Indiana State Department of Health  
Division of Consumer Protection  
Food Protection Program

Final Guidance on Maple Syrup Production – June 28, 2006

Purpose

The purpose of this program “Guidance Letter” is to provide maple syrup producers with regulatory information for maple syrup processing operations. This guidance is intended to assist the industry in being able to produce their maple syrup intended for sale in a safe manner and for health departments to use in the inspection of these operations.

Background

Maple syrup is a low risk food product and falls into a group known as “value-added” products. Maple syrup is a raw agricultural commodity that undergoes a heat process to reduce the sap to a “maple syrup” form. This guidance is intended only for the processing of maple syrup and not other related products such as maple cream, maple sugar or candy.

There are three categories of food establishments – a retail food establishment operated under 410 IAC 7-24 pursuant to IC 16-42-5; a wholesale food establishment operated under 410 IAC 7-21 pursuant to IC 16-42-5; and a food processing plant operated solely under IC 16-42-5. Maple sap is usually processed in what is commonly referred to as a sugar house. The sugar house is considered a food processing plant operated under IC 16-42-5 and does not need to meet the requirements of 410 IAC 7-24, Retail Food Establishment Sanitation Requirements, or 410 IAC 7-21, Wholesale Food Establishment Sanitation Requirements. For purposes of this guidance document, a sugar house includes a structure located in the remote woods where sap is gathered or an indoor facility located at another location outside of the woods but used for processing the maple sap.

Maple syrup that is processed under this guidance is intended for retail sales only. Maple syrup sold at wholesale, whether in state or out of state, would need to meet all the requirements of IC 16-42-5, Food: Sanitary Requirements for Food Establishments and 410 IAC 7-21, Wholesale Food Establishment Sanitation Requirements. All sections of 16-42-5 not cited below, must be met for retail sales.
It is recommended that maple syrup processors desiring to sell their product contact the local health department for inspection and permits. The health department may or may not conduct an inspection since this is a low risk food.

**Definitions**

Sugar house: A building where maple sap is boiled and processed into maple syrup.

**Guidance**

The following is guidance for a food processing plant that processes maple sap into maple syrup. Food processing plants must be operated pursuant to Indiana Code, IC16-42-5. The following guidance states the statutory provision (*in italics*) followed by guidance specific to sugar houses.

**IC 16-42-5-6 Conditions of health and comfort**

Sec. 6. A food establishment must meet the following conditions:

1. Be adequately lighted, heated, drained, and ventilated.
2. Be supplied with uncontaminated running water.
3. Have adequate sanitary facilities.

The sugar house, which may be located in the remote woods or any other place used as a food establishment, must meet the following requirements:

1. Adequately lighted, heated, drained and ventilated
   - Lighting may be electrical, natural light coming through windows, artificial electrical lights or gas lanterns. Lighting must be placed as to avoid contamination of sap or syrup if a fixture should break.
   - Light bulbs shall be shielded, coated, or otherwise shatter resistant over the processing and bottling equipment.
   - Ventilation should be such as to minimize odors and vapors. Fans, screened windows or other effective means may be used to achieve adequate ventilation.
   - Copious amounts of steam or condensate water are produced by the evaporation process. This water does not fall under the classification of “waste water,” but should be disposed of in a manner that does not create a safety or unsanitary condition for the food establishment.

2. Supplied with uncontaminated running water
   - A portable container of potable water, such as a water cooler, condensate from the evaporator or other alternative water supply may be used as the source of running water.
   - If well water is used, a sample must be taken annually to determine that it is potable. A copy of the sample results shall be kept on site and available for review.
3. Adequate sanitary facilities
   - Toilet facilities in a nearby farmstead or business may be used if the sugar house is remotely located.

**IC 16-42-5-7 Construction to facilitate cleanliness**

*Sec. 7. Each food establishment and the machinery used in each food establishment must be constructed so as to be easily and thoroughly cleaned.*

Each food establishment and the machinery used must be constructed so as to be easily and thoroughly cleaned.

- The sugar house and equipment must be constructed to meet the needs of the maple syrup process and be easily cleanable.

**IC 16-42-5-8 Cleanliness and sanitation of premises and vehicles**

*Sec. 8. The floors, sidewalls, ceiling, furniture, receptacles, implements, and machinery of a food establishment and a vehicle used to transport food products must at all times be clean and sanitary.*

The floors, sidewalls, ceiling, furniture, receptacles, implements, and machinery of a food establishment and a vehicle used to transport food products must at all times be clean and sanitary.

- Non-food contact surfaces, such as floors, sidewalls, ceiling and vehicles, shall be cleaned prior to the start of the season and as needed. Surfaces over the boiling sap and fill area should be free of any loose paint or other foreign material that could fall into boiling sap/syrup and be a source of contamination.
- A lid shall be provided to cover the pans on the evaporator to protect the remaining sap between boils or when not in use.
- All food contact equipment shall be stored off the floor.
- Food contact surfaces shall be in good repair, easily cleanable, food grade quality and not contain any chemicals or other hazardous materials. This includes storage tanks/barrels, tubing, collection buckets, filtering cloths, filtering materials, such as diatomaceous earth, and any other processing or filling equipment and containers.
- New equipment shall not contain any deleterious substances, such as lead, lead solder or lead paint.
- Maple syrup may be sampled at the time of inspection for lead content, foreign material or any other appropriate tests.
- Food contact equipment and surfaces shall be cleaned prior to and after use, and whenever it becomes contaminated. This includes all collection equipment.

