and in good repair and is designed and constructed in a way that allows easy accessibility for maintenance and cleaning.

(2) Equipment, water, and supplies used for cleaning. The operator of a food processing plant conducting canning operations shall use cleaning equipment that is adequate and in good repair, and shall provide

ample supplies of water and steam or other approved cleaning and sanitizing materials for cleaning purposes at the facility.

(3) Cleaning requirements for equipment used to process food before thermal processing. The operator at a canning facility shall clean equipment used to process food before thermal processing, in accordance with a written plan kept at the canning facility and made available to the department for review upon request. The written plan shall include:

(a) A clear and complete description of the affected food processing equipment and utensils, including any continuously-operated equipment. The description shall identify sanitary design features that are relevant to the proposed cleaning and, if deemed appropriate, sanitizing procedures.

(b) The types of food produced with the affected equipment or utensils, the purposes for which the food will be used, and the thermal processing conditions to which the food will be subjected.

(c) A clear and complete description of the alternative procedures used to clean and, if deemed appropriate, sanitize the equipment, including equipment used to conduct these procedures, frequency, methods, materials, and relevant process parameters such as time and temperature. The description shall include a flow diagram of the alternative procedures.

(d) A written statement, by the operator, that the alternative cleaning and sanitizing procedures have been determined by competent authority, such as a process authority, or validated by a published or unpublished, peer-reviewed article, challenge studies, or regulatory standards, to be effective in preventing finished food product contamination and ensuring the microbiological safety of food.

(e) Identification of foreseeable hazards, critical control points, critical safety parameters and limits, and monitoring procedures and controls to ensure that the procedure is effective and appropriately implemented.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (1), (3) (d) made under s. 35.17, Stats., Register January 2020 NO. 769.

ATCP 70.42 Handling raw agricultural commodities and by-products.

(1) Pre-canning operations. Raw agricultural commodities shall be washed, sorted, trimmed as necessary, and inspected before being canned. This requirement does not apply to the washing of cabbage being prepared to make sauerkraut.

(2) Waste handling. Waste and by-products from canning operations shall be stored and handled in a sanitary manner.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

Subchapter IV — Fish Processing Plants; Marine Shellfish Plants; Supplementary Requirements

Note: Fish information not included in this document.

Subchapter V — Bottling Establishments; Supplementary Requirements

ATCP 70.52 Bottling establishments; general. Bottling establishments shall comply with subch. II and this subchapter. Bottling establishments producing bottled water shall comply with 21 CFR part129.

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.54 Returnable and single-service bottles. Bottles shall comply with food package requirements under s. ATCP 70.26 (1). Returnable bottles shall be cleaned, sanitized, and inspected in compliance with s. ATCP 70.26 (2) and (3). Single service bottles shall comply with s. ATCP 70.26 (4).

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769.

ATCP 70.56 Bottled water product sampling; record keeping; reports.

(1) Sampling and analysis. The operator of a bottled water plant shall collect and analyze samples of bottled product for the following contaminants at the following minimum frequency, and more frequently if necessary, to provide reasonable assurance of compliance with this subsection:
(a) A weekly total coliform analysis. Pursuant to 21 CFR 129.80 (g) (1), a positive total coliform analysis requires follow-up testing for *E. coli* and, pursuant to 21 CFR 165.110 (b) (2) (B), if *E. coli* is present the bottled water will be deemed adulterated.
(b) An annual physical analysis pursuant to 21 CFR 165.110 (b) (3) for turbidity, color, and odor analysis.
(c) An annual chemical analysis pursuant to 21 CFR 165.110 (b) (4).
(d) An annual radiological analysis pursuant to 21 CFR 165.110 (b) (5).
(2) Reporting of analytical results. A processor of bottled water shall report the results of all required analyses, under sub. (1), to the department, for each license year upon request. If the result of any individual analysis exceeds the established enforcement standard, the bottled water processor shall submit a copy of that analytical report to the department within 7 days of the completion of the analysis.
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

ATCP 70.58 Labeling bottled products. Bottled products shall be labeled according to s. ATCP 70.26 (5). Bottled water shall also be labeled according to 21 CFR 165.110. Juice shall be labeled according to 21 CFR part 120, and any applicable regulations found in this chapter.
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769 .

Subchapter VI — Juice and Juice HACCP

ATCP 70.60 Juice and Juice HACCP.

(1) Applicable regulations. Food processing plants producing and packaging or bottling juice shall comply with subch. II and this subchapter. Food processing plants engaged in juice processing and packaging or bottling shall comply with 21 CFR part 120.
(2) Labeling requirements. A juice label may not misrepresent that juice has been pasteurized or has undergone a process equivalent to pasteurization. A juice label may not represent as “fresh" any juice that has been treated with ultra-violet light.
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction made under s. 35.17, Stats., Register January 2020 No. 769 .

Subchapter VII — Effect of Rules on Local Ordinances

ATCP 70.62 Effect of rules on local ordinances.

(1) Non-conflicting local ordinances permitted. This chapter does not prohibit or nullify any local government ordinance with which it is not in direct conflict as provided in sub. (2).
(2) Preemption of conflicting local ordinances. If this chapter conflicts directly with any local government ordinance, so that it is impossible to comply with one except by violating the other, this chapter controls.
(3) Duty to comply. Compliance with local government ordinances does not relieve any person from the duty of complying with this chapter.
History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20.

Subchapter VIII — Variances

ATCP 70.64 Variances.

(1) Issuance. The department may issue a written waiver granting a variance from a construction, equipment, utensils, processing or procedure standard under this chapter if the department finds that the variance is reasonable and necessary under the circumstances, and that it will not compromise the purpose

served by the construction, equipment, or processing standards. The administrator of the department's division of food and recreational safety may issue a waiver on behalf of the department. The department shall keep a copy of the waiver on file for as long as the waiver remains in effect.

(2) Submission of request for a variance. A variance request shall be submitted to the department through the sanitarian assigned by the department to inspect the food processing plant, and shall include all validation documents as well as a HACCP plan required under 21 CFR part 120 or 123, if applicable; or food safety preventive controls plan as required under 21 CFR 117, Subpart C, if it is for a waiver of accepted processing protocols.

(3) Department decision on request for a variance. The department shall grant or deny a request under sub. (2) or (4) within 60 days after it receives a complete request, except that the department may give written notice extending the action deadline for reasons stated in the notice.

(4) Duration, expiration, and reissuance.

(a) Waivers to construction and maintenance standards under s. ATCP 70.08 shall remain in effect as long as no material changes to construction or maintenance of the food processing plant result in failure to meet the standard in s. ATCP 70.08 (1). All waivers to standards under ss. ATCP 70.10 to 70.32 granted under this section shall expire five years from the date of issuance.

(b) A license holder who wishes to continue a variance to standards under ss. ATCP 70.10 to 70.32 after the expiration of the waiver shall file a request with the department for reissuance of the waiver at least 180 days prior to its expiration, unless permission for a later date has been granted by the department.

(c) When a license holder has made timely and sufficient application for the reissuance of a waiver or a new variance request with reference to any activity of a continuing nature, the existing waiver does not expire until the application has been finally acted upon by the department, and, if the application is denied or the terms of the new request are limited, until the last day for seeking review of the agency decision or a later date fixed by order of the reviewing court.

(d) A waiver shall be reissued by the department if the equipment, utensils, processes, or procedures described in it continue to meet the criteria in sub. (1) or if the food processing plant operator updates the original variance request to ensure compliance with the criteria in sub. (1).

History: CR 17-073: cr. Register January 2020 No. 769, eff. 2-1-20; correction in (2), (3), (4) (a) made under s. 35.17, Stats., Register January 2020 No. 769.

WI Regulations Chapter 97 - Food, Lodging, and Recreation

Subchapter II Food and Safety Regulation; Section 97.29 Food Processing Plant

Information current as of Jan, 2024. To be sure this information is current, use the link provided to access the form from WI State Legislature.Links can be accessed by clicking the blue text in the digital version of this document.

97.29 Food Processing Plants

(1) Definitions. In this section:

(a) "Alcohol beverage" has the meaning given under s. 125.02 (1).

(b) "Bakery" means any place where bread, crackers, pasta or pies, or any other food product for which flour or meal is the principal ingredient, are baked, cooked or dried, or prepared or mixed for baking, cooking or drying, for sale as food.

(c) "Bottling establishment" means any place where drinking water, soda water beverage or alcohol beverage is manufactured or bottled for sale. "Bottling establishment" does not include a retail establishment engaged in the preparation and sale of beverages under a license issued under s. 125.26 or 125.51 or a license issued under s. 97.30 for a restaurant or other license issued under s. 97.605.

(d) "Canning" means the preservation and packaging in hermetically sealed containers of low-acid or acidified foods.

(e) "Confectionary" means any place where candy, fruit, nutmeats or any other food product is manufactured, coated or filled with saccharine substances for sale as food.

(f) "Drinking water" means water used or intended for use for human consumption. "Drinking water" includes distilled water, artesian water, spring water and mineral water, whether carbonated or uncarbonated, if consumed by humans or intended for human consumption.

(g) "Food processing" means the manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking, grinding, cutting, mixing, coating, stuffing, packing, bottling, or packaging, or through any other treatment or preservation process. "Food processing" includes the activities of a bakery, confectionary, or bottling establishment, and also includes the receipt and salvaging of distressed food for sale or use as food.

(h) "Food processing plant" means any place used primarily for food processing, where the processed food is not intended to be sold or distributed directly to a consumer. "Food processing plant" does not include any of the following:

1. A retail food establishment if the food processing activities at that establishment are authorized by a license issued under s. 97.30.

2. A restaurant or other establishment where meals are prepared or processed for retail sale directly to consumers or through vending machines if the food processing activities at that establishment are authorized by a license issued under s. 97.605.

3. An establishment covered by a license or permit under ch. 125 to sell alcohol beverages if the food processing activities related to alcohol beverages at that establishment are limited to preparing individual servings of alcohol beverages that are sold on the premises in accordance with the terms of the establishment's license or permit under ch. 125.

4. A dairy plant if the food processing activities at that plant are authorized by a license issued under s. 97.20.

5. A meat or poultry establishment if the food processing activities at that establishment are authorized by a license issued under s. 97.42 or are authorized under 21 USC 451 to 472 or 21 USC 601 to 695.

6. An egg products plant if the food processing activities at that establishment are inspected by the federal department of agriculture under 21 USC 1031 to 1056.

7. A dairy farm and milking operation licensed under s. 97.22 that produces milk for shipment to a dairy plant licensed under s. 97.20 or under the equivalent laws of another state.

8. A place used by a beekeeper solely for extracting honey from the comb or producing and selling raw honey or raw bee products.

9. A place used solely for washing or packaging fresh or otherwise unprocessed fruits or vegetables.

10. A place used by a nonprofit organization solely for receiving and salvaging distressed food pursuant to the organization's purposes if the organization is described in section 501 (c) (3) of the Internal Revenue Code and is exempt from federal income tax under section 501 (a) of the Internal Revenue Code.

11. A place on a farm used by an egg producer solely for handling, cleaning, or packaging whole eggs, including nest-run eggs, that are produced as allowed under s. 97.28 (2).

12. A place used solely for producing and packaging maple syrup or concentrated maple sap for sale directly to consumers or to a food processing plant licensed under this section if those sales do not exceed $5,000 in any 12-month period.

12m. A place used to process food for sale at a stand operated by a minor, as defined in s. 66.0416 (1) (b).

13. Any other place exempted by the department by rule.

(hm) "Potentially hazardous food" has the meaning given in s. 97.27 (1) (dm).

(i) "Soda water beverage" means all beverages commonly known as soft drinks or soda water, whether carbonated, uncarbonated, sweetened or flavored.

(2) License.

(a) *Requirement.* Except as provided under par. (b) and s. 97.28, no person may operate a food processing plant without a valid license issued by the department for that food processing plant. A license expires on March 31 annually, except that a license issued for a new food processing plant on or after January 1 but before April 1 expires on March 31 of the following year. Each food processing plant shall have a separate license. A license is not transferable between persons or locations. Application for a license shall be made on a form provided by the department and be accompanied by the applicable fees required under sub. (3). An applicant shall identify the categories of food processing activities which the applicant proposes to conduct at the food processing plant. An application shall include

additional information which may reasonably be required by the department for licensing purposes.

(b) *Exemptions.*

1. If a dairy plant licensed under s. 97.20 or a meat establishment licensed under s. 97.42 is incidentally engaged in the operation of a food processing plant at the same location, the department may exempt by rule the dairy plant or meat establishment from licensing under this section.

2. A person is not required to obtain a license under this section to sell at retail food products that the person prepares and cans at home in this state if all of the following apply:

a. The food products are pickles or other processed vegetables or fruits with an equilibrium pH value of 4.6 or lower.

b. The person sells the food products at a community or social event or a farmers' market in this state.

c. The person receives less than $5,000 per year from the sale of the food products.

d. The person displays a sign at the place of sale stating: “These canned goods are homemade and not subject to state inspection."

e. Each container of food product that is sold is labeled with the name and address of the person who prepared and canned the food product, the date on which the food product was canned, the statement “This product was made in a private home not subject to state licensing or inspection.", and a list of ingredients in descending order of prominence. If any ingredient originates from milk, eggs, fish, crustacean shellfish, tree nuts, wheat, peanuts, or soybeans, the list of ingredients shall include the common name of the ingredient.

(c) *Added operations.* No food processing plant may add a new category of food processing operations during the time period for which a food processing plant license was issued unless the operator of the food processing plant first notifies the department and obtains written authorization for the new category of operations. “New category of food processing operations" may include any of the following operations which were not identified on the most recent license application for the food processing plant:

1. Bakery operations.

2. Confectionary operations.

3. Bottling establishment operations.

4. Canning operations.

5. Freezing, smoking or other food preservation operations which constitute a significant departure from the operations described in the most recent license application.

6. Any other category of food processing operations which constitutes a significant departure from the operations described in the most recent license application.

(3) Fees.

(a) *Annual license fee; all food processing plants.* An applicant for a food processing plant license shall pay the license fee specified under par. (am), based on the dollar volume of production by the food processing plant during the previous license year. The annual dollar volume of production shall be determined by gross sales of the product processed during the license year, plus the inventory value of any portion of the product not sold. If the food processing plant was not licensed during the previous license year, the license applicant shall pay an estimated license fee based on projected annual production in the license year for which application is made. At the end of the license year for which an estimated fee has been paid, the licensee shall report to the department the actual production during the license year, and the license fee for that year shall be recomputed based on the actual production. If the license fee based on actual production differs from the estimated license fee, the licensee shall pay the balance due or receive a credit from the department on the next year's license fee.

(am) *Fee amounts.* Unless otherwise required by department rule, the annual fees required under par. (a) are:

1. For a food processing plant that has an annual production of $25,000 or more but less than $250,000 and that is engaged in processing potentially hazardous food or in canning, an annual license fee of $120.

2. For a food processing plant that has an annual production of $250,000 or more and that is engaged in processing potentially hazardous food or in canning, an annual license fee of $270.

3. For a food processing plant that has an annual production of $25,000 or more but less than $250,000 and that is not engaged in processing potentially hazardous food or in canning, an annual license fee of $50.

4. For a food processing plant that has an annual production of $250,000 or more and that is not engaged in processing potentially hazardous food or in canning, an annual license fee of $110.

5. For a food processing plant that has an annual production of less than $25,000, an annual license fee of $40.

(b) *Canning operations; license fee surcharge.* If a food processing plant is engaged in canning operations, a license applicant shall pay a license fee surcharge of $195, beginning with the license year which ends on March 31, 1989, which shall be added to the license fee under par. (a).

(c) *Reinspection fee.* If the department reinspects a food processing plant because the department finds a violation of this chapter or rules promulgated under this chapter, the department shall charge the food processing plant operator the reinspection fee specified under par. (cm). The reinspection fee shall be based on the dollar volume of production by the food processing plant during the previous license year, and may include a reinspection fee surcharge for a food processing plant engaged in canning operations. The reinspection fee is payable when the reinspection is completed, and is due upon written demand from the department. The department may issue a demand for payment when it issues a license renewal application form to the food processing plant operator.

(cm) *Fee amounts.* Unless otherwise required by department rule, the reinspection fee required under par. (c) is:

1. For a food processing plant that has an annual production of $25,000 or more but less than $250,000 and that is engaged in processing potentially hazardous food or in canning, the reinspection fee is $80.

2. For a food processing plant that has an annual production of $250,000 or more and that is engaged in processing potentially hazardous food or in canning, the reinspection fee is $180.

3. For a food processing plant that has an annual production of $25,000 or more but less than $250,000 and that is not engaged in processing potentially hazardous food or in canning, the reinspection fee is $50.

4. For a food processing plant that has an annual production of $250,000 or more and that is not engaged in processing potentially hazardous food or in canning, the reinspection fee is $110.

5. For a food processing plant that has an annual production of less than $25,000, the reinspection fee is $40.

(d) *Surcharge for operating without a license.* An applicant for a food processing plant license shall pay a license fee surcharge if the department determines that, within one year prior to submitting a license application, the applicant operated the food processing plant without a license in violation of this subsection. The amount of the surcharge is $100. Payment of this license fee surcharge does not relieve the applicant of any other civil or criminal liability which results from the unlicensed operation of the food processing plant, but does not constitute evidence of a violation of any law.

(e) *Licensing contingent on payment of fees.* The department may not issue or renew a food processing plant license unless the license applicant pays all fees which are due and payable under this subsection, as set forth in a statement from the department. The department shall

refund a fee paid under protest if the department determines that the fee was not due and payable as a condition of licensing under this subsection.

(4) Food processing plants buying vegetables from producers. The department may not issue or renew a license to operate a food processing plant to any applicant who is a vegetable contractor, as defined in s. 126.55 (14), unless the applicant has filed all financial information required under s. 126.58 and any security that is required under s. 126.61. If an applicant has not filed all financial information required under s. 126.58 and any security that is required under s. 126.61, the department may issue a conditional license under s. 93.06 (8) that prohibits the licensed operator from procuring vegetables from a producer or a producer's agent, but allows the operator to procure vegetables from other sources.

(5) Rule making. The department may promulgate rules to establish the fees required under sub. (3) (a) or (c) or to govern the operation of food processing plants. Rules may include standards for the construction and maintenance of facilities; the design, installation, cleaning and maintenance of equipment and utensils; personnel sanitation; food handling and storage; sanitary production and processing; and food sources and food labeling.

(6) Information about home canning.

(a) The department shall encourage persons to whom the exemption in sub. (2) (b) 2. applies to attend and complete training, that is approved by the department, concerning preparing and canning foods and to have their recipes and processes reviewed by a person who is knowledgeable about the food canning industry and who is recognized by the department as an authority on preparing and canning food.

(b) The department, in cooperation with the University of Wisconsin-Extension, shall attempt to maximize the availability of information and technical services and support for persons who wish to home prepare and home can low-acid and acidified food products.

History: 1987 a. 399; 1989 a. 31; 1989 a. 56 s. 259; 1991 a. 39; 1993 a. 27, 264; 1995 a. 460; 1997 a. 27; 2001 a. 16; 2009 a. 101; 2013 a. 245, 302; 2015 a. 55, 195, 242; 2017 a. 365; 2019 a. 60.

Cross-reference: See also ch. ATCP 70, Wis. adm. code.

WI DNR Waste Water Permit

Who needs a Low-Impact Discharge General Permit?

Application Instructions for Maple Syrup Producers (link to pdf)

Disclaimer: Information provided here represents the author's current understanding of the topic. Any discrepancies are subject to the DNR Bureau of Water Quality. This information was current as of January 2024. Consult the links provided for the most current information.

Click the link to this decision module to help determine if a General Permit is required:
Wastewater General Permit Decision Module: Preliminary Eligibility Survey

WPDES Low-Impact Discharge General Permit & Maple Syrup Producers

Do I need a WPDES Low-impact Discharge General Permit (GP)?

Please note: This document pertains only to the WPDES general permit for Low-impact Discharge (WI-0066575) (https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html). Other permits may be applicable.

The Department does not charge a permit application fee or annual fee for the Low-impact Discharge permit. Permits required by other agencies may.

If you have questions, contact your General Permit representative at *https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html*

- Contacts tab.

#1 - Am I required to have a Food Processing Plant license from DATCP (https://datcp.wi.gov/Pages/Programs_Services/FSMapleSyrup.aspx)**?**

No – The GP is not required at this time.

Yes – The GP may be required. *Go to question #2.*

#2 - Do I use Reverse Osmosis (RO) to produce maple syrup?

No – The GP is not required at this time.

Yes – The GP may be required. *Go to question #3.*

#3 - My RO system discharges:

a. RO water and/or wastewater* to a surface water (lake, river, etc.) or wetland via a pipe, ditch, channel, tunnel, conduit, swale, storm sewer or similar conveyance – Contact your General Permit representative for more information and instructions. Discharges to a surface water will likely have additional requirements.

b. Wastewater* to a septic tank and drain field, a holding tank that is pumped and hauled, or sent to a sanitary sewer. Your wastewater is regulated under a different set of rules; the GP is not required at this time.

c. All water (RO water and wastewater*) to groundwater** – Your wastewater fits within the requirements of the GP. ***Go to "How to apply for a permit".***

d. Wastewater* to groundwater** - Your wastewater fits within the requirements of the GP. ***Go to "How to apply for a permit".***

** For this general permit, applicable maple syrup derived wastewater is defined as*

How to apply for a permit

An application package should be submitted at least 30 days before discharge. A letter extending coverage will be sent after a full application package is received and if the discharge meets the eligibility criteria of the permit. The package is required to include:

Notice of Intent (NOI) – The NOI and a copy of the permit can be found the General Permits tab under the Low-Impact Discharge at https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html.

Oil and Grease Analysis *- Your lab will supply you with a sample bottle containing a small amount of acid (used as a preservative). A grab sample of the wastewater is needed. The grab sample (a volume of water taken over a short period of time) should be taken directly into the sample bottle from a location where there is the greatest mixing, such as at the end of the RO wash cycle.*

Remember, it is important to follow all lab instructions.

- For groundwater discharges, one wastewater Oil and Grease (O&G) test result is required. O&G samples must be tested by a certified lab. Sample information can be found in section 3.1.1 of the permit. Due to the nature of maple syrup production, a wastewater discharge is necessary to collect a sample. An O&G sample result from a previous season may be used. If one is not available, with permission, an applicant may submit an NOI without a sample result. In those cases a sample shall be taken and result submitted at the beginning of the next production season. A list of certified labs can be found at https://dnr.wisconsin.gov/topic/labCert/certified-lab-lists.
- Narrative discharge observations found in section 3.1.2 are required. These parameters are based on visual observations and knowledge of the facility.
- Knowledge of Water Treatment Additives used is needed. Additives include detergents and other chemicals added to the RO system during the cleaning process. An additive worksheet 3400-213 (https://dnr.wi.gov/files/PDF/forms/3400/3400-213.pdf) shall be submitted for review for all surface water discharges. For groundwater discharges describe additives in the BMP Plan (see next bullet). Additives with the active ingredient chlorine, hypochlorite, sulfuric acid, hydrochloric acid or sodium hydroxide are common and do not need to go through the review process.
- A Best Management Practice (BMP) Plan that identifies potential discharges of pollutants to the environment including the impacts of erosion and sediment control is required. Section 6.6 of the permit identifies what should be included in the plan. A BMP template can be found on the General Permits tab under the Low-Impact Discharge at at https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html.
- Include a site map that shows the facility location and the location of each discharge point.

Once you receive coverage you are required to

- Operate under the permit requirements
- Follow your BMP Plan
- Maintain a log of the narrative discharge requirements

Coverage continues through the entire permit term.
You do not need to reapply each production season and you will be notified when the permit is reissued. At that time, you will need to reapply and resample (expected in 2025).

This WPDES general permit is effective for 5-years (March 1, 2020 to February 28, 2025). Difficulties during the permit process may cause a delay in the next reissuance. To compensate, section 8.2.4 of the permit states a permittee is covered under the expired permit until a new permit is reissued. The length of coverage for an individual permittee can be difficult to track, current permit holders will be notified by the department when and how to reapply.

FAQ: WI DNR Waste Water Permit

Links can be accessed by clicking the blue text in the digital version of this document.

Low-Impact Discharge General Permit Information

Stop! *Before you read this page, look closely at the WPDES Low -Impact Discharge Application Instructions for Maple Syrup Producers above to determine if your operation needs a General Permit (GP).*

If you need a Low-Impact Discharge General Permit, contact your local rep.

General Permit Contacts are assigned by region. Find the information in the contacts tab under wastewater general permits (for Low-Impact Discharge)

Click on the name below for their contact information.

Contact	Area/Counties of Responsibility
David Haas	Brown, Calumet, Door, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Waupaca, Waushara, Winnebago
Kristi Blackmon	Ashland, Barron, Bayfield, Burnett, Douglas, Florence, Forest, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn
Joshua Joseph	Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, La Crosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood
Reece Matheson	Columbia, Dane, Dodge, Green, Grant, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha

A Few Common Questions*:*

Why a permit? The ultimate goal is to protect the "waters of the state" from pollution. To that end, the Wisconsin Pollutant Discharge Elimination System (WPDES) permit program has been established. WPDES permits are issued by the DNR Bureau of Water Quality which monitors wastewater discharges to groundwater and surface water. The goal is to maintain the cleanliness of our water in Wisconsin.

What's the WPDES permit for? *The Low-Impact Discharge General Permit is an allowance for a facility to discharge a certain amount of pollutants into the water of the state under specific conditions. The goal is to properly manage low-impact discharges in order to protect public health and water quality of groundwater and surface water within the state of Wisconsin.* (Low-Impact Discharge Permit Fact Sheet)

What's the risk from Maple Producers? Maple Syrup producers fall in the "Low-Impact Discharge" category. The discharges are relatively pollutant-free that present no or minimal impact to water quality of surface water, wetlands or groundwater when managed properly. The DNR is concerned with the amount of RO water and wastewater (reject water from the wash/rinse process) released to groundwater or to surface water that may carry oil, grease, unhealthy pH and chlorine levels that could harm our water source and the ecosystem it supports.

- Clean RO water without chemicals discharged into **ground water** is **not** considered a pollutant. It is only a concern if the volume could cause erosion. (volume does **not** need

to be included in the application). Discharge to surface water (swamp, creek, river, lake, etc.) may be a pollutant.

- RO rinse water containing chemicals **is** considered a pollutant (volume does need to be included in the application)

Is this only for producers who use RO? Yes, at this time it is required for those using RO ***AND*** who are required to have a DATCP Food Processing License.

What about wastewater that goes into the creek? Contact your General Permit Representative for more information and instructions. They will work with you to ensure the water is not harming anything. An additives sheet must be completed in the application when discharging to surface water.

Is this an annual thing? No. General permits have an effective term of about 5 years from the date of issuance. (WPDES Low-Impact Discharge Application for Maple Syrup Producers)

When is this required? February 2021

What's the cost? No cost

How do I apply? Complete an application package at ***least 30 days before discharge*** including:Wastewater General Permits | | Wisconsin DNR (scroll down to Low-Impact Discharge)

Notice of Intent (NOI) which includes discharge sample test results, narrative of discharge visual observations and record of any water treatment additives, etc. **Starting on July 1, 2022**, applicants submitting a Notice of Intent (NOI) for coverage under any wastewater general permit must submit an electronic NOI (eNOI). The eNOI is available on the online ePermitting System by logging in through the Water Permit Applications webpage. Choose **Wastewater** and scroll down to **Low-Impact Discharge**. Paper NOIs will no longer be accepted by the department for wastewater general permits.

A Sample NOI form is provided on the following pages of this document.

Best Management Practice (BMP) Plan which includes identification of potential pollutant sources on site, pollutants discharged and how the effects shall be minimized (maintaining proper operations and following BMP), visual inspection program and log, description of erosion control, actions to take in case of a system failure (i.e. if too much is released). Other requirements included here overlap with DATCP requirements (security, good housekeeping, preventative maintenance, name and location of facility, etc) https://dnr.wi.gov/files/pdf/forms/3400/3400-240.pdf (save the link and open on your computer)

What tests are required? Lab test for Oil & Grease. Results must be less than or equal to 3.0 mg/L (see following pages for details)

Notice of Intent Form (NOI): WI DNR Waste Water Permit

Starting on July 1, 2022, applicants submitting a Notice of Intent (NOI) for coverage under any wastewater general permit must submit an electronic NOI (eNOI). The eNOI is available on the online ePermitting System by logging in through the Water Permit Applications webpage. Scroll down to **Wastewater**, then choose **Low-Impact Discharge**. Paper NOIs will no longer be accepted by the department for wastewater general permits.

Sample Notice of Intent Form (NOI)

This document is a copy of the Notice of Intent (NOI) with examples for Most Maple Producers on how to fill it out. Because each operation is unique, read carefully and complete according to your specific situation. This is NOT meant to be printed and submitted. It is meant to be a helpful guide when completing your individual NOI. ***Always work with your DNR regional representative to answer specific questions.***
Sample answers are highlighted in yellow and comments are in red.

State of Wisconsin
Department of Natural Resources
Bureau of Water Quality
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Notice of Intent (NOI)
Low-Impact Discharge
WPDES Permit No. WI-0066575-01-0
Form 3400-241 (R 07/20) Page 1 of 7

Notice: Pursuant to chs. NR 200 and 205, Wis. Adm. Code, this notice of intent (NOI) is required to request coverage under the Wisconsin Pollutant Discharge Elimination System (WPDES) Permit No. WI-0066575-01-0 for low-impact discharges to waters of the state of Wisconsin. Failure to complete this form in its entirety may result in a returned NOI or a denied NOI. Personal information collected will be used for administrative purposes and may be provided to requestors to the extent required by Wisconsin Public Records law [ss. 19.31-19.39, Wis. Stats.].

Please indicate the type of WPDES permit coverage being requested:

- ○ **Single Site coverage for temporary discharges**
- ◉ **Single Site coverage for continuous/recurring discharges**
- ○ **Statewide coverage for temporary operational discharges**

SECTION I: WPDES PERMITTEE RESPONSIBLE FOR POLLUTANT DISCHARGE

WPDES Permittee (Municipality, Industry, or Other)			
Other			
Permittee Authorized Representative (First and Last Name)	Title	Company	
John Doe	Owner	Sweet & Sour Sugarbush	
Mailing Address (i.e. PO BOX, Street, or Route)	Municipality	State	ZIP Code
1234 Somewhere Road	Anytown	WI	54490
Email Address	Phone No. (include area code)	Alternative Phone No.	
AnAddressisRequiredhere@gmail.com	(715) 000-1234		

SECTION II: APPLICANT INFORMATION ☐ Check if same as authorized representative

Applicant Name (First and Last Name)	Title	Company	
Mailing Address (i.e. PO Box, Street, or Route)	Municipality	State	ZIP Code
Email Address	Phone No. (include area code)	Alternative Phone No.	

SECTION III: DISCHARGE MONITORING CONTACT

Discharge Monitoring Contact (First and Last Name)	Title	Company	
Mailing Address (i.e. PO Box, Street, or Route)	Municipality	State	ZIP Code
Email Address	Phone No. (include area code)	Alternative Phone No.	

In section IV, most producers will Select the box "check if not applicable and skip this section"

SECTION IV: CONTRACTOR INFORMATION ☐ Check if not applicable and skip this section

Role: ○ Consultant ○ Contractor ○ Other — Specify:			
Contact Name (First and Last Name)	Title	Company	
Mailing Address (i.e. PO Box, Street, or Route)	Municipality	State	ZIP Code
Email Address	Phone No. (include area code)	Alternative Phone No.	

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Sample answers are highlighted in yellow and comments are in red.

SECTION V: FACILITY LOCATION INFORMATION ☐ Check if statewide operations and skip this section

Facility Name	County (of facility/project location)	○ City ◉ Town ○ Village
Sweet & Sour Sugarbush	Milwaukee	of List Township name

Physical Address (Street, Road, Route, or other)
1234 Somewhere Road (Google Earth will list latitude/longitude of sugarbush. Property tax statement shows PLSS)

Public Land Survey System (PLSS)
QQ of ▾ Q of ▾ Section Township N Range ○ E ○ W Latitude: Longitude:

Note: PLSS can be identified on the Surface Water Data Viewer here: https://dnr.wi.gov/topic/surfacewater/Swdv/.

To Find the PLSS refer to your Property tax statement. To find Latitude and Longitude try this link: https://www.latlong.net/convert-address-to-lat-long.html

SECTION VI: FACILITY ACTIVITY ☐ Check if statewide operations and skip this section

1. Other Environmental Permit or Approvals - Has the facility received or applied for coverage under any WPDES general permit or any other environmental permits, such as for management of hazardous wastes, emission of air pollutants or underground injection?
   - ◉ No. **Proceed to question 2.**
   - ○ Yes. Please give the permit number(s) and briefly describe the permit activity. **Proceed to question 2.**

Permit #	Description of Permit Activity

2. Nature of Business - Provide a brief description of the facility operations and activities:
   Maple syrup production using reverse osmosis to concentrate maple sap prior to boiling in an evaporator.

   Proceed to question 3.

3. Sanitary Wastes - Where are sanitary wastes (wastewaters from restrooms, washrooms, lunch/break room sinks, showers, etc.) discharged?
   - ○ In a septic tank system and/or subsurface absorption system
   - ○ In a privately-owned treatment system owned by you or operated by: _____
   - ○ In a publicly-owned treatment system operated by: _____
   - ◉ Other - Specify: (Select what you stated in your DATCP Food Processing Plant license application)

   Proceed to question 4.

4. Water Supply - What are the facility's sources of water?

Source Type	Name of Source	Average Volume or Flow rate (include units)
Municipal Supply		
Surface Water Intake		
Private Well	example-Drilled well, 180 feet deep,. 1950 year	e.g. Sufficient for dairy farm
Other (specify):		
Other (specify):		

If you do not have a private well, choose other and describe. Contact your DNR Local representative with any questions.

Proceed to question 5.

5. Removed Substances – Do treatment processes at the facility/proje other substances from the treatment of source waters or wastewate
   - ◉ No. **Proceed to Section VII.**
   - ○ Yes. Please provide the disposal method of the removed solids, sludges, or other substances. **Proceed to Section VII.**

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Sample answers are highlighted in yellow and comments are in red.

Low-Impact Discharge
WPDES Permit No. WI-0066575-01-0
Form 3400-241 (R 07/20) Page 3 of 7

SECTION VII: DISCHARGE CHARACTERIZATION ☐ Check if statewide operations and skip this section

1. Type of Wastewater Discharged – Please specify each type of wastewater discharged at the facility and the outfall number, average daily flow in gallons per day (gpd), discharge location, discharge duration, and surface water name (if necessary) of each type of wastewater discharged at the facility. **Proceed to Section VIII.**

Type of Wastewater	Outfall # (001, 002, etc..)	Average Daily Flow (gallons per day)	Discharge Duration	Discharge Location	Surface Water Discharge Only ☐ Check if not applicable	
					Surface Water Name	WBIC*
map sap RO discharge H20	001	4,200	5hr/20d/yr	Groundwater		
RO membrane wash water	001	24	4min/20d/yr	Groundwater		

Note: Type of wastewater: The applicant shall state each wastewater type that is discharged to a water of the state.

Outfall: For this general permit an outfall is the point where the wastewater will leave your facility and drain into the ground, a pond, a surface water, or storm sewer. The applicant should state each separate discharge point located at the site with an outfall number starting at 001.

Average Daily Flow: For new applicants when no flow data is available, the applicant shall approximate the highest expected average daily wastewater volume discharged. For existing permittees, the average daily flow shall be determined by the average daily wastewater volume discharged from the previous 24 months.

Discharge Duration: The applicant shall specify the duration of discharge from the facility/project. Discharge duration may include: continuous, noncontinuous, or seasonal.

Discharge Location: The applicant shall specify the location of the discharge. The applicant may consider the discharge locations below:

- **Groundwater Discharge** means any wastewater discharge that is allowed to infiltrate or seep into the soil from a permeable surface including but not limited to any drain field, agricultural field, ditch, swale, depression, trench or pit, adsorption pond, infiltration pond, rain garden, prairie, or vegetative area that may impact groundwater quality.
- **Surface Water Discharge** means any wastewater discharge via any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer to a creek, stream, pond, marsh, bay, reservoir, river, lake, or other surface water within the state of Wisconsin.
- **Wetland Discharge** means any wastewater discharge via any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer to a wetland. Wetland means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions.

Surface Water Name: If the discharge is to a surface water, the applicant shall provide the name of the surface water. Surface waters can be identified on the Surface Water Data Viewer here: https://dnr.wi.gov/topic/surfacewater/swdv/.

WBIC: If the discharge is to surface water, the applicant shall provide the Water Body Identification Code (WBIC) for that specific surface water, the WBIC can be found here: http://dnr.wi.gov/water/waterSearch.aspx

Proceed to Section VIII.

This document is a copy of the Notice of Intent (NOI) with examples for Most Maple Producers on how to fill it out. Because each operation is unique, read carefully and complete according to your specific situation. This is NOT meant to be printed and submitted. It is meant to be a helpful guide when completing your individual NOI. ***Always work with your DNR regional representative to answer specific questions.***
Sample answers are highlighted in yellow and comments are in red.

SECTION VIII: DISCHARGE SCREENING

1. Please provide sample results for the following applicable parameters for each discharge outfall based on Section 3.1.1 and Section 3.4 of the general permit **then proceed to question 2**. If you have more than one discharge outfall, please attach a summary of sample results for each additional discharge outfall to this NOI. Please also attach laboratory reports to this NOI if the discharge samples were analyzed by a commercial laboratory. The sampling parameters for certain discharge activities can be found in Section 3.4 of the general permit. Applicants may use historical discharge data, if available, for sampling results. The applicant shall contact the department prior to submittal of NOI to request a waiver from sampling for certain parameters.

☐ I have reviewed the sampling requirements in Section 3.4 and the discharge activity does not require sampling for any of the parameters listed below at this time. Proceed to question 2.

Parameter	Value	Units
pH Field	N/A	s.u.
Suspended Solids, Total	N/A	mg/L
BODs, Total	N/A	mg/L
Chlorine, Total Residual	N/A	mg/L
Oil & Grease (Hexane)	private lab results or pending	mg/L
Maximum Temperature	N/A	°F
Dissolved Oxygen	N/A	mg/L
Chloride	N/A	mg/L
Phosphorus, Total	N/A	mg/L
Nitrogen, Ammonia (NH3-N) Total	N/A	mg/L
Other (Specify):		
Other (Specify):		

An RO wash water sample must be taken and sent to a lab to evaluate for Oil & Grease (Hex) during the syrup season. You can complete this application by writing pending in this section. Contact a certified lab for details. A list of labs is on WMSPA web-site "members only" tab or by clicking here

2. Please certify that the discharge will comply with following narrative discharge requirements:

A. The discharge(s) are absent any visible oil sheen or film: ◉ Yes ○ No
B. The discharge(s) are not objectionable (offensive) for odor and color: ◉ Yes ○ No
C. The discharge (s) are absent any floating solids, submerged solids, foam, scum debris, or other indicators of pollution: ◉ Yes ○ No
D. The discharge(s) do not contain any unapproved water treatment additives except those already found in the source water: ◉ Yes ○ No
E. The discharge(s) are absent any bacteria/coliform organisms associated with humans and animal wastes: ◉ Yes ○ No
F. The discharge(s) are absent any toxic metals found in chs. NR 105 and NR 140, Wis. Adm. Code: ◉ Yes ○ No
G. The discharge(s) are absent any bioaccumulative chemicals of concern (e.g. mercury, PCBs, or PFAs): ◉ Yes ○ No
H. The discharge (s) are absent any other toxic or hazardous substances: ◉ Yes ○ No

Proceed to Section IX

SECTION IX: ELIGIBILITY CHECKLIST

1. Will all the wastewater be discharged from and/or to properties within tribal lands (i.e. land owned by or held in trust for the tribes and land within recognized reservation boundaries)?

○ Yes. **Your discharge is not eligible for this General Permit.** *If all discharges from your facility go to or come from properties in tribal lands, you do not require regulation under a WPDES discharge permit. Therefore, skip the rest of the NOI and sign the last page. We will remove you from our tracking system. The Tribe or United States Environmental Protection Agency (EPA) regulates discharges within tribal lands.*

◉ No. **Proceed to question 2.**

○ N/A. I am applying for statewide coverage but will contact the Tribe or EPA if the discharge occurs within tribal lands. **Proceed to question 2.**

Note: Tribal lands can be identified on the Surface Water Data Viewer here: https://dnr.wi.gov/topic/surfacewater/Swdv/.

Visually inspect your water discharge and watch for the things listed here. Answer according to your operation. The above are typical answers for a Maple Syrup Producer.

This document is a copy of the Notice of Intent (NOI) with examples for Most Maple Producers on how to fill it out. Because each operation is unique, read carefully and complete according to your specific situation. This is NOT meant to be printed and submitted. It is meant to be a helpful guide when completing your individual NOI. ***Always work with your DNR regional representative to answer specific questions.***
Sample answers are highlighted in yellow and comments are in red.

Low-Impact Discharge
WPDES Permit No. WI-0066575-01-0
Form 3400-241 (R 07/20) **Page 5 of 7**

2. Will all the wastewater be discharged to a sanitary sewer that conveys the wastewater to a publicly or privately-owned treatment works? A septic system is not considered a sanitary sewer. Please contact the owner of the treatment works for approval prior to discharging to the sanitary sewer.

○ Yes. **Your discharge is exempt from the need of a WPDES** *you do not need a WPDES discharge permit. Therefore, s you from our tracking system. If at some point in the future of the state, you will need to inform the Department.*

◉ No. **Proceed to question 3.**

○ N/A. I am applying for statewide coverage but will contact the c wastewater is discharged to a sanitary sewer system. Pro

Read carefully and answer what fits your situation. The answers given may be typical for Maple Syrup Producers. Contact your local DNR representative with any questions.

3. Will the discharge to surface water or groundwater contain any of the following wastewaters: contact cooling water, cooling tower blowdown, air compressor condensate contaminated with oil and grease, contaminated groundwater or stormwater, municipal wastewater, petroleum contaminated water, domestic wastewater, process wastewaters from the production of any material or product, or other wastewater that may be more appropriately covered by another general permit?

○ Yes. **Your discharge is not eligible for this General Permit.** *Skip the rest of the NOI and complete the certification on last page. Contact the Department to obtain application for another general permit or individual WPDES discharge permit.*

◉ No. **Proceed to question 4.**

4. If the proposed discharge will be directly to a surface water, is the surface water classified as an exceptional resource water (ERW) or outstanding resource water (ORW) as defined in ch. NR 102, Wis. Adm. Code?

○ Yes. **Your discharge is not eligible for this General Permit.** *Skip the rest of the NOI and complete the certification on last page. Contact the Department to obtain application for an individual WPDES discharge permit.*

○ No. **Proceed to question 5.**

◉ N/A. **The discharge will be to groundwater via seepage or a wetland. Proceed to question 5.**

○ N/A.I am applying for statewide coverage but will provide procedures of identifying ERWs or ORWs and alternative disposal methods to encountered ERWs or ORWs in the best management practice plan. **Proceed to question 5.**

Note: ERWs or ORWs can be identified on the Surface Water Data Viewer here: https://dnr.wi.gov/topic/surfacewater/Swdv/.

5. **Wetlands**

A. Will the proposed discharge be to a wetland?

○ Yes. **Proceed to question 5B.**

◉ No. **Proceed to question 6.**

○ N/A. I am applying for statewide coverage but will provide procedures of identifying wetlands and alternative disposal methods to encountered wetlands in the best management practice plan. **Proceed to question 6.**

B. Does no practicable alternative disposal exist which would avoid discharge to the wetlands in accordance with ch. NR 103, Wis. Adm. Code (Practicable alternatives means available and capable of being implemented after taking into consideration cost, available technology and logistics in light of overall project purposes)?