**IC 16-42-5-9 & 10 Walls, ceilings, floors; construction; washing**

*Sec. 9. (a) The sidewalls, woodwork, and ceiling of a food establishment must be made of an impervious material with a finish that is washable.*
(b) The sidewalls, woodwork, and ceiling must be kept washed clean with detergent and water.

Sec. 10. (a) The floor of a food establishment must be made of nonabsorbent material that can be flushed with water.
(b) The floor of a food establishment must be kept washed clean with detergent and water.

The sidewalls, woodwork, ceiling and floor of a food establishment must be made of impervious/nonabsorbent material that can be washed clean with detergent and water.
- Walls and ceilings may be constructed of wood or other impervious material, but must be free from unnecessary dust or soil accumulations.
- The floor should be sealed concrete, treated or sealed wood or other material that is nonabsorbent and can be cleaned.

IC 16-42-5-11 Domestic animals; rodents; insects

Sec. 11. A food establishment must be protected by all reasonable means against the presence of and entrance of domestic animals, rodents, flies, and other insects.

A food establishment must be protected by all reasonable means against the presence of, and entrance of domestic animals, rodents, flies, and other insects.
- A screen shall be on the steam cupola (if present) to prevent birds from roosting above an open evaporator. Openings should be protected as necessary against rodents, squirrels and other vermin. Domestic animals are not allowed in the food establishment.

IC 16-42-5-13 & 14 Toilet room; washrooms

Sec. 13. (a) A food establishment must have a convenient toilet room separate and apart from and not opening directly into a room that is used for food handling.
(b) The floor of the toilet room must be made of a nonabsorbent material.
(c) The floor of the toilet room shall be washed and scoured daily.
(d) Each toilet fixture and each toilet room must be adequately ventilated.
Sec. 14. (a) A food establishment must have a washroom adjacent to each toilet room.
(b) The washroom shall be supplied with adequate lavatories, soap, hot and cold running water, and clean individual towels.
(c) The washroom shall be kept clean by washing with detergent and water.

A food establishment must have a convenient toilet room separate and apart from and not opening directly into a room that is used for food handling. A washroom must be adjacent to each toilet room.
- If the food establishment does not have a toilet room provided, then a restroom, in a nearby home, farmstead or business can be utilized. The restroom must have a toilet with a handsink, soap, potable hot and cold running water, and clean individual towels.
IC 16-42-5-15 & 18  Food handling room; exclusive use

Sleeping in food handling rooms

Sec. 15. A room that is used for food handling or that is equipped for use for food handling may not be used for any other purpose.

Sec. 18. A person may not live or sleep in a room used for food handling or in a room opening directly into a food establishment.

Whatever facility is used, it cannot be used for any other purpose other than for maple syrup processing and packaging at the time of the maple syrup processing. If a home kitchen is used as a food establishment for this seasonal operation, then no other rooms can open directly into the kitchen that are used for living or sleeping purposes without at least a door that can minimize unauthorized entry.

- If a sugar house is used, it can only be used for maple syrup processing/filling. A separate room that meets all requirements of IC 16-42-5 and 410 IAC 7-24 must be used for producing maple syrup cream, sugar, confectionaries, or other maple syrup products.
- In the food establishment, no storage or handling of gasoline, oil, pesticides, or other hazardous materials shall be allowed.
- Equipment may be stored in the sugar house in the off season.

IC 16-42-5-16  Dressing rooms

Sec. 16. (a) Rooms separate and apart from rooms used for food handling must be provided for the changing and hanging of wearing apparel.

(b) The rooms for changing and hanging wearing apparel must be kept clean.

Clothing apparel must be stored in other rooms not used for any part of the food establishment. The changing of clothing apparel must also be conducted in areas not part of the food establishment.

IC 16-42-5-21  Washing; employees

Sec. 21. A person who works in a food establishment shall wash the person's hands and arms thoroughly with soap and clean water before beginning work, before resuming work after a rest period, and before resuming work after visiting a toilet room.

Persons working in a food establishment must be able to wash their hands and arms with soap and clean water before beginning work, before resuming work after breaks; or visiting a toilet room.

- It is recommended that if the restroom is not located nearby and convenient to the food establishment that a hand washing facility be provided at the site of the processing area. Soap, disposable paper towels, and a method to adequately wash hands shall be provided and used. A portable water dispenser may be used as part of a hand washing facility.
IC 16-42-1 and IC 16-42-2; Food, Drug & Cosmetic Act

This statute is provided to ensure that foods are safe, wholesome and not adulterated. These include the requirement that maple syrup in packaged form must be labeled with name and address of the manufacturer, packer or distributor, ingredient statement when made with multiple ingredients (listed in order of predominance) and an accurate statement of the quantity of the contents in terms of weight, measure or numerical count.

In addition, under 21 Code of Federal Regulations (CFR), Part 131-169, the final product cannot contain ingredients that are deceptive or fraudulent to the consumer. These products cannot have added ingredients, such as coloring or preservative, if they are to maintain the common name of the product. Furthermore, maple syrup must meet the 21 CFR, Part 168.180, standard of identity.