○ Yes. **Proceed to question 5C.**

○ No. Please contact the department to discuss practicable alternative disposal options and eligibility under this General Permit. **Proceed to question 6.**

C. Will all practicable measures to minimize adverse impacts of the affected wetlands be taken?

○ Yes. **Proceed to question 6.**

○ No. **This NOI will be considered incomplete and returned to you.**

○ N/A. I am applying for statewide coverage but will provide procedures of identifying wetlands and alternative disposal methods to encountered wetlands in the best management practice plan. **Proceed to question 6.**

Note: Wetlands can be identified on the Surface Water Data Viewer here: https://dnr.wi.gov/topic/surfacewater/Swdv/.

Best Management Practice (BMP) Plan Form: WI DNR Waste Water Permit

This form (https://dnr.wi.gov/files/pdf/forms/3400/3400-240.pdf) was current as of Jan. 2024. Always check with https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html for current forms. Scroll down to the **General Permit** section and then to the **Low-Impact Discharge** information. Use the digital version of this document to click the links in blue.

Sample BMP for Maple Producers

Sample BMP for Maple Producers

This is a sample of possible answers for maple producers applying for a General Permit for Low-Impact Waste Water Discharge. Each operation is unique, so read carefully and complete as applies to your situation. Keep in mind the goal of this document is to explain how you will ensure that any waste water does not cause erosion or introduce harmful substances into the water supply for Wisconsin.
Sample answers are provided in the blue boxes. Additional notes are in red throughout the document.

Please indicate the type of BMP plan:

- (●) **Site Specific BMP plan**
- ( ) **Company-wide BMP Plan**
- ( ) **Statewide BMP plan**

Facility/Project or Parent Company Name:	Facility/Project or Parent Company Address:
Sweet & Sour Sugarbush	N1000 Somewhere RD, Anytown WI 54470
Plan Preparer:	Date:
David Doe	02/14/2021

BMP Plan Policy Statement and Objectives:

The Sweet & Sour Sugarbush operates a Reverse Osmosis (RO) machine. The RO membranes are washed upon completion of each day's operation utilizing sodium hydroxide solution and RO discharge water in a 24 gallon reservoir integral to the unit, The cleaning solution is discharged the next morning onto the ground. It is immediately followed with 400 gallons of discharge water which is flushed through the RO membranes and onto the ground at the same discharge outfall location.

BMP Committee Members

Name	
John Doe	Owner
David Doe	Son of owner
Jane Doe	Co-owner

Committee Members and Plan Preparer can be the same person. In maple production are typically those who are doing the work.

BMP Committee Responsibilities:

Jane or David prepare the RO for the wash cycle and personally add the sodium hydroxide solution.
Jane supervises the maple syrup RO and evaporator operation and is also responsible to train others who assist with the operation of the RO and maple syrup production equipment.

Personnel Contact Information Involved with BMP plan Implementation

Name	Position	Work Phone #	Cell Phone #
John Doe	Owner	(715) 229-0123	(715) 965-3210
David Doe	Son of owner		(715) 965-3200
Jane Doe	Co-owner	(715) 229-0123	(715) 965-3211

Please identify potential pollutant sources at the facility/project site(s) that could release pollutants during discharge below:

Sodium hydroxide powder is stored (explain where/security)except when opened to prepare RO wash water. Other potential liquid discharges interior and exterior of the building are raw maple sap & concentrated maple sap which is piped into the evaporator. The RO wash cycle discharges wastewater and is discharged onto the ground for absorption. Maple syrup could be spilled.

Note: This examination must include all normal operations and ancillary activities including material storage areas, plant site runoff, in-plant transfer, process and material handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

Sample BMP for Maple Producers

This is a sample of possible answers for maple producers applying for a General Permit for Low-Impact Waste Water Discharge. Each operation is unique, so read carefully and complete as applies to your situation. Keep in mind the goal of this document is to explain how you will ensure that any waste water does not cause erosion or introduce harmful substances into the water supply for Wisconsin.

Sample answers are provided in the blue boxes. Additional notes are in red throughout the document.

Please specify the type and frequency of visual inspections that will be conducted on equipment or facility/project site areas identified as having the highest potential pollutant source at the facility/project site(s) (attach a facility inspection log):

The maple syrup evaporator and RO are never operated unattended. RO settings/function, sap level in storage vessels, evaporator liquid level, temperature & finished syrup discharge require constant monitoring.

Please specify the type and frequency of visual inspections that will be conducted on the discharge(s) (attach a discharge inspection log):

(Explain your monitoring of where the RO water and wash water discharges, in most cases onto the ground, no soil erosion etc)

Discharge Inspection Log is a paper where you record the date, time and visual observation. It should be done no less than monthly.

Note: The visual inspection frequency of the discharge may not be less frequent than monthly.

Please specify any temporary treatment practices that will be implemented in case of any observed indicators of pollution in the permitted discharge(s):

The RO machine operation will be stopped until the cause is resolved.

Please specify or attach a security plan that describes how to prevent accidental or intentional entry to the facility/project site(s) which might result in vandalism, theft, sabotage, or other improper or illegal use of the facility/project site(s):

The sugarbush is located where? By home? Remote woods?. Describe how access doors to the sugarbush are secured when not in operation. Syrup is stored in 55 gal barrels weighing 700# so resistant to vandals tipping. Sodium hydroxide is secured in a cabinet and inconspicuous to visitors. RO wash and discharge water only exist during the spring maple season.

Note: The security plan shall cover security in a general fashion and discuss in detail only the practices that focus on preventing environmental releases or discharges.

Please specify any good housekeeping practices that will be conducted at the facility/project site(s) and/or discharge location(s) to maintain a clean and orderly work environment:

Sugarbush is cleaned at start of season? Floors swept/vacuumed/washed how often? Sap/syrup storage containers are washed when/how ofen? RO discharge and wash solution water is discharged onto the ground in a cattle pasture for ground absorption(example). Housekeeping is per our DATCP Food Processing Plant requirement license and "Rules for Maple Syrup Processors".

Good Housekeeping practices are outlined in the process you completed to get your DATCP license. Be sure to reference that here, no need to recreate what you've already done.

Please specify or attach a preventative maintenance plan that describes the method of periodically inspecting, maintaining, and testing BMPs, equipment and systems at the facility/project site(s) and/or discharge location(s) to uncover conditions that may cause breakdowns or failures.

(Example) The RO is inspected at 30 minute intervals for performance and problems. The RO is closely inspected for leaks when first assembled and operated at begin of season. Failure at the RO waste water discharge location does not apply.
The operation requires operator presence because temperatures and fluid levels require constant vigilance.

Note: The preventative maintenance plan as a part of the BMP plan shall evaluate any existing preventative maintenance program and recommend changes, if needed, to address concerns raised from equipment and facility/project site areas identified as a potential pollutant source at the facility/project site and any results from inspections.

Sample BMP for Maple Producers

This is a sample of possible answers for maple producers applying for a General Permit for Low-Impact Waste Water Discharge. Each operation is unique, so read carefully and complete as applies to your situation. Keep in mind the goal of this document is to explain how you will ensure that any waste water does not cause erosion or introduce harmful substances into the water supply for Wisconsin.
Sample answers are provided in the blue boxes. Additional notes are in red throughout the document.

Please specify any measures that will be implemented at the facility/project site(s) to dissipate or slow the energy/velocity of the discharge flow to prevent erosion that may be caused by the discharge(s):

Discharge water flows out of a ____" dia. hose at a rate of ____ gallons per hour. The flow is onto the (grass? woods? where?) and exits as a laminar flow. There is no evidence of ground disturbance from the discharge. The flow occurs during approximately 20 syrup production days and ranges from __ to __ hours duration.

Please specify any dechlorination methods that will be utilized to reduce the chlorine concentration in the discharge(s):

Not applicable/chlorine use is very incompatible with RO membrane performance. Chlorine is not present in maple sap.

Note: Dechlorination is only necessary if the source water is from a chlorinated public water supply or if adding chlorine-based compounds to the water and discharging to surface waters or wetlands. If the source water is groundwater from private wells located at the facility and chlorine-based compounds are not added to the water, then dechlorination is not necessary. Moreover, dechlorination is not necessary if the discharge is to a seepage area that infiltrates to groundwater.

Please specify or attach a contingency plan that describes procedures to minimize the discharge duration during system failures (e.g. line breaks, leaks, and overflows) or spills:

Explain your situation. (Here is an example of one operation: Discharge of the sodium hydroxide wash water is to the cattle pasture. Any leak/line break run off will be to the same cattle pasture. A line failure of the RO discharge water would flow to the same cattle pasture. A failure as an overflow or leak in the RO concentrate line containing enhanced maple sap will be visible and audible in the sugarbush building. It will also cause the evaporator to run low and automatically shutdown causing another visible/audible alarm.
Spilled concentrate would run into the cattle pasture.)

These are examples. Your plan should be designed to fit what you are already doing to prevent wash water chemicals from getting into ground water

Note: The general permit does not authorize discharges from any accidental or unp
of the state.

Please specify the recordkeeping and reporting program for the facility/project site(s) below. The program shall describe the system to keep and maintain records that are relevant to discharge activities and any environmental releases and a system to report actual or potential problems, violations, or noncompliance to appropriate personnel and regulatory agencies.

Example only:(The Notice of Intent (NOI) will be on file in the sugarbush office for 5 years. Discharge records the DNR identifies as necessary will be maintained and retained for 3 years in the office of the sugarbush.) Describe your plan.

Records referred to below can be simple, a paper with date, time and record of your visual inspection of discharge, chemicals added, annual maintenance review. This completed document is the BMP plan. Keep these records so you can find them if requested during an inspection. (see below)

Note: The recordkeeping and reporting program shall be consistent with the requirements in Section 8.1 and Section 8.3.5. Records to be kept and maintained shall include the notice of intent, any discharge screening results, information gathered for the BMP plan, the BMP plan, inspection reports, preventative maintenance records, employee training materials, and other relevant information. Records shall be made available for department inspection and submitted to the department upon request.

For discharges from washing activities, please specify how the washing operations will be conducted at the facility/project site(s) and specify any BMPs that will be implemented during washing:

Each operation will be unique. Describe yours. (Example only:Approximately 10% of the RO discharge water is directed into the evaporator steam hood and heated for hot water used to wash barrels to store syrup and allowed per Wis. Admin Code:ATCP 87.24. New barrels are used but rinsed to ensure optimal cleanliness before use. Steam condensate is also used for washing the components of the syrup filtering machine. This cleaning water runs into the cattle pasture for absorption.)

Sample BMP for Maple Producers

This is a sample of possible answers for maple producers applying for a General Permit for Low-Impact Waste Water Discharge. Each operation is unique, so read carefully and complete as applies to your situation. Keep in mind the goal of this document is to explain how you will ensure that any waste water does not cause erosion or introduce harmful substances into the water supply for Wisconsin.
Sample answers are provided in the blue boxes. Additional notes are in red throughout the document.

The next section of the application is colored gray. This section is only for a statewide company, so it is not applicable to most maple producers. Skip to the bottom of the last page for the final sections.

BMP Plan Review

The BMP plan will be reviewed at least at begin of season by the BMP plan committee or by N/A.
The BMP plan committee or N/A will evaluate the need to update or modify the BMP plan and evaluate the effectiveness of the BMP plan in preventing and mitigating releases of pollutants. The BMP plan committee or N/A will notify the department when the BMP plan is modified to determine if the modification requires department approval.

Certification

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.

Signature of Plan Preparer _____ Date _____

After this is complete, save it to your computer. Print a copy and mail the completed NOI, RO Waste Water Report (that you sent to a lab for) and the BMP to the address listed on the forms:

State of Wisconsin
Department of Natural Resources
Bureau of Water Quality
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

You may also be able to e-mail your documents to your local DNR representative, please check with them for details.

Finally, a DNR representative will review your application package and you will be contacted to either make adjustments or that your application has been accepted. There is important information included in this communication for you to review. Keep this document along with all the records.

Things to record:

1. Additive Usage Log: Log of additives used, their manufacturer, date applied, how much
2. Monthly Visual inspection Log: Record time, date and results of monthly inspection of discharge
3. Maintenance Log: Just record the annual equipment check and cleaning that you do before use.

Certified Labs for Oil and Grease (HEM) Evaluation

What tests are required? Lab test for Oil & Grease, results must be less than or equal to 3.0 mg/L.

How do I get an Oil & Grease test? Contact a water testing lab near you Laboratories | | Wisconsin DNR . Try the one you already use for your DATCP water sample to see if they can also do Oil & Grease test. Sample jars have a short shelf-life, so ask how long you can keep it.

How often do I need to test for Oil & Grease? Once during the permit term (about 5-years).

I didn't know I needed a sample! What now? Notify your general permit contact. They will work with you to identify sampling options. It is recommended that you complete the Notice of Intent (NOI) without the sample result. However, one will be required as soon as the season begins. Make a note of this in the comment section of the NOI.

WI certified labs for oil and grease testing

This list was current as of July, 2022. **Link to certified laboratories** .

LAB_NAME	PARAMETER	STATE	CITY	PHONE
Abbyland Foods WWTP Laboratory	Oil & Grease as HEM	WI	Abbotsford	7152236386
AgSource Laboratories	Oil & Grease as HEM	WI	Marshfield	7158981402
Badger Laboratories, Inc.	Oil & Grease as HEM	WI	Neenah	9207291100
Commercial Testing Laboratory Inc.	Oil & Grease as HEM	WI	Colfax	7159623121
CT Laboratories	Oil & Grease as HEM	WI	Baraboo	6083562760
Davy Laboratories	Oil & Grease as HEM	WI	La Crosse	6087823130
Environmental Monitoring and Technologies, L	Oil & Grease as HEM	IL	Des Plaines	8479676666
ESC - Pace Analytical National Center	Oil & Grease as HEM	TN	Mt. Juliet	6157585858
Eurofins Buffalo	Oil & Grease as HEM	NY	Amherst	7166912600
Eurofins Chicago	Oil & Grease as HEM	IL	University Park	7085345200
Eurofins Denver	Oil & Grease as HEM	CO	Arvada	8005728958
Eurofins S-F Analytical Laboratories Inc.	Oil & Grease as HEM	WI	New Berlin	2627545300
Kohler Co., CHEM Lab	Oil & Grease as HEM	WI	Kohler	9204574441
Laboratory Services (We Energies)	Oil & Grease as HEM	WI	Milwaukee	4142212828
Milwaukee Metropolitan Sewerage District	Oil & Grease as HEM	WI	Milwaukee	4142776377
Northern Lake Service Inc. (Crandon)	Oil & Grease as HEM	WI	Crandon	7154782777
Pace Analytical Services, LLC-Minneapolis MN	Oil & Grease as HEM	MN	Minneapolis	6126071700
Pace Analytical Services,LLC-Duluth MN	Oil & Grease as HEM	MN	Duluth	2187356700
Pace Analytical Services,LLC-Indianapolis IN	Oil & Grease as HEM	IN	Indianapolis	3172283100
Scientific Control Laboratories, Inc. (SCL)	Oil & Grease as HEM	IL	Chicago	7732542406
Siemens Energy Inc	Oil & Grease as HEM	WI	Rothschild	7153597226
Suburban Laboratories of SE Wisconsin	Oil & Grease as HEM	WI	Mequon	2625392316
Suburban Laboratories, Inc.	Oil & Grease as HEM	IL	Geneva	7085443260
Synergy Environmental Lab, LLC	Oil & Grease as HEM	WI	Appleton	9208302455
Trace Analytical Laboratory	Oil & Grease as HEM	MI	Muskegon	2317735998
Wisconsin State Laboratory of Hygiene	Oil & Grease as HEM	WI	Madison	6082246281

Where can I find DNR Regulations?

Information current as of October 2022. For the most up to date details, use the links provided.Links can be accessed by clicking the blue text in the digital version of this document.

Low-Impact Discharge General Permit–Detailed Rules

WPDES Permit No. WI-0066575-01-0

WISCONSIN
DEPT. OF NATURAL RESOURCES

WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

GENERAL PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 283, Wis. Stats., any facility engaged in a

LOW-IMPACT DISCHARGE

located in the State of Wisconsin and meeting the applicability criteria listed in this General Permit, is permitted to discharge these wastewaters directly to surface waters of the state and/or indirectly to groundwaters of the state in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

State of Wisconsin Department of Natural Resources (hereafter department)
For the Secretary

By _____
Adrian Stocks
Director, Bureau of Water Quality

2/28/2020
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE – March 1, 2020 **EXPIRATION DATE – February 28, 2025**

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1 Applicability Criteria

1.1 Discharges Covered

This general permit is applicable to low-impact discharges to the waters of the state that meet all of the following conditions:

1. The department determines that the discharge does not contain pollutants in concentrations that cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standards in chs. NR 102, NR 103, NR 104, NR 105, NR 106, NR 207, and NR 217 Wis. Adm. Code or any applicable groundwater quality standards in ch. NR 140, Wis. Adm. Code;
2. The permittee submits a complete and timely Notice of Intent (NOI) to the department in accordance with Section 2 and receives a letter from the department granting them coverage under this general permit;
3. The permittee submits discharge screening results from Section 3 with the NOI and the department determines that the discharge passes the screening levels and narrative requirements in Section 3; and
4. The permittee submits a complete best management practice (BMP) plan in accordance with Section 6 with the NOI to the department for approval.

This general permit may cover the following low-impact discharge activities:

1. Maple syrup derived wastewaters discharged to groundwater via infiltration or seepage;
2. The following outside washing activities:
   a. Recurring washing of vehicles or equipment at car dealerships, truck companies, construction companies, implements, highway departments, golf courses, truck terminals, or petroleum bulk stations;
   b. Recurring washing of recreational vessels, boats, trailers, and other aquatic equipment at marinas or boatyards;
   c. Washing of trucks or other construction equipment containing inert or readily biodegradable materials (i.e. dirt, sand, or gravel) at construction sites or storage areas;
   d. Mobile commercial power washing or contract washers;
   e. Nonemergency steam or high-pressure water degreasing of an average of one or less engines or oily pieces of equipment per month at a site in any 6-month period;
   f. Emergency degreasing associated with equipment malfunction; and
   g. Washing of vehicles, equipment, and/or other objects inside permanent structures on a commercial basis if the washwater is directed outside.
3. Noncontact cooling waters, boiler blowdown, condensates discharged to groundwater via infiltration or seepage;
4. Public swimming pool and water attraction wastewater discharged to groundwater via infiltration or seepage;
5. Air conditioning/compressor condensates uncontaminated by oil and grease; or
6. Other low-impact discharge activities that meet the applicability conditions above as approved by the department.

1.2 Discharges Not Covered

The discharges listed in this section are not applicable to this general permit and may require application under another general or individual WPDES permit. The following discharges are not applicable to this general permit:

- Discharges that are more appropriately covered under another general permit;
- Discharges requiring permanent treatment to meet the discharge screening levels in Section 3 and the installation or construction of the treatment system requires review and approval by the department in accordance with s. 281.41, Wis. Stats.;
- Discharges of petroleum contaminated water;
- Discharges from hydrostatic testing of water supply systems (i.e. watermains, water storage tanks, water towers) or petroleum transportation or storage infrastructure (i.e. pipelines, petroleum storage tanks, pressure vessels);
- Discharges from occasional vehicle washing at not-for-profit fund-raising events;
- Discharges from noncommercial washing at individual residences;
- Discharges from commercial automatic car washes;
- Discharges of washwater to a subsurface soil absorption system (e.g. septic tank and drain field);
- Discharges from nonemergency steam or high-pressure water degreasing of an average of more than one engine or oily piece of equipment per month at a given site in any given 6-month period;
- Discharges from degreasing operations using degreasing agents containing halogenated hydrocarbons;
- Discharges from washing activities covered under the Nonmetallic Mining Operations WPDES General Permits (Nos. WI-A046515 and WI-B046515);
- Discharge from washing activities covered under the Concrete Product Operations WPDES General Permit (No. WI-0046507) including mobile or portable concrete operations;
- Discharges from swimming pools or water attractions at individual private residences that do not directly discharge through a permanent conveyance structure to surface waters. Residential swimming pools that directly discharge to surface waters will be evaluated on a case-by-case basis for coverage under this general permit;
- Discharges of filter backwash from swimming pools or water attractions with diatomaceous earth filters;
- Discharges containing contaminated groundwater or stormwater;
- Discharges containing municipal wastewaters, domestic wastewaters, or manure;
- Discharges containing industrial process wastewater that require limits from chs. NR 221 to NR 297, Wis. Adm. Code;
- Discharges of industrial liquid wastes, by-product solids, or sludges to a landspreading or sludge spreading system as defined under ch. NR 214, Wis. Adm. Code. Discharges to other land treatment systems as defined under ch. NR 214, Wis. Adm. Code will be evaluated for coverage under this general permit on a case-by-case basis;

DNR Regulations
General Permit Fact Sheet for Low-Impact Discharge

Information current as of October 2022. For the most up to date details, use the links provided. Links can be accessed by clicking the blue text in the digital version of this document.

PERMIT FACT SHEET
General Information
Permit Number: WI-0066575-01-0
Permit Name: Low-Impact Discharge
Permittee: Point source dischargers in the state of Wisconsin
Discharge Location: Land surface or surface waters in the state of Wisconsin
Receiving Water: Surface waters or groundwater in the state of Wisconsin

WPDES Permit Program Background
Wisconsin Statutes and regulations require a Wisconsin Pollutant Discharge Elimination System (WPDES) permit for the discharge of any pollutant through a point source into any waters of the state which includes surface waters and groundwater. WPDES permits are issued by the Department of Natural Resources (department) consistent with applicable federal requirements. These permits contain requirements that include pollutant discharge limitations, monitoring and reporting or record keeping requirements, best management practices and other provisions to reduce, eliminate, or minimize the risk of pollutants impacting human health and water quality. A WPDES permit is an allowance for a facility to discharge a specified amount of a pollutant into the waters of the state under specific conditions. There are two basic types of WPDES permits:

- Individual permit. An individual permit is a permit specifically tailored to an individual facility. Once a facility submits a complete application(s), the department develops a draft permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). After a public participation process, the department may issue the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapply 180 days prior to the expiration date. Public notices are posted for each individual permit application and proposed individual permit permittee.

- General Permit. A general permit covers a group or category of dischargers with similar qualities within a designated area of the state under one WPDES permit. A general permit provides coverage to several dischargers. To obtain coverage under a general permit for a discharge of pollutants, an owner or operator must submit a notice of intent (NOI) requesting general permit coverage. General permits have an effective term of 5 years from the date of issuance. If a permittee submitted a complete and timely NOI to be covered by the general permit and the department approves coverage, the discharge of pollutants is then subject to all conditions of the general permit and these terms or conditions shall continue to apply until the effective date of the reissued general permit. Public notices are issued for the general permit and not for the permittee covered under the general permit. A person may apply for general permit coverage at the time a general permit is issued or a person may apply during the term of the permit.

General Permit Objective
This general permit was created to properly manage low-impact discharges to waters of the state to protect public health and water quality of groundwater and surface water within the state of Wisconsin.

General Permit Description
This permit is applicable to facilities with low-impact point source discharges to waters of the state. These discharges are relatively pollutant free wastewaters that present no or minimal impact to water quality of surface water or wetlands or groundwater quality when managed

properly. Low-impact discharges covered under this permit do not contain pollutants in concentrations that cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standards or groundwater quality standards. Discharges eligible for coverage are intermittent, low volume, and/or short-term in duration. Examples of some facilities that may be regulated by this general permit include: low volume discharges of non-contact cooling water, intermittent discharges of air conditioner condensate, or other similar low-impact discharges.

General Permit Summary
This general permit establishes applicability criteria, obtaining permit coverage requirements, discharge screening requirements, discharge requirements, best management practice and plan requirements, water treatment additives requirements and standard requirements for low-impact discharges. The permit requirements are provided to protect human health and protect and maintain the physical, chemical and biological integrity of the waters of the state by eliminating or minimizing the discharge of pollutants.

Fact Sheet Organization
This fact sheet serves to explain the rationale and assumptions used in deriving the conditions and requirements set forth in the general permit. The sections that follow are taken from the permit and are numbered in this fact sheet as they are numbered in the permit.

Changes from Previous Permit
None as this is the first issuance of this permit.

Grading Maple Syrup in Wisconsin

Grading Pure Maple Syrup under the US Department of Agriculture is voluntary, however Wisconsin has adopted the USDA grading standards and requires syrup be graded IF you have a Food Processing Plant License. Grade standards do not apply if you process your maple syrup by adding flavoring, coloring, or other ingredients because it is no longer considered Pure Maple Syrup.

The following are Wisconsin's Grading requirements:

If a facility has a food processing plant license, they must label their maple syrup product as one of the following: Grade A, processing grade, or substandard.
Note: If the product is being sold as bulk to be further processed it may be labeled as ungraded.
If a facility does not hold a food processing plant license, they must label their product as one of the following: Grade A, processing grade, substandard, or ungraded.

Grade A requirements: Maple syrup labeled as Grade A must meet the following characteristics:

- Is not more than 68.9% solids content by weight, or 68.9 degrees Brix.
- Has good uniform color.
- Has good flavor and odor, and intensity of flavor, or maple taste, normally associated with the color class for Grade A maple syrup.
- Is free from off flavors and odors considered as damage.
- Is free from cloudiness, turbidity, sediment, and is clean.

Grade A must be accompanied by descriptive information: The color class of Grade A maple syrup is determined by the percent of transmittance of light at a wavelength of 560 nanometers through the syrup, as measured with a spectrophotometer using matched square optical cells having a 10 mm light path. The color value is expressed as percent of light transmission, as compared to analytical grade glycerol fixed at 100%. Percent transmittance is denoted by %Tc. Any method that provides equivalent results may be used to determine Grade A maple syrup color class. Grade A maple syrup color classes and corresponding flavor descriptors are shown in Tbl 1.

Table 1. Maple Syrup Color Classes and Flavor Descriptions

Grade A Color Class	Flavor Descriptor	Percent Light Transmittance
Golden	Delicate	At least 75.0
Amber	Rich	50.0-74.9
Dark	Robust	25.0-49.9
Very Dark	Strong	Less than 25.0

Processing grade: Maple syrup labeled as processing grade shall be packed in containers holding at least 5 gallons (18.925 liters) and shall not be packaged in containers smaller than 5 gallons (18.925 liters) for retail sale. Processing grade maple syrup has all of the following characteristics:

- Fails to meet the requirements for Grade A maple syrup.
- Possesses a fairly good characteristic maple taste.
- Is fairly clean and fairly free of damage, turbidity, or cloudiness.

- May be in any color class and have any percent light transmittance.
- Has not more than 68.9% solids content by weight, or not more than 68.9 degrees Brix.
- May contain off flavors and odors.
- May have a very strong taste.

Substandard grade: Maple syrup labeled as substandard does not meet the requirements for processing grade.

Ungraded: Any maple syrup that does not have a grade designation.

Maple Grading School

The International Maple Syrup Institute Maple Grading School is for maple producers, bulk syrup buyers, state inspectors, and others needing to accurately grade maple syrup or judge maple product entries at fairs and contests. This school provides a strong scientific base combined with intensive hands-on exercises. This approach enables participants to learn how to grade or judge maple products with confidence. https://extension.umaine.edu/maple-grading-school/

United States Standards for Grades of Maple Syrup

Information current as of October 2022. For the most up to date details, use the links provided. Links can be accessed by clicking the blue text in the digital version of this document.

USDA

United States Department of Agriculture

Marketing and Regulatory Programs

Agricultural Marketing Service

Fruit and Vegetable Program

Specialty Crops Inspection Division

United States Standards for Grades of Maple Syrup

Effective March 2, 2015

Official disclosure found within the Federal Register

Document Number: AMS-FV-14-0040; FV-15-326

These grading standards were adopted by Wisconsin Department of Agriculture, Trade and Consumer Protection under Chapter

ATCP 87 – Honey and Maple Syrup, Subchapter II – Maple Syrup and Certain Other Maple Products section ATCP 87.36 Description and use of grade designation, terminology, and geographical designation to label containers of maple syrup.

ATCP 87.36 can be found within this document or located at:
https://docs.legis.wisconsin.gov/document/administrativecode/ATCP%2087.36f

Voluntary U.S. grade standards are issued under the authority of the Agricultural Marketing Act of 1946, which provides for the development of official U.S. grades to designate different levels of quality. These grade standards are available for use by producers, suppliers, buyers, and consumers. As in the case of other standards for grades of fresh and processed fruits, vegetables, and specialty crops these standards are designed to facilitate orderly marketing by providing a convenient basis for buying and selling, for establishing quality control programs, and for determining loan values.

The U.S. grade standards and inspection instructions for all fresh and processed fruits, vegetables, and specialty crops are available on the internet and upon request at the address below. These documents provide detailed interpretations of the grade standards and provide step-by-step procedures for grading the product.

Grade standards are issued by the U.S. Department of Agriculture (USDA) after careful consideration of all data and views submitted during rulemaking. The Department welcomes suggestions for improving the standards in future revisions. Comments may be submitted to, and copies of standards and inspection instructions obtained from:

Director, Specialty Crops Inspection Division
Fruit and Vegetable Program,
USDA, Agricultural Marketing Service
1400 Independence Avenue, SW, STOP 0240
Washington, D.C. 20250

Authority: 7 U.S.C. 1621-1627.

Note: Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and regulations.

United States Standards for Grades of Maple Syrup

Section		Page No.
§52.5961	Product description.	2
§52.5962	Grades.	2
§52.5963	Recommended Fill of Container.	2
§52.5964	Color.	3
§52.5965	Classification Requirements.	3
§52.5966	Explanation of Terms.	4
§52.5967	Determining the Grade of a Lot.	5
§52.5968	Reserved.	5

§52.5961 Product description.

Maple syrup is the liquid food derived by concentrating and heat treating sap from the maple tree (Acer) as defined in the U.S. Food and Drug Administration (FDA) Standards of Identity for Maple Sirup (21 CFR 168.140) issued under the Federal Food, Drug, and Cosmetic Act. The solids content of the finished maple syrup shall not be less 66 percent by weight (Brix).

§52.5962 Grades.

(a) **U.S. Grade A** is the quality of maple syrup that:

(1) Not more than 68.9 percent solids content by weight (Brix);

(2) Has good uniform color;

(3) Has good flavor and odor, and intensity of flavor (maple taste) normally associated with the color class;

(4) Is free from off flavors and odors considered as damage;

(5) Is free from cloudiness, turbidity, sediment, and is clean;

(6) No deviants for damage shall be allowed in Grade A.

(b) **Maple syrup for processing (Processing Grade)** means any maple syrup that does not meet Grade A requirements, but meets the requirement of Processing Grade for use in the manufacturing of other products. Maple syrup for processing must be packed in containers of 5 gallons or 20 liters or larger. Processing Grade maple syrup cannot be packaged in consumer-size containers for retail sales (containers of less than 5 gallons).

(1) May be any color class and any light transmittance; and not more than 68.9 percent solids content by weight (Brix);

(2) May contain off flavors; and odors;

(3) May have a very strong taste.

(c) **Substandard** is the quality of maple syrup that fails to meet the requirements of Processing Grade maple syrup.

§52.5963 Recommended Fill of Container.

The amount that a container is filled is not a requirement since the fill of a container is not a quality factor. It is, however, recommended that each container be filled with

syrup as full as practicable and that the product occupy at least 90 percent of the volume of the container.

§52.5964 Color.

General. The color class of maple syrup is determined by:

(a) The percent of light transmission through the syrup as measured with a spectrophotometer using matched square optical cells having a 10mm light path at a wavelength of 560 nm. The color value is expressed as percent of light transmission as compared to analytical reagent glycerol fixed at 100 percent. Percent transmission is symbolized by "%Tc."

(b) Any method that provides equivalent results.

When certifying the color of a sample that has been officially drawn and which represents a specific lot of maple syrup, if the number of color deviants exceeds the acceptance number in the appropriate sampling plan, the lot should be designated as mixed color.

§52.5965 Classification Requirements.

(a) **"Grade A" classification.**

(1) Possesses a good maple flavor (taste) characteristic of the color;

(2) Is clean, free from turbidity or cloudiness, and free from off flavors and odors;

(3) Has good uniform color, which means the syrup color is bright and typical of maple syrup.

"Grade A" Maple syrup has four color and flavor classes

Color classes are associated with specific **%Tc** values as follows:

Grade A Color Classes	Taste	Light Transmittance (% Tc)
U.S. Grade A Golden	Delicate	≥ 75.0
U.S. Grade A Amber	Rich	50.0-74.9
U.S. Grade A Dark	Robust	25.0-49.9
U.S. Grade A Very Dark	Strong	< 25.0

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(b) **"Processing Grade" classification.** Fails to meet the requirements of Grade A, but possesses a fairly good characteristic maple taste and may contain off-flavors, but is fairly free of damage, fairly free of turbidity or cloudiness, and is fairly clean.

(c) **Substandard classification.** Maple syrup that fails to meet the requirements of paragraph (b) of this section shall not be graded above Substandard.

§52.5966 Explanation of Terms.

(a) **Brix** is the percentage by weight concentration of total soluble solids (mainly sugar), of maple syrup when tested with a refractometer calibrated at 68 degrees Fahrenheit and to which any applicable temperature correction has been made; **or** by any other method which gives equivalent results.

(b) **Buddy flavor** or buddiness (classified as damage), is a disagreeable flavor characteristic of syrup when sap is collected from maple trees as they come out of dormancy. This flavor can be described as tasting chocolaty to bitter chocolaty.

(c) **Clean** means that the syrup is free from foreign material such as pieces of bark, soot, dust, or dirt.

(d) **Damage** means any defects that materially affect the appearance, edibility, or quality of the syrup. Badly scorched syrup, buddy syrup, fermented syrup, or syrup that has any off flavors or odors shall be considered as damage.

(e) **Fermentation** (classified as damage), means the chemical breakdown of a substance by bacteria, yeasts, molds, or other microorganisms.

(f) **Light Transmittance (Tc)** means the ability of a liquid to transmit light as determined optically by means of a spectrophotometer.

(g) **Off-flavor** or **off-odor** (classified as damage), means any specific and identifiable or unidentifiable flavor or odor defect that is not normally found in Grade A maple syrup. These flavors or odors may be related to natural factors (e.g., woody or buddy), to manufacturing practices (e.g., burnt, chemical, fermented, scorched), or caused by the presence of any disagreeable flavor or odor that may have developed during handling or storage.

(h) **Taste** means the **intensity** of maple **flavor.** The descriptors for the taste of **Grade A** Maple Syrup are as follows:

(1) **Delicate** means mild maple taste.

(2) **Rich** means a full-bodied maple taste of medium intensity.

(3) **Robust** means stronger maple taste than the lighter colors.

(4) **Strong** means a maple taste that is stronger than robust.

(i) **Turbidity** or **cloudiness** means the presence, in the suspension, of fine particles of mineral matter such as malate of lime, niter, sugar sand, calcium malate, or other substance that detract from the clearness of the syrup.

(1) **Malate of lime** means fine particles of mineral matter in maple syrup.

(2) **Sugar sand** or **niter** generally means a harmless gritty substance naturally found in maple syrup, and is often referred to as cloudiness.

(3) **Calcium malate** results from high calcium and malic acid concentrations in the syrup and is one of the least soluble salts in the syrup.

§52.5967 Determining the Grade of a Lot.

The grade of a lot of maple syrup covered by these standards is determined by the procedures in the **Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Processed Food Products** (7 CFR 52.1 through 52.83).

§52.5968 Reserved.

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IMSI- Standard International Grading System

This resource is no longer in print. Other information on grading from the International Maple Syrup Institute web site: https://internationalmaplesyrupinstitute.com/nutrition-and-grading

Proposed Colour Classes with Descriptions for Grade A Pure Maple Syrup

Golden Maple Syrup with a Delicate Taste
Colour not less than 75% Tc

Pure maple syrup in this class has a light to more pronounced golden colour and a delicate or mild taste. It is the product of choice for consumers preferring a lighter coloured maple syrup with a delicate or mild taste.

Amber Maple Syrup with a Rich Taste Colour
50-74.9% Tc

Pure maple syrup in this class has a light amber colour and a rich or full-bodied taste. It is the product of choice for consumers preferring a full-bodied tasting syrup of medium taste intensity.

Dark Maple Syrup with Robust Taste
Colour 25-49.9% Tc

Pure maple syrup in this class has a dark colour and a more robust or stronger taste than syrup in lighter colour classes. It is the product of choice for consumers preferring a dark coloured syrup with substantial or robust taste.

Very Dark Maple Syrup with a Strong Taste
Colour less than 25% Tc

Pure maple syrup in this class has a very strong taste. It is generally recommended for cooking purposes but some consumers may prefer it for table use.

Note: Samples illustrated are not at the colour class break points but are representative of average syrup colours within each colour class

A standard international grading system is being proposed by the International Maple Syrup Institute to help unite maple syrup producers, packers, distributors and consumers. The goal is to adopt a system which will better meet the regulatory and marketing needs of both the commercial maple syrup industry and consumers for the 21st century. The proposal has been submitted to regulatory agencies in both Canada and the United States with implementation proposed for the 2013 maple production season. However, the timing of implementation will depend on whether supporting regulatory amendments are obtained.

For further information, English contact:
Dave Chapeskie, R.P.F., Executive Director,
International Maple Syrup Institute
5704 Rock St., Spencerville ON K0E 1X0
Telephone: 613-658-2329 Fax: 877-683-7241
E-mail: agrofor@ripnet.com

For further information, French contact:
Yvon Poitras, Directeur général/General Manager
Association Acéricole du N.-B./N.N. Maple Syrup Association Inc.
1350 Regent St., Fredericton N.B. E3C 2G6
Tél.: 506-458-8889 Fax 506-454-0652
E-mail: yrp@nb.aibn.com

Definition of Pure Maple Syrup

- ☑ Produced exclusively by the concentration of maple sap or by the solution or dilution of a maple product other than maple sap in potable water
- ☑ Minimum soluble solids of 66%
- ☑ Maximum soluble solids of 68.9%
- ☑ Comply with appropriate federal and state/provincial standards for contaminants
- ☑ Comply with other appropriate federal and state/provincial regulations and policy directives (e.g. labeling, standard containers, establishment registration)
- ☑ Proper determination of grade and colour class
- ☑ Traceable to batch (daily production)

Pure Maple Syrup for Retail Sale *

GRADE A
Four Colour Classes (See back of card)

Quality Descriptors:
- Uniform in colour
- Taste normally associated with the colour class
- Free from objectionable odours and off-flavours
- Free from turbidity and sediment

Label must include:
- Grade A
- Production Batch Code
- Pure Maple Syrup
- Product Origin (Country or State/Province)
- Producer Contact Information/ Packer Identification
- Colour Class
- Intensity of Flavour (Taste)

**All Pure Maple Syrup with objectionable odours and off flavours cannot be graded as Grade A. This syrup must be labeled as follows: Processing Grade, Pure Maple Syrup, Product Origin, Producer /Packer ID and Batch Code. This syrup may not be sold in retail markets and must be packed in 20 litre/5 gal. or larger containers.*

Revised February 2012

Off Flavors in Maple Syrup

All pure maple syrup with objectionable odors and off flavors cannot be graded as Grade A. This syrup must be labeled with the following: Processing Grade, Pure Maple Syrup, Product Origin, Producer Information and Batch Code. This syrup may not be sold in retail markets and must be packaged in 5 gallon or larger containers.

the map of maple: off-flavors

mother nature	sour sap		ropey appearance citrus, soy sauce, fermented aromas sour taste thick, chunky mouthfeel
	metabolism		chocolaty, grassy aroma lack of maple flavor cardboard, popcorn, peanut butter flavors dry mouthfeel
	buddy		chocolaty aroma and flavors lingering aftertaste
defoamer	safflower and vegetable oils		vegetable aroma and flavor oily, waxy mouthfeel
	canola oil		spicy, peppery flavors walnut, pungent finish astringent mouthfeel
processing	burnt	scorch	burnt flavors (coffee, dark chocolate) thick body
		niter	burnt flavors (coffee, dark chocolate) leathery, spicy meat flavor chalky, gritty mouthfeel
	storage	fermented	yeasty alcohol aroma honey, fruity, spicy (soy sauce), vegetable flavors thin body foamy appearance (severe fermentation) effervescent mouthfeel
		metallic	tin can aroma strong metallic flavor (affects back tongue and teeth)
chemicals	minerals / niter		fizzy, gritty mouthfeel
	chloride		salty taste
	acid / basic		acid or caustic odor (depending on chemical) pungent, burning sensations
others	musty / mold		moldy, yeasty, vegetable aromas and flavors lingering finish (affects back tongue and throat)
	detergents		perfumy, floral aromas soapy flavor
	lubricants / fuels		petroleum aroma and flavor oily mouthfeel astringent finish

filters — these defects could stem from misuse or mishandling of syrup filters

tasting maple syrup

The flavor and overall sensory quality of maple syrup can be influenced by multiple factors. Outside the sugarhouse, these include environmental conditions, location, and time in the season; inside the sugarhouse these include method of production, as well as filter and packaging conditions. This sensitivity makes the flavor of maple syrup susceptible to flavors not considered "typical."

This tool is meant to identify off-flavors in syrup, and link the particular sensory experience to a specific defect and category that explains why the defect has occurred. Additionally, this tool serves as a user-friendly representation of the Vermont Agency of Agriculture Farms and Markets (VAAFM) "Maple Syrup Off-Flavors" manual.

The descriptors on the right describe the aroma, taste and/or mouthfeel of the defective syrup (ex. "chocolaty aroma and flavors, lingering aftertaste"), paired on the middle column with the specific cause of defect (ex. "buddy"). The defects are then grouped by type of defect (example: "mother-nature") in order to better identify off-flavors, and to trouble-shoot future batches. The triangle in the lower left corner denotes a defect linked to misuse or mishandling of filters.

sampling your syrup

Smell the syrup before tasting, note any atypical smells. Consult the list of descriptors to match any atypical aromas to their potential causes listed on the left.

Taste the syrup, note of the taste and the mouthfeel. Repeat the process described above.

Evaluate the syrup. If the troubleshooting guide indicates, address any issues with filters or processing equipment.

the taste of Vermont

A team of researchers, sugarmakers and sensory panelists collaborated over several years by evaluating maple syrup from throughout the state of Vermont. The result was two sensory tools to help sugarmakers determine the quality of the maple syrup each season. It was jointly developed by the Nutrition and Food Sciences Department at University of Vermont and the Vermont Agency of Agriculture Food and Markets. State funds for this project were matched with Federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Department of Agriculture.

The University of Vermont

VERMONT AGENCY OF AGRICULTURE, FOODS & MARKETS

Basic Food Labeling Information

Wisconsin follows the FDA Nutritional labeling regulations. The following is a summary of recent changes to the FDA labeling requirements.

FDA Changes to Nutritional Labeling

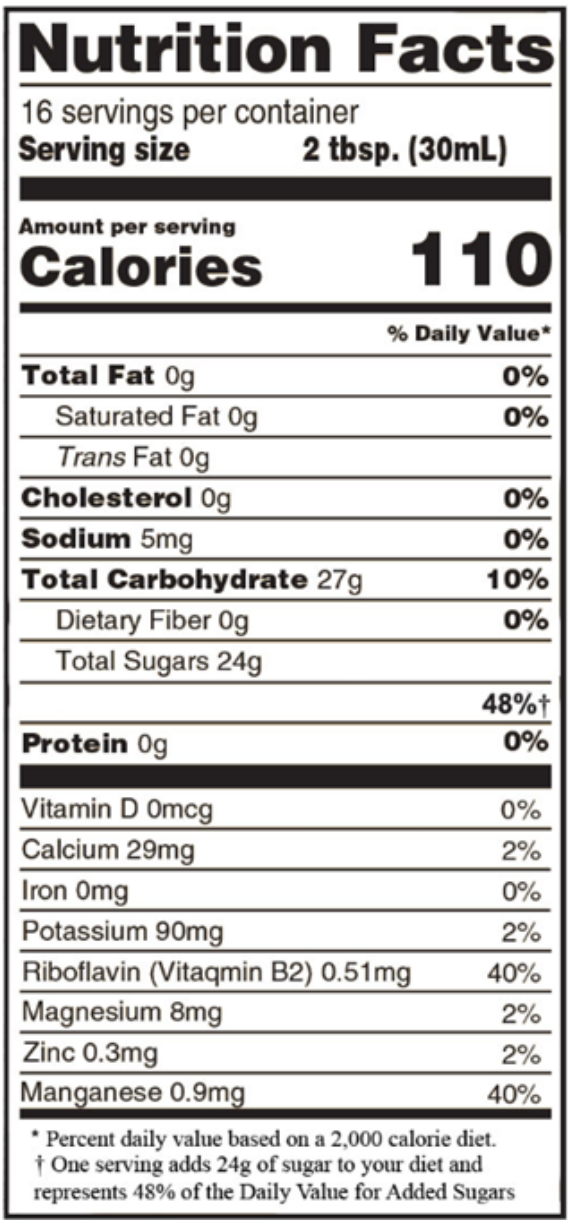
The Nutrition Facts label on packaged foods was updated in 2016. Manufacturers of most single-ingredient sugars, such as honey and maple syrup and certain cranberry products had until July 1, 2021 to make the required changes. The FDA has committed to work cooperatively with manufacturers to meet the new Nutrition facts label requirements.

The most up to date information can be found on the **FDA food labeling web-site.**

Industry Resources on the Changes to the Nutrition Facts Label can be found **here**

Added Sugars

There is a new requirement to display "added sugars" on the updated nutrition label. The FDA interprets this phrase to mean the amount of sugar added to a person's diet when they eat this food. It does NOT mean the amount of sugar added to the product. Lobbyists funded by the IMSI (International Maple Syrup Institute) met with FDA regulators to come to a compromise for how to label the natural sugar in Pure Maple Syrup without misleading the public to think sugar is added to Pure Maple Syrup. In 2019 a compromise was reached, to identify the Added Sugar percent on a blank line and put a note at the bottom that states " One serving adds 24g of sugar to your diet and represents 48% of the daily value for Added Sugars." See the example below.



Nutrition Facts

16 servings per container
Serving size **2 tbsp. (30mL)**

Amount per serving
Calories **110**

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0g	**0%**
Sodium 5mg	**0%**
Total Carbohydrate 27g	**10%**
Dietary Fiber 0g	**0%**
Total Sugars 24g	
	48%†
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 29mg	2%
Iron 0mg	0%
Potassium 90mg	2%
Riboflavin (Vitaqmin B2) 0.51mg	40%
Magnesium 8mg	2%
Zinc 0.3mg	2%
Manganese 0.9mg	40%

* Percent daily value based on a 2,000 calorie diet.
† One serving adds 24g of sugar to your diet and represents 48% of the Daily Value for Added Sugars

Guidance for Industry:
The Declaration of Added Sugars on Honey, Maple Syrup, Other Single-ingredient Sugars and Syrup, and Certain Cranberry Products.

Current Nutritional Facts labels for Maple Syrup are available to WMSPA members from the WMSPA store on-line.
www.wismaple.org/online-catalog
Stickers come in a variety of sizes. See the web-site for details.

Links can be accessed by clicking the blue text in the digital version of this document.

FDA-New Nutrition Facts Label Examples.FDA (2017)

This resource contains examples of various label formats. It is 6 pages long with clear nutritional panels containing font size and print requirements. The 2013 Food Labeling Guide below contains more explanations and these two are best used together.

FDA Food Labeling Guide (2013)

Under FDA's laws and regulations, FDA does not pre-approve labels for food products. This resource is 130 pages long and has helpful information and illustrations to show label requirements and nutritional claims. However, it was published in 2013 and nutritional panel requirements were updated in 2016. This guide should be used in combination with The New Nutrition Facts Label Examples from 2017.

Small Business Nutrition Labeling Exemption Guidance | FDA

It is the author's understanding that an exemption only applies if you are selling products directly to the consumer and would therefore be considered a "retailer". This interpretation is consistent with Wisconsin regulations on nutritional labeling. The following text was taken from the site linked above.

Section 403(q) of the Federal Food, Drug, and Cosmetic Act requires that packaged foods and dietary supplements bear nutrition labeling unless they qualify for an exemption.

Title 21 of the Code of Federal Regulations (21 CFR) 101.9(j)(1) and 21 CFR 101.9(j)(18) outline the requirements for a small business nutrition labeling exemption for foods. The small business nutrition labeling exemption requirements for dietary supplements are outlined in 21 CFR 101.36(h)(1) and 21 CFR 101.36(h)(2).

The nutrition labeling exemptions found in 21 CFR 101.9(j)(1) and 21 CFR 101.36(h)(1) apply to ***retailers*** *with annual gross sales of not more than $500,000, or with annual gross sales of foods or dietary supplements to consumers of not more than $50,000.* ***For these exemptions, a notice does not need to be filed with the Food and Drug Administration (FDA).***

The nutrition labeling exemptions for low-volume products found in 21 CFR 101.9(j)(18) and 21 CFR 101.36(h)(2) apply if the person claiming the exemption employs fewer than an average of 100 full-time equivalent employees and fewer than 100,000 units of that product are sold in the United States in a 12-month period. ***For these exemptions, a notice must be filed annually with FDA.***

If a person is not an importer, and has fewer than 10 full-time equivalent employees, that person does not have to file a notice for any food product with annual sales of fewer than 10,000 total units.

A "product" is a food or dietary supplement in any size package; which is manufactured by a single manufacturer or which bears the same brand name; which bears the same statement of identity, and which has similar preparation methods.

Maple Syrup Label checklist

This checklist was developed using the above sources including the updated labeling rules and guidance for the maple industry. *Click on the blue text in the digital version of this document for copy of this document.*

Product Label Checklist

July 2020

Primary Display Panel (usually the "front")

- ☐ **Statement of Identity** (name of food – Pure Maple Syrup) on Principal Display Panel (PDP)
  - Most prominent printed matter on front panel (for picture examples see page 5-7 of Food Labeling Guide)
- ☐ **Net Quantity**: __ fl. oz (_ mL) (see page 14-16 of Food Labeling Guide)
  - Located in the bottom 30% of PDP, parallel to the base of package.
  - Statement must be separated from other printed material above and below by twice the width of capital letter "N" of the used font.
  - Minimum size is smallest size permitted based on space available on PDP

PDP (for cylinder use 40% of h. x circ.)	Minimum type size (meas. lower case "o")
5 sq. in or less	1/16 in (16 mm)
5 sq. in – 25 sq. in	1/8 in (3.2 mm)

- ☐ **Grade** Example: Grade A Dark with Robust Taste (follow USDA grading definition)
  - Taste and Flavor are interchangeable
  - Color is sometimes used after the grade (i.e. Dark Color). This is required in New York.

Information Panel (immediately to the right of the PDP if not using separate back labels)

- ☐ **Nutrition Panel**
  - Container size exemption – see p. 66 of Food Labeling Guide
    - Sm. Packages with < 12 sq. in total surface available to bear labeling may be printed with phone number or address (web/e-mail) to obtain nutrition information.
  - Possible business exemptions – see FDA Small Busines Nutrition Labeling Exemption guide
    - *<100 full-time employees AND < 100,000 units sold in US in last 12-months. Exemption must be filed annually*
    - *< $50,000 gross annual sales DIRECT to consumers. No notice needed to file.*
  - Must be displayed in a box.
  - "Nutrition Facts" heading must be largest type size in the nutrition label (larger than 8 pt, but does not need to exceed 13pt)
  - Servings per container (1 fl. oz. is a serving, so 12 oz. bottle has 12 servings)
  - Serving size: 2 tbsp (30mL) per RACC from FDA)
  - Blank line under Total Sugars with 48% †
  - Added sugar note *"†One serving adds 24g of sugar to your diet and represents 48% of the Daily Value for Added Sugars"*
  - % DV note *"*Percent Daily Value are based on a 2,000 calorie diet"*
  - Note if using simplified format: *"Not a significant source of saturated fat, trans fat, cholesterol, dietary fiber, vitamin D and iron"*
  - Minimum type size of 8 point for Nutrition info.
  - Minimum type size of 6 point for footnotes
  - Nutrition numbers and % are correct (see samples on back)
- ☐ **Ingredient List** (only if NOT Pure Maple Syrup, ie. popcorn, rootbeer, sugar covered nuts). Type size at least 1/16 in. based on lower case "o".
- ☐ **Allergen notice** Not required for Pure Maple Syrup. **Contains:** wheat, milk, peanuts/tree nuts. ("May contain", or "Processed in a facility that also processes" are optional. Per 2006 document)
- ☐ **Name and Address** of manufacturer

Own Label (address in phone bk)	Own label (NO address in phone bk)	Private Label
Company City State Zip	Company Street address City State Zip	"Distributed by…" or "Manufactured for…" Company Name (negotiated with customer) Street Address City, State, Zip

- ☐ **Refrigerate After Opening**

Sources: IMSI Sample labels (2020), FDA Labeling Guide (2013) https://www.fda.gov/media/81606/download, *FDA New Nutritional Facts Label Examples (2020)* https://www.fda.gov/media/99151/download

Product Label Checklist

July 2020

Items if applicable

- ☐ Kosher and other certifications
- ☐ Organic ("Certified Organic by "XXXX" **directly** under company address)
- ☐ Country of Origin statement required only if imported. ("Product of…")
- ☐ Bar Code (Producer MUST own the bar code. It must follow strict guidelines including format and scannability requirements)
  - If you don't have a UPC (Universal Product Code) bar code for your product, but have been told you need one here are a few ways that might help you get one: www.simplybarcodes.com – They will allow you to buy individual UPC codes instead of a large group.
  - The UCC (Uniform Council Code) and GS1 can issue you a UPC prefix for a bar code and then you can create thousands of different bar codes with that. Here are helpful websites to purchase a prefix: www.barcode-us.info or https://www.upccode.net/upc-guide/uniform-code-council.html
  - Another helpful link with check digit calculator https://www.gs1us.org/tools/build-a-sample-upc-barcode

Standard Vertical Display

Nutrition Facts

16 servings per container
Serving size **2 tbsp. (30mL)**

Amount per serving
Calories **110**

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0g	**0%**
Sodium 5mg	**0%**
Total Carbohydrate 27g	**10%**
Dietary Fiber 0g	**0%**
Total Sugars 24g	
	48%†
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 29mg	2%
Iron 0mg	0%
Potassium 90mg	2%
Riboflavin (Vitaqmin B2) 0.51mg	40%
Magnesium 8mg	2%
Zinc 0.3mg	2%
Manganese 0.9mg	40%

* Percent daily value based on a 2,000 calorie diet.
† One serving adds 24g of sugar to your diet and represents 48% of the Daily Value for Added Sugars

Simplified Format

Can be used if at least 8 of the following nutrients are present in insignificant amounts (0% DV): Calories, **total fat, saturated fat, trans fat, cholesterol**, sodium, total carbs, **dietary fiber**, sugars, **protein, vitamin A, vitamin C, vitamin D**, calcium and **iron.** (bolded nutrients qualify as insignificant in pure maple syrup)

If this format is used it must be accompanied by this note: *"Not a significant source of saturated fat, trans fat, cholesterol, dietary fiber, vitamin D and iron"*

Linear Display for Small Packages may be used on packages with < 40 Sq. in. ONLY if the label will not accommodate the tabular display.

Nutrition Facts Servings: X, **Serv. Size: 2 tbsp. (30mL),**
Amount per serving: **Calories 110**, **Total Fat** 0g (0% DV), Sat. Fat 0g (0% DV), *Trans* Fat 0g (0% DV), **Cholest.** 0mg (0% DV), **Sodium** 5mg (0% DV), **Total Carb.** 27g (10% DV), Fiber 0g (0% DV), Total Sugars 24g, **Protein** 0g, Vit. D (0% DV), Calcium (2% DV), Iron (0% DV), Potas. (2% DV), Riboflavin (40%), Magnesium (2%), Zinc (2%), Manganese (40%).

Tabular Display for Small Packages can be used on packages with < 40 sq. inches of total surface area available to bear labeling. (see page 2 label examples)

Nutrition Facts
8 servings per container
Serving Size 2 tbsp (30mL)

Amount Per Serving **Calories** 110	**% Daily Value***
Total Fat 0g	**0%**
Sodium 5mg	**0%**
Total Carbohydrate 27g	**10%**
Total Sugars 24g	
	48%†
Protein 0g	

• Calcium 30 mg 2%
• Potassium 90 mg 2%

*Percent Daily Values are based on a 2,000 calorie diet.
Not a significant source of saturated fat, trans fat, cholesterol, dietary fiber, vitamin D and iron.
†One serving adds 24g of sugar to your diet and represents 48% of the Daily Value for Added Sugars.

Sources: IMSI Sample labels (2020), FDA Labeling Guide (2013) https://www.fda.gov/media/81606/download, *FDA New Nutritional Facts Label Examples (2020)* https://www.fda.gov/media/99151/download

Current Nutritional Facts labels for Maple Syrup are available to WMSPA members from the WMSPA store on-line. www.wismaple.org/online-catalog
Stickers come in a variety of sizes. See the web-site for details.

Where Can I find Food Labeling Regulations?

General background information:
Following are websites and documents on the topic of food labeling which may be helpful to small or start-up businesses. Links can be accessed by clicking the blue text in the digital version of this document. Please note that the information presented here covers most food products except meat and poultry products.

WI-DATCP General Food Labeling Home Page

CONTACT FOR FURTHER INFORMATION:
Division of Food and Recreational Safety
(608) 224-4713
datcpdfslicensing@wisconsin.gov

The DATCP web-site above includes a number of resources for both Wisconsin and FDA information including:

WI-Packaged Food Labeling Guidance

Wisconsin Food Code: Retail Labeling Requirements

WI Allergen and Cross-Contamination information

FDA Food Labeling Guide Under FDA's laws and regulations, FDA does not pre-approve labels for food products. This document is very helpful but was published in 2013, nutritional panel requirements were updated in 2016, so only use this guide in combination with The New Nutrition Facts Label Examples from 2017.

FDA-New Nutrition Facts Label Examples.FDA (Examples from 2017)

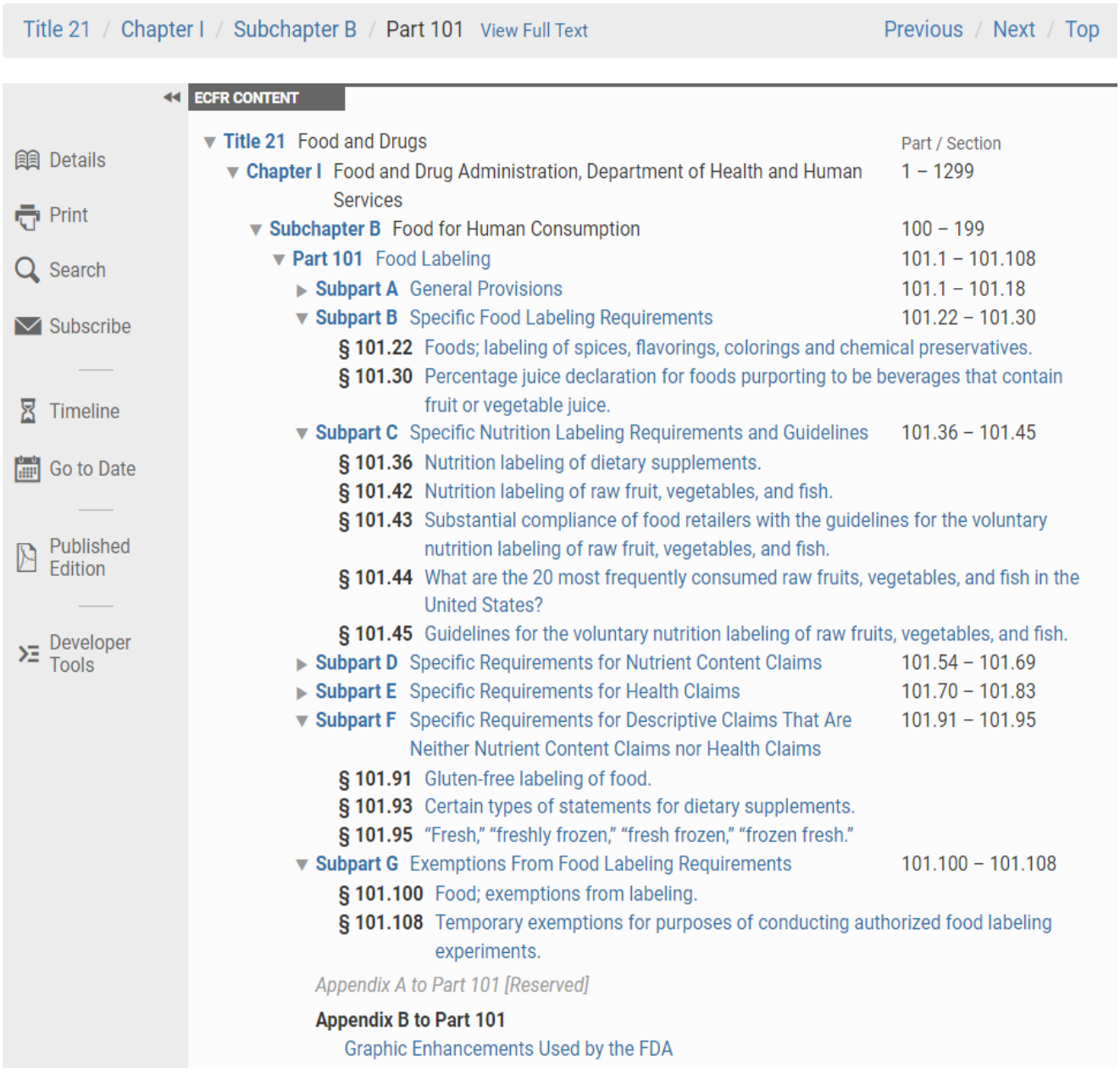
FDA Guidance on Allergen Labeling

FDA Small Business Exemptions from Nutrition Labeling
Small businesses may be able to qualify for small business exemptions from nutrition labeling. Specific food products will not be eligible for this exemption if nutrient content or health claims or other nutrition information appears on the label.

FDA Guidance for Industry: Food Labeling Guide: Questions concerning the labeling of food products
More FDA Labeling & Nutrition Guidance Documents & Regulatory Information

FDA Food Labeling Regulations. Title 21: Part 101

FOOD LABELING
eCFR :: 21 CFR Part 101 -- Food Labeling
The above link will take you to the entire Food Labeling regulations. Open the ECFR contents and choose your desired section. Parts of this document (current August 2022) have been copied into this handbook.



Heavy Metals in Maple Syrup: Where could it come from?

FINAL COPY

Potential Sources of Lead Contamination in Maple Syrup Production and Processing by Exhibit Category

February 2015

Item	Specific Components that May Contain Lead
Spiles	Terneplate coated spiles. Lead-soldered, tin or galvanized spiles.
Buckets and Pails	Terneplate coated buckets and pails. Lead-soldered, tin or galvanized buckets and pails.
Sap Gathering and Storage Tanks	Lead-soldered seams or galvanized tanks.
Valves, Connectors, Joints and Level Controls	Any lead-containing fitting, solder or other contact surface that comes into contact with sap or syrup. Lead-containing bronze alloy valves.
Pre-heaters, Piggy Backs, and Steam-Away	Lead-bearing solder or fittings. Brass piping may contain lead.
Syrup Pumps	Pumps made of brass or bronze alloys may contain lead, including fittings, etc.
Evaporator Pans (Sap & Syrup)	Lead soldering. Flue pans have more solder seams, resulting in greater potential for lead transfer.
Finishing Stoves & Tanks	Lead soldering in contact surfaces of tanks.
Sap Pumps	Pumps made of brass or bronze alloys may contain lead, including fittings, etc.
Filling Units	Lead soldering. Lead-containing bronze valves, fittings or taps.
Filter Tanks	Lead soldering.
Filter Units	Lead soldering. Brass and bronze alloys in pumps.
Syrup Storage	Galvanized or lead soldered drums. Old milk cans or other lead bearing or non-food grade containers.

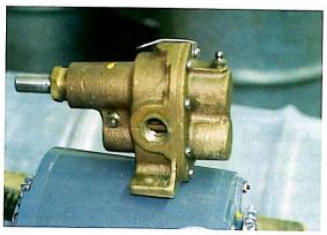
- Ensure that any soldered repairs are done with lead-free solder.
- As a preventative measure, use a lead test kit if you are unsure whether a specific contact surface contains lead.
- Samples of maple syrup may be sent to a laboratory for lead content analysis to monitor the effectiveness of removal of lead-containing equipment in your operation. A listing of recommended laboratories is available.

Lead, when present in food, is a contaminant. The FDA regulations seek to limit the amount of lead that can occur in food, foodware, cookware and packaging. Lead in Food, Foodwares, and Dietary Supplements | FDA

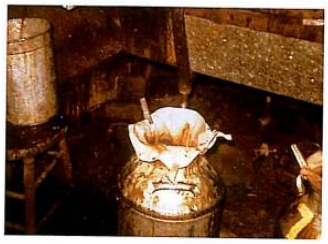
Storing food (including Maple Syrup) in a container that has lead solder is not allowed by the FDA. eCFR :: 21 CFR 189.240 -- Lead solders.

Keeping Lead out of Maple Syrup

The Following document was developed by Proctor Maple Research Center, University of Vermont. Funded in part by the North American Maple Syrup Council (NAMSC). Click the blue text in the digital version to link to this pamphlet.
Keeping Lead out of Maple Syrup

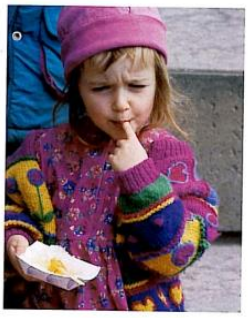


Bronze used in the manufacture of gear pumps usually contains lead, and these pumps can add lead to sap and syrup. Unnecessary pumping, particularly of sap, should be avoided. Other pump models are available which contain little or no lead.



Old milk cans frequently contain terneplate, an alloy with a high lead content, and should never be used for syrup filtering or storage.

Syrup kept in older, heavy galvanized **barrels** like these had a much higher lead content after 8 months of storage. Newer galvanized barrels do not add appreciable lead in this amount of time.



Standards for lead concentration are based on models of the maximum syrup consumption by children. Standards vary within the maple producing regions of the U.S. and Canada. Syrup producers and health officials share the goal of a healthy and fine tasting product that is safe from contaminants. We are committed to the words "Pure Maple Syrup" that we put on our containers.

Lead testing is available at:

Agricultural and Environmental Testing Lab.
220 Hills building, University of Vermont
Burlington, VT 05405
phone: 802-656-3030

Most state universities have a laboratory where lead testing can be performed.

For more information contact:
Proctor Maple Research Center
P.O. Box 233, Underhill Center, VT 05490
802-899-9926
www.uvm.edu/~pmrc
email: pmrc@uvm.edu
or your local extension or agricultural agent.

Acknowledgments:
Research on sap and syrup lead reduction was supported by grants from the US Department of Agriculture, Vermont sugarmakers, and the North American Maple Syrup Council.

Keeping Lead Out of Maple Syrup

A Guide to the Use of Sap Collecting and Syrup Making Equipment

Proctor Maple Research Center
Timothy Wilmot
Timothy Perkins
The UNIVERSITY *of* VERMONT

The lead content of most maple syrup is extremely low, even when it is made with lead containing equipment. However: the only way to know the lead content of your syrup is to have it tested. If tests show that your syrup has lead levels within acceptable standards (below 250 ppb in Vermont), then the use of your older equipment is satisfactory, provided that you manage the equipment properly and retest for lead periodically. If syrup lead is high, then you need to make some changes.

How to test for lead: Samples sent for lead testing should be representative of most of your syrup, not necessarily your best syrup. Try to sample from several syrup batches, and try to sample syrup made at both the beginning and end of a sap run. Take only syrup that has received the final filtering. Collect samples in clean glass or plastic containers and pool everything into one lot. You need only a few ounces to send to a lab. Suggestions for where to send syrup for lead testing are at the end of this leaflet.

Sources of lead: Lead does not come from trees. Sap collected using lead-free plastic materials had virtually no lead in it. Sap collecting and syrup making materials that contain lead include: 50/50 solder, used before 1995 for evaporators, tanks, and some buckets (Leader evaporator switched to lead-free solder in 1991); galvanized equipment made before 1994; most brass and bronze; and terneplate, an alloy used for some older equipment. Sugar sand concentrates any lead in the sap as it is formed, so it should also be treated as lead containing. Roadside dust and dirt may also contain lead.

In tests of several models, all older **metal spouts** added lead to maple sap. Very old spouts may be made of terneplate and will leach large amounts of lead into the sap. Lead-free metal spouts are now available.

Not all **buckets** are equal when it comes to lead. In our tests, Wheeling buckets (2nd from left) added the least amount of lead, while old "tin" buckets (extreme right) added the most. Some old buckets have shinier terneplate bottoms (3rd from left); beware of these. Lead-free bucket is on the extreme left.

Lead containing buckets begin to leach lead into sap within the first few hours, and continue to add lead to sap as long as it is in contact with metal surfaces. Storage of sap in buckets for several days, which may occur when sap runs slowly, can result in very high sap lead concentrations.

Galvanized and lead-soldered tanks also add some lead to sap, although usually less than buckets, because their surface-to-volume ratio is smaller.

In an **evaporator**, a lead-soldered back pan adds more lead than a lead-soldered front pan, due to the many solder seams. The lead content of partially made syrup often decreases in the front pan, as lead is precipitating and sticking to the pan in the form of sugar sand.

After the evaporator is shut down, lead will continue to accumulate in the partially boiled syrup (sweet) from lead solder. We found that **draining the front pan** into buckets and adding the sweet again once boiling resumed, reduced lead accumulation.

Cleaning the front pan may remove some of the sugar sand (a source of lead) but also re-expose lead solder (another source of lead). Water cleaning had little effect on syrup lead concentration in our experiments. Frequently cleaning a lead-soldered pan with acid will likely result in higher syrup lead content.

Sugar sand may contain extremely high amounts of lead, depending on the concentration of lead in the sap and presence of lead solder in the evaporator. It can reach levels of 1,000,000 ppb. Good filtering is essential for keeping lead out of syrup.

In our tests, cone filters were as effective as filter presses in removing lead. A large percentage of lead in syrup is in a dissolved form, however, which is not filterable.

****

Action Levels for Lead in Maple Syrup

The only definite way to determine if there is lead within a syrup sample is to have it tested at an accredited laboratory with the level of equipment sophistication and protocols to measure parts per billion (ppb) of lead to a low enough level. Many labs can detect lead but they may not be to the level required to meet the lead requirements of the State of California under California Proposition 65 (Prop 65). It is always best to ask the lab before sending a sample to be tested.

There currently is no specific threshold value for lead in maple syrup in writing by Wisconsin DATCP for what requires action or might be deemed adulterated. Sale to other jurisdictions might have actionable levels (see following page for California Prop 65).

Lead tolerance levels for maple syrup

The following tolerance levels and action steps are adopted by the Ohio department of agriculture for evaluating the level of lead to determine whether maple syrup or sorghum produced, processed, or offered for sale in the state of Ohio is adulterated as per section 3715.59 of the Revised Code:

Lead tolerance level for maple syrup	Action step
0 - 499 Parts per billion	Acceptable. A warning letter shall be issued by the director to any producer or processor whose maple syrup or sorghum lead levels are greater than two hundred fifty parts per billion but less than five hundred parts per billion.
500 Parts per billion and greater	Maple syrup and sorghum is considered adulterated in accordance with section 3715.59 of the Revised Code.

https://codes.ohio.gov/ohio-administrative-code/rule-901:3-44-01

Likely changes:

As of 2022, the FDA is increasingly focusing on lead levels. Lead in Food, Foodwares, and Dietary Supplements | FDA

Consulting current research in 2022 from Updated interim reference levels for dietary lead to support FDA's Closer to Zero action plan - ScienceDirect and using calculations with the sugar content of Pure Maple Syrup and 2000 calorie diet it seems likely the FDA may drop these levels to **100ppb** for females of childbearing age and **50 ppb** for children ages 1-3.

What does this mean for the Maple Industry? Testing for the presence of lead is likely to become standard practice for retail sellers. ***It would be wise to adhere to the more strict levels which are the California Prop 65 levels explained on the next page.***

California Proposition 65

California Proposition 65 (Prop 65) is a legal document derived from within the Federal safe drinking water and toxic enforcement act of 1986 that is only found within the State of California. Prop 65 governs the states stance on regulating contamination with chemicals known to cause cancer, birth defects and other reproductive harm, and requires businesses to inform Californians about exposures to such chemicals.
More information can be found here: https://oehha.ca.gov/proposition-65

Impact on Maple Producers

The maximum lead level under Prop 65 is 11 parts per billion. If a product contains more than or cannot definitely prove and verify that it is under the set level it must carry a warning label as the example below. What this means to Maple producers is that when selling syrup to packers who have markets within California the packers must take the necessary steps to assure the bulk syrup they are buying can meet the Prop 65 standards. That is why they test for lead and require producers to follow established protocols in all steps of maple production to eliminate the chance of lead within a producer's maple syrup system.

> ⚠ **WARNING: This product contains chemicals known to the State of California to cause cancer and birth defect or other reproductive harm.**

Private Labs that Test for Heavy Metals (lead) in Maple Syrup

Verify that the lab can test for levels under 10ppb. Only you will receive the Results. Contact lab for cost and sample size required.

Eurofins Food Chemistry Testing Madison, Inc. Location Website 6304 Ronald Reagan Avenue Madison, WI 53704 efiiclientservices@us4.eurofins-info.com 1.800.675.8375 *Detect limit <5ppb*	**Medallion Laboratories** https://www.medallionlabs.com/tests/heavy-metals-package/ 9000 Plymouth Avenue N. Minneapolis, Minnesota (763)764-4453 or 1(800)-245-5615 *Detect limit <10 ppb*
University of Guelph **Laboratory Services Division** https://afl.uoguelph.ca/residue-testing-services 95 Stone Road West P.O. Box 3650 Guelph, Ontario N1H 8J7 (519) 767-6299 *Detect limit 4ppb?*	A&L Canada Laboratories East Inc. https://www.alcanada.com/index 2136 Jetstream Road London, Ontario N5V 3P5 alcanadalabs@alcanada.com (519)457-2575 *Detect limit 0.25ppm*
Endyne Inc. https://www.endynelabs.com/ 160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 *Detect limit <10ppb*	**Element Santa Fe Springs** https://www.element.com/locations/the-americas/santa-fe-springs#allservices 9240 Santa Fe Springs Road Santa Fe Springs, California 90670 (562) 948-2225 *Detect limit 3ppb*
Element Toronto - Mississauga Laboratory 2395 Speakman Drive Mississauga, Ontario L5K 1B3 (905) 822-4111 *Detect limit 3ppb*	**Bureau Veritias** https://www.bvna.com 6740 Campobello Rd. Mississauga, Ontario L5N 2L8 (905) 817-5700 *Detect limit <10ppb ??*

LeadCheck® Kits

- If wanting to test equipment at your operation these kits are a first effort.
- They are not the most reliable and false positives can occur.
- **ONLY GOOD FOR USE ON ONE SPOT ONE TIME.**
- Can pick them up at many retail outlets.

Buy bulk volumes direct from company LeadCheck®
Products Hybrivet Systems, Inc.
P.O. Box 2425
Natick, MA 01760
1-800-262-5323
508-651-7881

Food Safety In Maple Operations

Washing and Sanitizing Food Contact Surfaces

Definition of Sanitization

The application of cumulative heat or chemicals on cleaned food-contact surfaces that is sufficient to yield a 5-log reduction of microorganisms with public health importance

Pre-clean – Equipment & Utensils

- Scrape over a waste disposal unit or garbage receptacle
- Pre-flush, presoak, or scrub with abrasives in a separate pre-wash sink.
- Pre-clean in a warewashing machine with a prewash cycle

Air Dry

Do not use a towel to dry

Hot water sanitizing rinse

- Stationary rack, single temperature -165°F
- All other machines 180°F

Chemical sanitizers

Same requirements as manual sanitizing.

Manual ware washing using a 3-compartment sink:

Sink 1—Wash utensils in an appropriate wash solution of 110°F or at the temperature specified on the manufacturer's label.

Sink 2—Rinse utensils in clear, clean water to remove all wash solution and any remaining food particles.

Sink 3—Sanitize using one of the following methods:

- **Hot water:** Sanitize by immersion in hot water immersion maintained at 171°F or higher for at least 30 seconds.
- **Chemical:** Sanitize by the use of a DHS-approved chemical sanitizer according to manufacturer's label instructions to achieve proper concentration.

Mechanical ware washing

Check the machine's data plate for specific details on proper operation.

Scrape → Pre-wash → Soak, as appropriate.

Wash

- Maintain wash solution temperature at manufacturer's specifications for systems using hot water for sanitization, ranges between 150°F to 165°F.
- Maintain wash solution temperature above 120°F for systems using chemicals for sanitization

Rinse—per manufacturer's specifications

Wisconsin Department of Trade, Agriculture & Consumer Protection
Division of Food Safety
2811 Agriculture Drive, PO Box 8911
Madison, WI 53708 datcp.wi.gov

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2016

Mechanical ware washing (cont'd)

Sanitize—Mechanical dishwashers use fresh hot water or inject approved chemical sanitizers into the final rinse applied according to the manufacturer's specifications.

Verify proper sanitization

- Use temperature sensitive labels or tape for hot water sanitization systems.
- Use chemical test strips with chemical injection dishwashers.

Clean In Place Equipment

Follows the manufacturer's recommended cleaning process to include the steps of pre-clean, wash, rinse, sanitize, and dry.

Chemical Sanitizer Criteria

Chlorine

Apply at a concentration between 50 ppm - 100ppm with a water temperature between 55-75°F and a contact time of at least 10 seconds.

Chemical Sanitizer Criteria (cont'd)

Iodine

Apply at a concentration between 12.5 - 25 ppm at a minimum water temperature of 68°F with a contact time of at least 30 seconds.

Quaternary Ammonia

Apply at a concentration between 200-400 ppm at a minimum water temperature of 75°F with a contact time of at least 30 seconds.

Acid Sanitizer

Apply according to label directions

Provide a test kit or device to measure concentration of solution.

Improper concentration will not provide effective sanitizing and high concentrations may leave a toxic residue

Other options for sanitizing must be approved by the Regulatory Authority

Wisconsin Department of Trade, Agriculture & Consumer Protection
Division of Food Safety
2811 Agriculture Drive, PO Box 8911
Madison, WI 53708 datcp.wi.gov

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2016

Preventing Foreign Material Contamination

Options for Shielding Light Bulbs in Maple Operations

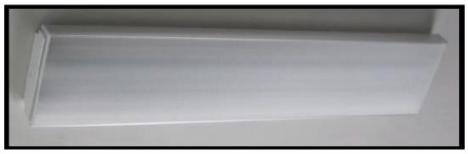
1. ENCLOSED FLUORESCENT FIXTURES

Use: syrup grading, overhead fixtures, wall lighting

WALL MOUNTED

Wall-mounted florescent with shield over entire bulb
ideal for lighting on dark walls or syrup grading

CEILING MOUNTED-LARGE

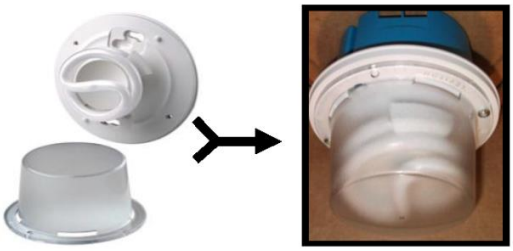


Fixture with wraparound lens, commonly sourced from industrial supply catalogs

Moisture sealed, shielded fixture appropriate for new construction or major facility upgrades. Most expensive lighting option, but long-term.

CEILING MOUNTED-SMALL

Fully enclosed compact fluorescent ceiling fixture = inexpensive replacement for a bare incandescent bulb. Bulb is sealed in fixture preventing broken glass from falling into sap/syrup processing equipment.



2. SHATTER RESISTANT AND SHATTER PROOF BULBS

Use: In all fixtures, available in variety of sizes and bulb styles

shat-r-shield® INC.
PLASTIC-COATED, SHATTERPROOF LAMPS & LIGHTING PRODUCTS

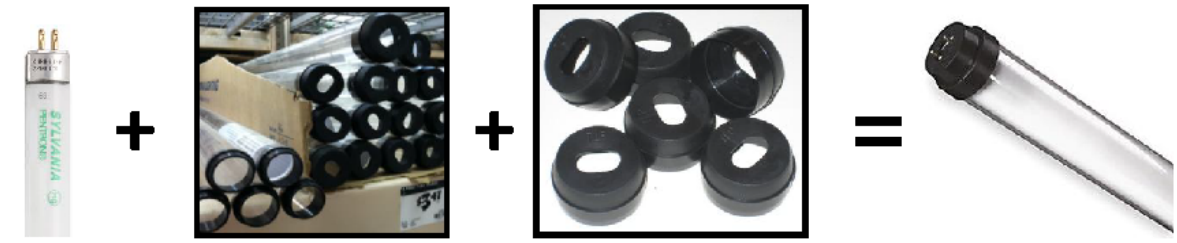
Pros: install same as regular light bulb—no special fixture or equipment required, can drop and broken glass will stay contained within bulb coating = no clean up required

Cons: approximately twice the price of non-shatterproof bulbs, certain coatings may impact brightness of bulb

Options for Shielding Light Bulbs in Maple Operations

3. FLUORESCENT TUBE SLIP-ON SLEEVES
   Use: Overhead fluorescent tube light fixtures

Sleeves work with most styles of overhead fluorescent tube light fixtures, single bulb or multi bulb

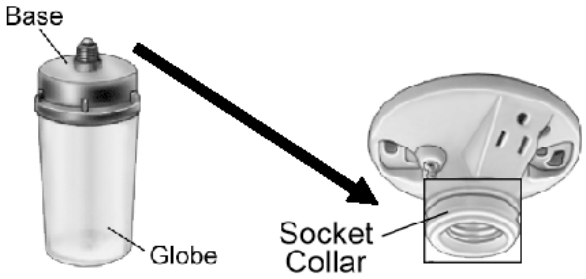


regular bulb | clear sleeve slides over fluorescent tube | end caps allow for bulb prongs to exit | fully shielded bulb ready to install in fixture

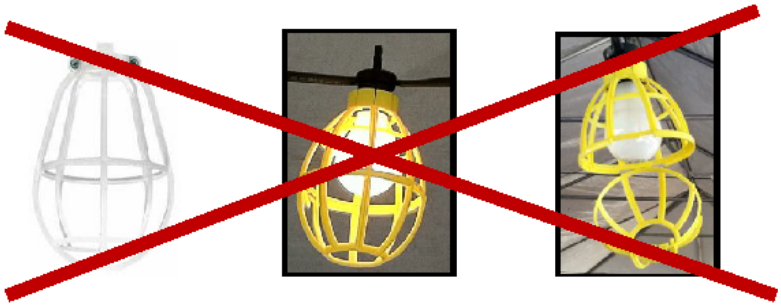
Pros: sleeves are reusable, fairly inexpensive at $3-5/each, very little impact on brightness of light from fixture

4. INCANDESCENT LIGHT BULB GUARDS

Fully enclosed guard typically constructed of polycarbonate or other plastic. Incandescent bulb screws into base and base screws into standard light socket



**Please Note: cage-style shields are not an acceptable method for shielding incandescent bulbs. Why? If the bulb bursts broken glass can fall through the cage and contaminant sap or syrup.



Food Safety in Maple Operations – Chemical Safety

Do Not Use Isopropyl Alcohol as a Maple Sanitizer in the U.S.

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Edition 3 of the North American Maple Syrup Producers Manual (2022) has a section on cleaning tubing systems. Find the link in the Resources section of this document.

Increased attention to spout and tubing sanitization has led to rising sap yields for maple producers. Cleaning and replacement (use of new spouts, use of check-valve spouts or adapters, or replacing spouts and droplines) strategies have different effects on sap yields, and each carry their own costs in terms of supplies and labor to implement the various approaches, and thus each has a different net profit. This topic has been extensively studied, and an on-going study by researchers at the University of Vermont and Cornell University has verified the effectiveness and net profit of each of the major ways of achieving good sanitization in maple operations. A report detailing these findings and a computer-based tool to help producers determine the optimal sanitization approach to use in their operation is expected to be available later in 2016.

Many people may simply assume that the use of isopropyl alcohol (IPA) would be governed by the U.S. Department of Agriculture. That is not the case. In the United States, chemicals used to clean and sanitize spouts and tubing in maple operations are regulated by the Environmental Protection Agency (EPA). Some Federal Drug Administration (FDA) regulations under Title 21 may also pertain. IPA, like many sanitizers, is considered to be a pesticide. The mode of action of these substances is to remove or kill microbes existing in the system and to prevent regrowth, thus protecting the tubing and the materials passing through the tubing from the harmful effects of microbial growth. To be legal to use in the U.S., sanitizers must be registered for use with the EPA after they have undergone a review process to document their efficacy and safety, and labels must include certain precautions and specific instructions for the type of use for which they are to be employed.

Most sanitizers used in maple operations are registered sanitizers, and include statements for use on surfaces such as maple tubing. Producers using these sanitizers should carefully read the label to understand any hazards associated with their use, and follow instructions on the application of the sanitizer, any rinsing requirement (often satisfied by allowing the first sap of the season to run on the ground) and the safe disposal of any residues.

Isopropyl alcohol (IPA) is a commonly used maple spout and tubing sanitizer in Quebec. IPA is registered for use in maple tubing systems in Quebec and throughout Canada, and publications are available in both French and English detailing how IPA should be used there. When used according to instructions, IPA does appear to have some level of effectiveness against some types of microbes occurring in maple tubing systems. The labeling on at least some of the IPA products that are available are unclear or contradictory, stating "No-Rinse" in some places, but requiring producers to " dispose of maple sap collected until alcohol has been eliminated from the system," although there are no instructions advising how to determine that point. In addition, the instructions of one product state on one part of the label to, "Spray product directly on hands" as a sanitizing hand dip, but the precautions say to "Avoid contamination with skin," "Wear impervious gloves," and to "Wash contaminated skin with soap and water" in other sections. At best, this is highly confusing and doesn't meet U.S. pesticide labeling requirements.

It has come to our attention that some maple equipment companies in the U.S. are offering IPA in their catalogs and in their stores, are selling the equipment to dispense IPA in tubing, and are providing instructions in its use in maple operations. We have also spoken with several U.S. producers who have asked about, already tried, or are currently using IPA. Using this product is illegal.

Regardless of the availability and guidance provided, maple producers should clearly understand that **THE USE OF ISOPROPYL ALCOHOL IN MAPLE TUBING SYSTEMS ANYWHERE IN THE UNITED STATES IS A VIOLATION OF FEDERAL LAW**. Syrup produced from tubing systems in the U.S. employing IPA could therefore be considered contaminated according to U.S. E.P.A. regulations. Any syrup produced with IPA in the U.S. could be seized and destroyed by Federal or State regulators.

The availability of IPA by maple equipment vendors in the U.S. and the acceptance of IPA by Canadian authorities does not convey any regulatory protection for maple producers using IPA in the U.S. **Therefore, we strongly encourage maple equipment and supply companies in the U.S. to cease making IPA available to U.S. producers, and for maple producers using or considering using IPA as a sanitizer to refrain from doing so until such time as IPA is registered with the E.P.A. for use in maple tubing systems.**

Chemical Safety in Maple Sugaring Operations

A.K. van den Berg and T.D. Perkins
Proctor Maple Research Center, The University of Vermont

H.J. Marckres
Vermont Agency of Agriculture, Food & Markets

The use of hazardous chemicals in the maple industry has increased the potential for accidents, including syrup and environmental contamination, chemical spills and personal injury. Chemical safety must be a priority in maple sugaring operations. This brochure describes the most common hazardous chemicals used in sugaring, outlines general guidelines for safely using hazardous chemicals and provides resources where further information can be obtained. The careful use of chemicals helps to ensure that maple products remain pure.

For more information contact:
Proctor Maple Research Center
P.O. Box 233, Underhill Center, VT 05490
802-899-9926
www.uvm.edu/~pmrc
Email: pmrc@uvm.edu

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont. If you require special accommodations to participate in this program, please let our office know so we may assist you. Any reference to commercial products, trade names, or brand names is for information only, and no endorsement or approval is intended. This publication is made possible, in part, by funding from the USDA.

This resource can be found at https://mapleresearch.org/pub/chemsafety/

INTRODUCTION

The use of hazardous chemicals in maple sugaring operations has been increasing steadily. The chemicals currently used for reverse osmosis (RO), pan and tubing cleaning, and in some other maple practices are often extremely hazardous, industrial-grade chemicals; they are frequently more concentrated and present a much higher level of danger to personal safety and syrup contamination than general-use household chemicals. However, the real hazards of these chemicals are frequently overlooked or understated. It is sometimes unclear from a product's label alone what chemicals it contains and in what concentrations, what the chemical's hazards are, and how it can be used safely.

It is imperative to use, store and dispose of these chemicals properly in order to protect your own personal safety and prevent chemical contamination of syrup and the environment. This brochure is intended to raise awareness among sugarmakers about hazardous chemicals commonly being used in sugaring operations as well as the need to use these materials safely, in a way which protects personal and food product safety. This brochure will outline 1) the most common types of chemical hazards associated with sugarhouse chemicals, 2) basic guidelines for using chemicals safely, and 3) where to get more detailed information.

A chemical storage cabinet in a sugarhouse. These cabinets are a great way to store chemicals safely. They minimize the extent of spills, contain small fires and keep chemicals dry, away from incompatible chemicals, food and the public.

Note: The intention of this brochure is to provide basic advice and a general introduction to chemical safety information only. Its purpose is not to supply detailed information on how to comply with any safety laws or regulations. It is the responsibility of the producer to gather all required information and to abide by all applicable precautions, laws and regulations. Information on where to obtain further compliance information and more detailed chemical safety information is included at the end of this brochure.

CHEMICAL HAZARDS IN THE SUGARHOUSE

"Hazardous materials are any chemicals which present either physical or health hazards to life or property" (University of Vermont Environmental Safety Facility, UVM ESF). There are three basic categories of physical hazards: flammability, corrosivity and reactivity, and one health hazard category: toxicity.

Flammables include any liquid which is ignitable at room temperature.

Corrosive chemicals are those that are acidic (have low pH values) or alkaline (have high pH values). Though regulations differ, a general rule of thumb is that solutions with pH values of 4.0 or lower are hazardously acidic, and those with pH values of 10.0 or greater are hazardously alkaline.

More Information

Flammable and combustible liquids –
http://www.ccohs.ca/oshanswers/chemicals/flammable/

What makes chemicals poisonous –
http://www.ccohs.ca/oshanswers/chemicals/poisonou.html

Chemical hazard information –
http://esf.uvm.edu/chem_comp_chart.pdf

Reactive chemicals have the ability to react violently under many circumstances, including upon contact with air, water or other incompatible chemicals.

Toxicity is "the ability of a chemical substance to cause an undesirable effect in a biological system" (UVM ESF). Information on a chemical's toxicity includes whether the chemical in question has acute and/or chronic effects (acute effects are the result of short-term exposure, while chronic effects are the results of repeated exposures over time), what the target organs of the chemical are, and whether the effects of the chemical are local (at the site of exposure) or systemic (away from the site of exposure) (UVM ESF).

More Information

How to work safely with corrosives –
http://www.ccohs.ca/oshanswers/prevention/corrosi1.html

Hazards of corrosives –
http://www.ccohs.ca/oshanswers/chemicals/corrosive/corrosiv.html

Almost all of these hazard types can be found in chemicals used in sugaring, and each individual chemical can fall into more than one hazard category.

Toxics

All chemicals used in sugaring are toxic to some degree. For example, formaldehyde-based membrane storing solutions are toxic because formaldehyde is considered a likely human carcinogen. If possible, the use of toxic chemicals should be avoided in sugaring operations. If it is absolutely necessary to use toxics, extreme caution should be used to ensure absolutely no residue remains on the membrane prior to use.

Corrosives

By far the most common types of hazardous chemicals used in sugaring are corrosives.

Many cleaners or detergents used for reverse osmosis (RO) contain citric or phosphoric acids often in concentrations ranging from 30 to 100%. Some RO soaps contain sodium hydroxide, a hazardously alkaline chemical, in concentrations from 30 to 100%. The main ingredient in many tubing and pan cleaners is phosphoric acid, present in widely varying concentrations. Other pan cleaners sold are 92% concentrated sulfamic acid. Membrane storing solutions containing sodium metabisulfite are also corrosive.

Regardless of the concentration, all of these materials are hazardous, corrosive chemicals. They are far more concentrated, and thus far more hazardous, than any similar chemicals sold for household use. The corrosivity of these chemicals (represented by their pH values), either as purchased or when diluted for use, is at a level which is unsafe for unprotected skin contact.

In general, exposure to corrosive chemicals can cause severe skin burns, permanent eye damage and respiratory damage if inhaled. Ingestion of corrosive chemicals can cause burns to the mouth, throat or digestive tract, and can be potentially fatal. Extreme care needs to be taken to prevent corrosives from contaminating syrup!

Always *add* corrosives *to* water when diluting or mixing. When using corrosive chemicals (such as acid pan cleaners or alkaline sodium hydroxide RO soaps), you should always add the material slowly, while stirring, to the water and NEVER add water to the corrosive. Acids and alkalines react strongly when mixed with water, often causing splashing. By adding the corrosive to the water (instead of the reverse), any splashed material is more likely to be a dilute mixture with water, rather than a concentrated corrosive.

GUIDELINES FOR USING CHEMICALS SAFELY

The following is an outline of some simple steps you can take to use hazardous chemicals more safely. It is not a comprehensive set of guidelines - for more information on how to use, store and dispose hazardous chemicals safely, contact the safety resources listed at the end of this brochure.

1. Obtain the Material Safety Data Sheet (MSDS) for every chemical used in your operation

- The MSDS should contain all of the information necessary to safely use and store each chemical. Occasionally, the information on an MSDS can be limited or difficult to interpret. In this situation, the best way to find out more information is to call the manufacturer's phone number listed on the MSDS.

- When you purchase a chemical, the dealer or retailer is required to give you its MSDS sheet on request.

More Information

Material safety data sheets –
http://www.ccohs.ca/oshanswers/legisl/msdss.html

Glossary of Common terms in MSDSs –
http://www.ccohs.ca/oshanswers/chemicals/glossary/

Note: Depending on the nature of your business, laws that govern workplace safety may apply, and you may be required to maintain a copy of all MSDSs onsite. The Occupational Safety and Health Administration (OSHA) Office of Small Business Assistance can help you determine if this or any other federal (or state, if applicable) OSHA regulation is applicable to your business through a free and confidential compliance assistance consultation. Contact information is provided at the end of this brochure.

2. Using the MSDS, identify the necessary information for using the chemical safely. In general, you want to be able to answer the following questions before you begin using any chemical:

- What are the physical hazards of this chemical?
- What are the health hazards?
- What is the concentration of the chemical?
- What are the possible routes of entry - can it enter through the skin, or by inhalation?
- Could there be potential health effects from ingesting syrup that has come in contact with this chemical?
- How can this chemical be stored safely? Can it be exposed to freezing temperatures without harm?
- Are there other chemicals this one is incompatible with, and should not used with or stored near?
- What personal protective equipment is necessary for using this chemical?
- What emergency equipment is necessary if this chemical is spilled or an accidental exposure occurs?

Photo by Mark Isselhardt

Always be aware! The directions for this extremely corrosive RO soap instruct you to use 'One capful'. Using the cap to measure the chemical leaves a lot of chemical residue in the cap, creating a dangerous hazard for the next person who opens the bottle.

3. Be aware and have an emergency plan

- Once you've identified the chemical you're working with and before you begin your work, think carefully about what you're about to do. Plan ahead for what action you'll take if an accident occurs. Even when careful attention is paid to prevention, accidents can happen and it is especially important to be prepared when an accident could involve hazardous chemicals.

More Information

Glove selection –
http://www.ccohs.ca/oshanswers/prevention/ppe/gloves.html

Safety glasses and face protectors –
http://www.ccohs.ca/oshanswers/prevention/ppe/glasses.html

Selecting PPE for individual chemicals:
National Institute for Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards –
http://www.cdc.gov/niosh/npg/npg.html

Emergency showers and eyewash stations –
http://www.ccohs.ca/oshanswers/safety_haz/emer_showers.html

- Let the people around you know what you're doing and that you're working with a hazardous chemical. This is especially important if chemicals are being used in an area that children or the public have access to.

MSDSs are important emergency equipment. The MSDS is the best source of information for emergency personnel in case of an accidental contamination or spill. Having the MSDS ready for emergency personnel at the time of an accident is imperative and will allow them to respond more quickly and effectively. The simple step of keeping a readily available copy of the MSDS for each chemical used in your operation could lessen the severity of an injury or accidental release, or prevent a fatality.

4. Use the appropriate personal protective equipment (PPE)

- The PPE required for each chemical should be indicated on the MSDS. This can include protective clothing (such as heavyweight coveralls), chemical resistant gloves, chemical goggles or even a faceshield.

Photo by: Mark Iselhardt

Cleaning pans with the appropriate personal protective equipment, including chemical-resistant gloves, protective clothing and a faceshield.

5. Have the right emergency equipment

- The MSDS should also indicate what emergency equipment is necessary for each chemical, such as a safety shower, eyewash or chemical spill kits.

- Having this emergency equipment and knowing how to use it is critical. Using an eyewash within the first 10-15 seconds of exposure to acid can potentially prevent permanent eye injury or blindness.

- Emergency devices designed for use in buildings without plumbing are available.

6. Dispose of the chemicals properly

- Because these are hazardous, industrial grade chemicals, **ANY** process that uses these chemicals is producing a waste product (such as wash water) that will require special disposal procedures and cannot be disposed of directly into septic systems, municipal waste systems or onto the ground. This will apply to wash water you may have previously considered relatively harmless.

- In general, the objective is to ensure waste is being disposed in a way that doesn't cause harm – to septic systems, pipes, water sources, municipal waste systems, soil, trees in the sugarbush, etc.

Dilution is not the solution! It seems logical that diluting a concentrated chemical during a process such as RO washing would reduce the hazard of that chemical. However, even when diluted with thousands of gallons of water, the wastewater produced using sugarhouse chemicals will still always require special disposal procedures.

- Determining what disposal procedures are required for each type of waste is complex, and depends on many factors including the composition of the waste and the nature and location of your operation.

- Fortunately, most states have Small Business Assistance Programs (SBAPs) that provide free, confidential environmental compliance consultations which will help determine how your waste can be legally disposed. Contact information is provided at the end of this brochure.

Photo by: George Cook

Sugarhouses are often places where the whole family and the public have access to. This is an important reason why chemical safety should be a priority in any sugarhouse.

- **You must determine how to legally dispose of each individual waste you produce**. To make this determination:

  1. Determine the characteristics of each of the different types of waste being produced in your operation. This will include RO wash water, and water produced after pan and tubing cleaning. Identify the chemicals that are present in each waste by checking the MSDS for the chemicals used.

  2. Contact the SBAP Hotline in your state. Using the information you provide, they will help you determine how to safely and legally dispose of the waste. This may include neutralization, contacting your municipal waste system prior to release, or in some cases collecting the material to be disposed of as hazardous waste.

- The SBAPs can also help you determine how to dispose of unused hazardous chemicals.

7. Store chemicals safely
   - The MSDS sheet should also contain information on how to safely store each chemical.
   - Always store chemicals apart from other incompatible chemicals. Each container should be clearly labeled with the chemical name and its hazard (Example: Phosphoric acid, 35% - CORROSIVE!).
   - Containers should be made of a material compatible with the chemical, should be able to be closed or sealed, and should be free from any damage which would allow leaks or spills.
   - All chemicals should be stored in cool, dry locations away from food and where the public or children do not have access. You may wish to purchase a chemical storage cabinet to provide a safe and secure storage location.

Photo by: Mark Isselhardt

What's wrong with this picture?
In this chemical storage cabinet, *acid* pan and RO cleaners are being stored right next to *alkaline* RO soap. These are incompatible with each other and storing them together could lead to very dangerous accidental reactions. **NEVER** store acids with alkalines.

8. Follow the manufacturer's directions
   - Chemicals are only safe to use at the dilution levels indicated in manufacturer's instructions, and only for the purposes described by the manufacturer.

Mixing sugarhouse chemicals. Mixing of incompatible chemicals (such as mixing an acidic chemical with an alkaline one) can cause very dangerous, unpredictable reactions, even explosions.

   - Doubling the recommended concentration of a chemical does not double its effectiveness – but it does hugely increase the risk of injury if an accidental splash or spill occurs and increases the damage to equipment. If the chemical does not come with instructions, call the dealer or manufacturer to obtain them.

9. Use chemicals approved for use in the sugaring industry only
   - All chemicals used in any part of a sugaring operation should be approved for 'Food Use'.
   - Chemicals sold for other industries or purposes are not appropriate for use in sugaring.

10. If you don't know – ask!
   - The following are resources where you can obtain more information to help you use chemicals more safely.

WHERE TO FIND MORE INFORMATION

Compliance Information

Small Business Assistance Programs (SBAPs) – For compliance assistance with environmental regulations on the disposal of hazardous chemicals or wastes produced using hazardous chemicals, SBAP Hotlines provide free, confidential consultations to small businesses.

State	Hotline	Website
MA	(617)-626-1060	http://www.mass.gov/envir/ota/
ME	(800)-789-9802	http://www.maine.gov/dep/oia/sbta/
MN	(800)-657-3938	http://www.pca.state.mn.us/programs/sbap_p.html
NH	(800)-837-0656	http://www.des.state.nh.us/SBTAP/
NY	(800)-780-7227	http://www.nysefc.org/tas/SBAP/SBAP.htm
OH	(800)-329-7518	http://www.epa.state.oh.us/ocapp/sb/index.html
VT	(800)-974-9559	http://www.anr.state.vt.us/dec/ead/sbcap/index.htm

A complete listing of SBAPs for each state can be found at:
http://www.smallbiz-enviroweb.org/sba/sbap.html

Note: If your state's SBAP does not currently provide compliance assistance, the following link provides a listing of other compliance assistance resources by state:
http://www.smallbiz-enviroweb.org/sba/seasbapweb.html

OSHA Office of Small Business Assistance Consultation Programs – For compliance assistance with federal (or state, if applicable) OSHA regulations, such as Hazard Communication (MSDSs, chemical labeling and documentation) and the use of hazardous chemicals in the workplace, OSHA provides free, confidential consultations to small businesses. A directory of consultation projects in each state can be found at:
http://www.osha.gov/dcsp/smallbusiness/consult_directory.html
Vermont Consultation Program (Project WorkSAFE) Hotline: (800)-SAFE-YES

Other – The National Agriculture Compliance Assistance Center provides comprehensive information on environmental requirements which affect agriculture. Their hotline is available to answer environmental compliance questions related to agriculture.
Hotline: (888)-663-2155 or http://www.epa.gov/agriculture/index.html

General Safety Information

Canadian Centre for Occupational Health and Safety OSH Answers
http://www.ccohs.ca/oshanswers/chemicals/ ~ This site provides easy to read fact sheets on numerous subjects related to chemical safety, including how to work safely with corrosive chemicals.

National Ag Safety Database
http://www.cdc.gov/nasd/index.html ~ A collection of agricultural safety information and resource materials.

National Institute for Occupational Safety and Health
http://www.cdc.gov/niosh/homepage.html ~ NIOSH provides research, information and education on occupational health and safety. Their website has extensive information on chemical safety in the workplace.

Small Business Environmental Homepage
http://www.smallbiz-enviroweb.org ~ This site links to safety resources useful for small businesses.

NIOSH Pocket Guide to Chemical Hazards
http://www.cdc.gov/niosh/npg/npg.html ~ A searchable database of information on individual hazardous chemicals.

Searchable MSDS website

Vermont Safety Information Resources, Inc.
http://siri.org/msds/index.php ~ This site allows you to search for MSDSs by chemical or trade name.

Where to purchase safety supplies

Lab Safety Supply, Inc. ~ http://www.lss.com or (800)-356-0783
Grainger ~ http://www.grainger.com or (888)-361-8649

Photo by: Paula Murakami

Acknowledgements
Thanks to Judy Mirro, Rich St. Gelais, Barbara Benton St. Gelais, Mark Isselhardt, Brian Stowe and Tim Wilmot for assistance in producing this brochure.

How to Read A Safety Data Sheet (SDS)

Safety Data Sheets (SDS) are an important requirement of the OSHA Hazard Communication Standard. SDS are essential documents that are used to inform employees, students, and the general public about how materials can be safely handled, used, and stored. Since Flinn provides chemicals only to schools, we have written Flinn SDS specifically for teachers and their students. Using clear and straightforward language, each Flinn SDS provides all the relevant safety and hazard information in a consistent, useful, and easy-to-read two-page format. Flinn SDS follow the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The 16 sections are divided into four major areas, each designed to answer a specific question.

What is the material and what do I need to know immediately in an emergency?
Sections 1–3.

A It is important that the chemical name on the label match the name on the SDS. Many chemicals have similar names, but very different properties.

B The most important section! Provides an overview of the physical and health hazard risks associated with using the material.

C Signal words, either Danger or Warning, heighten the awareness of the relative risk when using certain chemicals. Danger is the more severe warning!

D Eight pictograms exist in the GHS classification scheme to call attention to physical and health hazards. See page 1238 for more information about GHS pictograms.

E This section includes the formula, formula weight, concentration, and CAS#. The CAS# is the single identifying number for each specific substance. CAS# should match the CAS# on the bottle label.

What should I do if a hazardous situation occurs?
Sections 4–6.

F Seek medical attention. These first-aid measures are only meant for immediate first aid and should always be followed up with professional medical care. The CAS# is the single identifying number for each specific substance. CAS# should match the CAS# on the bottle label.

G This section is written for the firefighter. Flash point (the lowest temperature at which enough vapor is present to form an ignitable mixture with air); upper and lower flammable limits; and the auto ignition temperature (AIT) are common properties included in this section.

FLINN SCIENTIFIC, INC.
Safety Data Sheet (SDS)

SDS #: 181.00
Revision Date: September 25, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

n-Butyl Alcohol A

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261
CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word C **DANGER**

D Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

B

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).

Hazard class: Serious eye damage/eye irritation (Category 1). Causes serious eye damage (H318).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
n-Butyl alcohol E	71-36-3	$CH_3(CH_2)_2CH_2OH$	74.12	
Synonym: 1-Butanol; n-Butanol				

SECTION 4 — FIRST AID MEASURES

F

Call a POISON CENTER or physician if you feel unwell (P312).
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing (P305+P351+P338).
If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).
If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

G

Class 1C flammable liquid.
Flash point: 37 °C Flammable limits: Lower: 1.4% Upper: 11.2% Autoignition Temperature: 343 °C
When heated to decomposition, may emit toxic fumes.
In case of fire: Use triclass dry chemical fire extinguisher (P370+P378).

NFPA CODE H
H-2
F-3
R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information. I

PAGE 1 OF 2

H The NFPA code is a numerical code established by the National Fire Protection Association. It rates the substance *under fire conditions* in four categories. Health, Flammability, Reactivity, and unusual reactivity: 4 is a severe hazard, 0 is no hazard.

I How to clean up a spill. Always remove unprotected personnel from area and make sure all students are safe. Contain the spill with sand or absorbent materials.

HOW TO READ A SAFTEY DATA SHEET (SDS) continued on next page.

How to Read A Safety Data Sheet (SDS), continued

Each Flinn SDS follows the same format and the information is always found in the same location, making it a valuable resource in the event of an emergency. With your first chemical order of the year, every teacher will receive a CD from Flinn Scientific containing all of our SDS. You may also request another CD at any time. Flinn SDS are updated on a regular basis, guaranteeing the most up-to-date safety information possible. Flinn sells a complete SDS Library in two versions, a hard copy version in two binders (Catalog No. AP7703, page 1206) or as part of the Flinn Online Chemventory program. For a more detailed description of the Flinn Online Chemventory program, please refer to pages 1196–1197. For our customers' convenience, Flinn has also placed a free complete set of SDS on our website. Simply go to www.flinnsci.com and click on the *Free SDS* button—individual SDS are easy to find and copies may be printed from your computer.

FLINN SCIENTIFIC, INC.
Safety Data Sheet **n-Butyl Alcohol**
SDS #: 181.00
Revision Date: September 25, 2015

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines, and amides. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. J
Keep container tightly closed (P233). Keep cool (P235). Use only in a well-ventilated area or in a hood (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing and eye protection (P280). Wash thoroughly after handling (P264). Use ventilation to keep airborne concentrations below exposure limits.
Exposure guidelines: PEL 100 ppm (OSHA) TLV 20 ppm (ACGIH) K

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear colorless liquid. Wine-like odor.
Soluble: Water (20%). Miscible with alcohol and ether. L

Boiling point: 117.7 °C
Melting point: -89 °C
Refractive index: 1.3988
Specific gravity: 0.81

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with aluminum, chromium trioxide, and oxidizing materials.
Substance may develop explosive hydroperoxides.
Shelf life: Fair, substance may oxidize. See Section 7 for further information. M

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Absorbed through skin. Eye, skin, respiratory tract irritation. Dizziness. CNS depression.
Chronic effects: N.A.
Target organs: Eyes, skin, respiratory system, central nervous system. N

ORL-RAT LD_{50}: 790 mg/kg
IHL-RAT LC_{50}: 8000 ppm/4H
SKN-RBT LD_{50}: 3400 mg/kg O

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available. P

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #18b is one option. Q

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Butanols. Hazard class: 3, Flammable Liquid. UN number: UN1120.

N/A = Not applicable R

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-751-6), RCRA code U031. S

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S). T

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

PAGE 2 OF 2

How can I prevent hazardous situations from occurring?
Sections 7–11.

J Use the Flinn Suggested Chemical Storage Pattern to prevent accidents and improve safety. Special storage and usage tips are also included.

K Wear personal protective equipment such as goggles, gloves, and an apron. See page 1226–1227 for an explanation of exposure guidelines.

L Clear, concise, and useful physical and chemical properties help you learn more about the chemicals you use. The first part describes the material's appearance. If it doesn't look like this, STOP. Do not use it. It may be more or less hazardous.

M Describes the conditions or reactions to be avoided. Also provides some indication about anticipated shelf life.

N More detail on how the material may injure you. Acute (short exposure) and chronic (long-term) effects are listed along with their target organs.

O Oral (ORL), inhalation (IHL), and skin absorption (SKN) toxicity data on test animals is included. For more information on LD_{50}, see pages 1228–1229.

Other useful information.
Sections 12–16.

P Ecological impact if large amounts (e.g., tank car) of the chemical spill near a river or lake.

Q Suggested disposal methods for laboratory quantities of chemicals. See pages 1268–1298 for Flinn Suggested Disposal Methods.

R Department of Transportation shipping information is included for your school district, emergency responders, and transport/shipping departments.

S Regulatory information used by regulatory compliance personnel.

T Flinn Scientific has an ongoing program to update its SDS. As professional chemists, we try our best to provide science teachers with the most accurate and useful safety information. Call Flinn if you have any questions. We can help!

WISCONSIN FOOD PROCESSING AND FOOD SALES REQUIREMENTS FOOD SAFETY & LICENSING GUIDE

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Food Safety

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WHY IS A LICENSE REQUIRED?

The objective of food licensing and inspection is to keep food wholesome and safe. Ensuring a safe food supply protects public health, minimizes your liability, and instills customer satisfaction. The responsibility of the Department of Agriculture, Trade and Consumer Protection is to ensure that all consumers who "pay" for a food product receives one that is safe and wholesome. Our role is to ensure that foods manufactured in Wisconsin meet the minimum safety standards found in the Wisconsin Food Code, which is modeled after the FDA Food Code for the sake of consistency with national standards.

This booklet is a resource to guide you through the licensing process, explain the requirements and ensure you have done your research before pursuing your application.

or *48 million* people get sick each year from contaminated food.

DO I NEED A LICENSE?

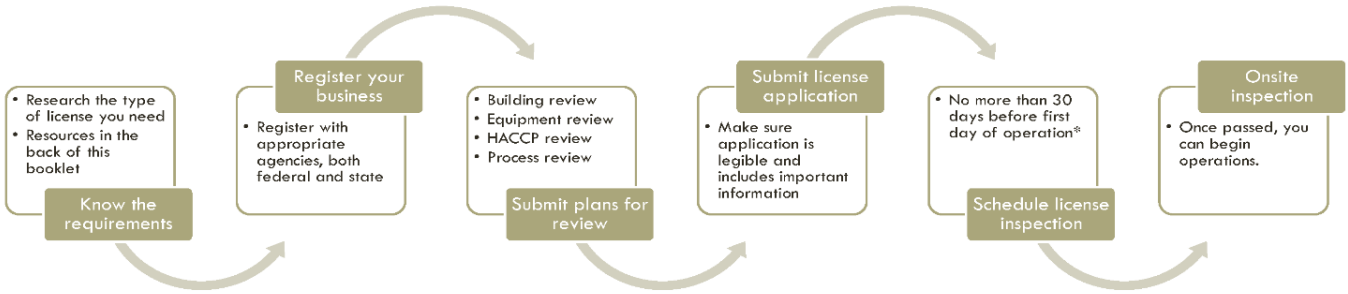
A retail food license or food processing plant license is required to make and sell food items to the public.

If you plan to sell your products primarily to consumers directly, you will need a retail food license. Internet sales are considered retail sales.

If you plan to sell primarily through wholesale distribution, you will need a food processing plant license issued by our Department. Wholesaling under a food processing plant license allows you to sell your products anywhere and to anyone; this includes other retail food stores, restaurants and the internet.

There are certain types of foods - specifically canned items and processed fish - that can only be made in a facility licensed as a food processing plant.

WHAT IS THE APPLICATION PROCESS?



**If you are not ready for inspection within 30 days, the license fee is forfeited and the license is denied. You will need to begin the process over to become licensed.*

KEY REQUIREMENTS FOR LICENSING: PHYSICAL FACILITY, TOXIC MATERIALS, & TOILETS

- Ensure that the location is acceptable to your local zoning board, and obtain a seller's permit from your local city clerk's office, if required.
- The facility must be a commercial-grade kitchen. Using your personal home kitchen is not allowed. If you plan to start the business in your home, you must construct a separate kitchen room dedicated to your food business. The dedicated kitchen must have washable floors, walls, and ceilings. The lighting must be adequate for commercial purposes, and the room must be properly ventilated. Some starting operators rent time in a restaurant, school, or church kitchen to satisfy the separate commercial kitchen requirement without having to invest in a new separate kitchen of their own.
- The exterior of the premises must be drained, clean, orderly and free from garbage accumulation or harborage areas for rodents or other pests.
- Ventilation, natural or mechanical, must be adequate to remove excess heat, condensation, smoke or fumes. Be sure to check with a local fire inspector for specific requirements.
- Walls and ceiling must be smooth, non-absorbent and finished with a light-colored, easily cleanable surface.
- The floor must be smooth, non-absorbent and in good repair. Wood-surfaced floors are not acceptable for most food processing facilities.
- Processing areas, equipment, and utensils must be thoroughly cleaned immediately after the day's processing or more often as required.
- Lighting must be sufficient for the intended purpose. Light bulbs or fluorescent tubes must be shielded or shatter-resistant to prevent contamination of food in the event of bulb breakage.
- Effective measures to control the presence of insects, rodents, and other pests must be employed.
- Poisonous and hazardous substances must be used with caution and in strict accordance with label instructions. They must be kept in segregated storage, adequate to prevent contamination of food or utensils.

KEY REQUIREMENTS FOR LICENSING: EQUIPMENT, UTENSILS & LINENS

- Hand washing facilities must include a non-hand-operated hand-washing sink located in the processing area. This sink may not be used for food preparation. Hand soap, paper towels in a dispenser, and an easily cleanable waste container are required. Common towels, those used by more than one person, cannot be used.
- A three-compartment sink or a National Sanitation Foundation (NSF) approved dishwasher is required for washing your equipment and utensils daily. The three compartments are required for the wash, rinse, and sanitize steps. There may be a fourth sink for pre-rinsing and/or a food processing sink as required. The sink must be smooth, non-absorbent, and have rounded corners. Sink compartments must be large enough to accommodate immersion of the largest equipment and utensils such that adequate cleaning and sanitizing can be done.
- Equipment such as refrigerators, stoves, sinks, and mixers must be of approved design, used only for the food business, and be easily cleanable and in good repair. If the equipment bears the National Sanitation Foundation (NSF) certification you can feel certain that it will meet these design requirements.
- Tables, counters and other work surfaces must be in good repair and easily cleanable. Easily cleanable means a smooth and non-porous surface in light finishes as much as possible.
- Other utensils like pans, bowls, and spoons must be smooth, non-absorbent, in good condition and easily cleanable. Just about all utensils manufactured currently meet these requirements.
- An approved sanitizer (such as plain, unscented chlorine bleach) or an equivalent must be provided. Sanitizer test strips must be available to check the strength of the sanitizing solution: at least 100 PPM chlorine (or equivalent if an alternate sanitizer is used).

KEY REQUIREMENTS FOR LICENSING: WATER, PLUMBING & WASTE

- If you have a private water supply, annual testing for bacterial contamination is required. You will need a certified lab safe well water result prior to licensing.
- Plumbing must meet all state and local codes and be in good working order. Contact your local plumbing inspector for assistance.
- Restrooms must be provided as required by the code of the Safety and Building Division of the Department of Safety and Professional Services.
- Toilet rooms may not open directly into processing areas and must be vented to the outside.
- A hand washing sink must be provided inside or immediately adjacent to the restroom.
- A covered trash container must also be provided for ladies' room and wash hands signage must be posted.

KEY REQUIREMENTS FOR LICENSING: FOOD

- Food storage must be sanitary, orderly, and protect the food from contamination at all times.
- Food must always be stored at safe temperatures: refrigeration must be maintained at 41°F or below.
- All food ingredients, including eggs, must originate from a licensed processing facility.
- Your product's food label must meet all food-labeling requirements, including an allergen alert.
- If you are selling products by weight, your scales must be inspected by State Consumer Protection personnel or by local weights and measures officials.
- A food processing plant operator must have a written plan for identifying and recalling food produced at that plant, should a food recall become necessary. The operator must update the plan as necessary, and make it available to the department for inspection and copying upon request.

KEY REQUIREMENTS FOR LICENSING: PERSONNEL

- Employees must wear clean clothing, an effective hair restraint, and no jewelry. The only exception is a plain band wedding ring.
- Persons with a communicable disease or open sores may not work where they could potentially contaminate the food or food-contact surfaces.
- Direct bare-hand contact with ready-to-eat foods is prohibited.
- Food, beverage, and tobacco use is restricted to designated areas, away from the processing areas and dishwashing areas.

RESOURCES

FDA Facility Registration: All food firms, exception retail, must register with FDA, and re-register every two years. You can complete this registration online: http://www.fda.gov/Food/GuidanceRegulation/FoodFacilityRegistration/default.htm
You may also request paper forms by phone, at 1-800-216-7331 or 301-575-0156.
Registration was first required by the Bioterrorism Act of 2002.

Wholesale Food Processing: Wisconsin Legislature: Chapter ATCP 70

UW Extension Small Scale Production of Acidified Foods: http://www.foodsafety.wisc.edu/ssp_acidified_canned_food.html

Retail Food Sales: Wisconsin Legislature: Chapter ATCP 75

The WI Food Code (retail sales):Wisconsin Legislature: Chapter ATCP 75 Appendix

Food Code Fact Sheets: http://datcp.wi.gov/Food/Food_Code_Fact_Sheets/index.aspx

The ***Wisconsin Local Food Marketing Guide*** is an excellent resource for all facets of starting a food processing business. Available at: http://datcp.wi.gov/uploads/Business/pdf/ThirdEditionLFMG.pdf

Chapter 4 Excerpt: Rules, Regulations, Licensing and Liability: http://datcp.wi.gov/uploads/Newscenter/pdf/LFMG_CH4.pdf

CONTACT US

For additional information or to submit your application, contact:

Licensing Assistance
608-224-4923
datcpdfslicensing@wisconsin.gov

Application/Payment
Wisconsin DATCP
Division of Food Safety
PO Box 93586
Milwaukee, WI 53293-0586

RESOURCES

Organizations Supporting Maple Syrup Producers

State, National, and International Levels

Links can be accessed by clicking the blue text in the digital version of this document.

The **Wisconsin Maple Syrup Producers Association (WMSPA)** is dedicated to improving the ability of its members to produce & market the finest pure maple syrup in North America. They represent all Wisconsin Maple producers in regards to regulatory issues.

The **North American Maple Syrup Council (NAMSC)**, is an international network of associations representing 16 commercial maple producing states and Canadian provinces within North America. The Council, a non-profit organization established in 1959, brings together industry leaders and affiliated groups to share common interests, experience and knowledge for the advancement and improvement of the maple syrup industry. The North American Maple Syrup Council promotes industry education and supports maple research through the NAMSC Research Fund.

North American Maple Syrup Producers Manual available!
The Third edition of the North American Maple Syrup Producers Manual is now available for **free download!** This fully revised edition has a new chapter on food safety, as well as updated chapters on sap, syrup, and value-added product production based on the most current research. The remaining chapters have had modest updates. Along with chapters on sugarbush management, economics of maple businesses, marketing, and more, the Maple Manual is the most comprehensive, accurate resource for sugarmakers of all sizes. A joint project of the University of Vermont, the North American Maple Syrup Council, and dozens of the industry's researchers, scientists, and educators, the Manual is available for free download, however note that it is copyrighted, and all materials should be cited if used elsewhere (newsletters, presentations, etc.).

Maple Research The North American Maple Syrup Council has developed a maple research site where you can search by topic to find scientifically accurate information for maple production.

The ***Maple Syrup Digest*** is the official publication of the North American Maple Syrup Council and is published in February, June, October and December.

The ***Digest*** contains information of interest for all who are involved with the maple syrup industry. It features research reports from US and Canadian universities and institutions on all aspects of maple syrup production, packaging and marketing. The Council provides funding annually to these research groups from contributions generated from maple syrup producers, syrup packers, and related maple businesses which support the NAMSC Research Fund.

The latest production equipment and industry related services are featured by the ***Digest*** advertisers. Manufacturers, distributors, dealers and maple industry service providers can reach over 5,000 producers throughout the maple region with their message and are invited to contact the ***Digest*** editor for more information about advertising. editor@maplesyrupdigest.org

Subscriptions to the Maple Syrup Digest are available as follows:

- US residents $10.00 per year (Payable by Check or US Postal Money Order
- Canadian Residents $15.00 per Year (Payable by US Postal Money Order Only)

Payments to be made out to the ***MAPLE SYRUP DIGEST*** and sent to:
Winton Pitcoff, Editor
Maple Digest
PO Box 6
Plainfield, MA 01070
Phone: 413-628-3912
E-Mail: editor@maplesyrupdigest.org
About the Maple Syrup Digest – NAMSC

The **International Maple Syrup Institute (IMSI)** was founded in 1975 to promote and protect pure maple syrup and other pure maple products. Its mission remains unchanged today: The organization provides an important international framework for communication, information exchange and cooperation on a variety of issues related to the production, sale and marketing of pure maple syrup. In addition, the Institute has been a strong monitor for adulteration around the world, protecting the integrity of maple products.

Proctor Maple Research Center is a field research station of the Plant Biology Department at the University of Vermont. The center strives to contribute to the practical and scholarly knowledge required for the success of the maple industry, through research, demonstration, and education.

Proctor's research has produced new techniques for sap collection and evaporation and for improving syrup quality, while basic research has shed light on the physiology and health of sugar maple trees and the chemistry of sap and syrup.

Cornell Maple Program | Sugar Maple Research & Extension contains research, articles and videos for a variety of maple topics.

Centre Acer is based in Quebec and has done significant research for use in maple production. Centre Acer's mission is to facilitate research, development, and technological transfer to stimulate innovation and promote development of the maple industry.

The Maple News is a monthly publication featuring articles, stories and information from suppliers.

The **National Institute of Food and Agriculture (NIFA)** is a U.S. Federal government body whose creation was mandated in the Food, Conservation, and Energy Act of 2008. Its purpose to consolidate all federally funded agricultural research, and is subordinate to the Department of Agriculture. It replaced the Cooperative State Research, Education, and Extension Service (CSREES) in 2009.

The **University of Wisconsin Extension (UW Extension)** is the educational and research outreach department of the University of Wisconsin. **Agriculture – Extension**

The Mission: Extension researchers work hand-in-hand with row crop, forage and fresh produce growers to provide best practices for every aspect of the growing phase. We also advise communities on using sustainable practices to create inviting spaces free from invasive species. Our work supports people, communities and businesses.

UW-Extension Resources:

Wisconsin Extension Maple Syrup Program

Wisconsin Food Processing Guide **A handbook for Entrepreneurs and Mangers**

For Your Information: University of Wisconsin-Extension, Resources

Wisconsin Food Safety Regulations

Focus on Food Safety when Making and Marketing Maple Syrup

Sugar Maple **Tree**

Wisconsin Energy Efficiency and Renewable Energy: Maple Syrup Production

Selling Home-Canned Foods: Do It Safe, Do It Legal

Production and Marketing Materials – Wisconsin Local Food Locator

Food Safety & Health

Federal Regulating Agencies and Web Page Resources

The following are the Federal agencies and regulation sections that are part of this document important to the maple syrup industry. Underlined, blue text are direct links that can be accessed in the digital version of this document.

The **Code of Federal Regulations**, This database includes a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. Title 21 of the CFR is reserved for rules of the Food and Drug Administration.
https://www.ecfr.gov/

Title 21 is the section within the Code of Federal Regulations that governs the food industry and where the regulations governing maple syrup are found. https://www.ecfr.gov/current/title-21

The **Food and Drug Administration (FDA or USFDA)** is a federal agency of the United States Department of Health and Human Services. The FDA is responsible for protecting and promoting public health through the control and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), cosmetics, animal foods & feed and veterinary products. ***The FDA regulates the Maple Syrup Industry.*** https://www.fda.gov/
https://www.fda.gov/Food/GuidanceRegulation/default.htm

The **United States Department of Agriculture (USDA)**, is the U.S. federal executive department responsible for developing and executing federal laws related to farming, agriculture, forestry, and food. It aims to meet the needs of farmers and ranchers, promote agricultural trade and production, work to assure food safety, protect natural resources, foster rural communities and end hunger in the United States and internationally. ***The USDA sets the grading guidelines for Maple Syrup.*** https://www.usda.gov/

The **United States Department of Health and Human Services (HHS)**, also known as the Health Department, is a cabinet-level department of the U.S. federal government with the goal of protecting the health of all Americans and providing essential human services. Its motto is "Improving the health, safety, and well-being of America".
https://www.hhs.gov/ https://www.hhs.gov/regulations/index.html

The **Food Safety Modernization Act (FSMA)** was signed into law in January 2011. The FSMA has given the Food and Drug Administration (FDA) new authorities to regulate the way foods are grown, harvested and processed. The law grants the FDA a number of new powers, including mandatory recall authority, which the agency has sought for many years. The FSMA requires the FDA to undertake more than a dozen rulemakings and issue at least 10 guidance documents, as well as a host of reports, plans, strategies, standards, notices, and other tasks. This law was an update to the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. It is considered the first major piece of federal legislation addressing food safety since 1938. It is also the first piece of legislation to address intentional adulteration and Food Defense.

Food Safety Modernization Act of 2011 https://www.fda.gov/Food/GuidanceRegulation/FSMA/

Frequently Asked Questions on FSMA
https://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm247559.htm

FDA Guidance for Industry: Food Labeling Guide: Under FDA's laws and regulations, FDA does not pre-approve labels for food products. Questions concerning the labeling of food products may be directed to the Food Labeling and Standards Staff (HFS-820), Office of Nutrition, Labeling, and Dietary Supplements, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5001 Campus Drive, College Park, MD 20740-3835, Telephone: (240) 402-2371.

This link takes you to a document that addresses the most frequently raised questions using a "question and answer" format. The Table of Contents will help you locate your food labeling area of interest.
https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm2006828.htm

More FDA Labeling & Nutrition Guidance Documents & Regulatory Information

https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/default.htm

The **US Department of Food Safety and Inspection Services (FSIS)** enhances public health and well-being by protecting the public from foodborne illness and ensuring that the nation's meat, poultry and egg products are safe, wholesome, and correctly packaged. https://www.fsis.usda.gov/wps/portal/fsis/home

Wisconsin Administrative Code

Links can be accessed by clicking the blue text in the digital version of this document.

Source for Searching all Legislative Documents for Wisconsin.
https://docs.legis.wisconsin.gov/code

Wisconsin Administrative Code
Statement of Scope, Department of Agriculture, Trade and Consumer Protection, Chapters ATCP 70 and 87 relating to Maple Syrup Processing and Grading Standards
https://docs.legis.wisconsin.gov/code/register/2015/716A4/register/ss/ss_077_15/ss_077_15

Wisconsin Act 101 (the Pickle Bill)
http://docs.legis.wisconsin.gov/2009/related/acts/101.pdf

Wisconsin Food Code –
The following entire Food Code is available
https://docs.legis.wisconsin.gov/code/admin_code/atcp/055/75
https://docs.legis.wisconsin.gov/code/admin_code/atcp/055/75_.pdf

Wisconsin Administrative Code: Chapters ATCP 55-89
Food, Lodging, and Recreation Safety
http://docs.legis.wisconsin.gov/code/admin_code/atcp/055

Chapter ATCP 75 - Retail Food Establishments
http://docs.legis.wisconsin.gov/code/admin_code/atcp/055/75

Wisconsin Statutes Chapter 97 – Food, Lodging and Recreation
https://docs.legis.wisconsin.gov/statutes/statutes/97
http://docs.legis.wisconsin.gov/statutes/statutes/97.pdf

Chapter 77.54 (29) Sales & Use Taxes – General exemptions:
https://docs.legis.wisconsin.gov/2009/statutes/statutes/77.pdf#page=31

Wisconsin Department of Agriculture, Trade and Consumer Protection

Wisconsin Food Code– **Fact Sheets** provide quick explanation for select portions of the Food Code. https://datcp.wi.gov/Pages/Programs_Services/FoodCodeFactSheets.aspx

Wisconsin Local Food Marketing Guide
This 109-page document from DATCP is a go to source if looking to expand marketing of any locally grown product in Wisconsin
https://datcp.wi.gov/Documents/DAD/LocalMarketingFoodGuide_1_16.pdf

DATCP Home-Canned Foods
Provides information about a Wisconsin law – sometimes called the "pickle bill" – allowing limited sales of home-canned foods without a license. Previously you needed to register with the Department of Agriculture, Trade and Consumer Protection for these sales, but that is no longer necessary.

Information for Food Entrepreneurs DACTP
Information on Regulations, labeling, licensing, international sales and recall plans
https://datcp.wi.gov/Pages/Programs_Services/FoodSafetyBusinessInformation.aspx

Microbiology 101 for Food Processors
https://datcp.wi.gov/Pages/Programs_Services/MicrobiologyFoodProcessors.aspx

Hand Washing Signs (required)
English – https://datcp.wi.gov/Documents/HandWashSignEnglish.pdf
Spanish – https://datcp.wi.gov/Documents/HandWashSignSpanish.pdf