Maple Syrup Organic System Plan

Use this form to describe your operation. If a question does not apply, indicate "none" or "N/A" if not applicable. This plan is to be submitted with the Farm Organic System Plan.

| Status: |
| Contact: |
| Subject: |
| Date: |
| Type: 2020 |
| Comments |

GENERAL INFORMATION AND DESCRIPTION NOS §§205.201, .202, .272

Describe all wooded parcels used for maple syrup (or other types of syrup) production under your management.

The "Identification" column is the parcel ID/field name and must match and be identified on your Crop Summary/CURRENT Year Field Plan and maps and have adequate buffers in place.

Please verify the lines below. Use the table to add new items. If there isn't enough room, attach a separate list with the same column layout.

Maple Syrup Parcels

<table>
<thead>
<tr>
<th>Identification</th>
<th>Diameter of tapped trees</th>
<th>Organic?</th>
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Additional Comments

2. Do you have nonorganic syrup production?
   □ Yes  □ No

3. If you have nonorganic syrup production how do you prevent commingling and contamination of your organic syrup? Check all that apply.
   □ separate sugar bush harvesting areas  □ separate sap lines and equipment  □ equipment is cleaned before use
   □ processing of organic and nonorganic syrup is done at different times  □ N/A, no nonorganic syrup production  □ other

4. If "other," explain.

5. Describe any sugar houses, their size, and the type of licensing for the houses. Identify sugar houses on facility maps.

6. If you do not have a sugar house, describe how sap is finished.
List all maple products requested for certification in the table below.

Please verify the lines below. Use the table to add new items. If there isn’t enough room, attach a separate list with the same column layout.

<table>
<thead>
<tr>
<th>Maple Products</th>
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<td>Product Type</td>
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Additional Comments

Question(s) not listed are for office use only.

GENERAL SUGARBUSH MANAGEMENT NOS §§205.200, 201, 203, 205
The National Organic Standards require that practices are chosen that maintain or improve the natural resources of the operation. Tree health must be maintained and long term preservation of the sugarbush as an ecosystem must be ensured. All practices and materials used must meet the general crop requirements of the National Organic Standards. List all fertility, pest and disease control inputs on the Crop Summary/Current Year Field Plan form and on the Crop Input Inventory. Provide product labels and ingredient information for inputs not OMRI listed or previously approved by MOSA.

10. What methods do you use to maintain the viability of the sugarbush ecosystem? Check all that apply.
   - [ ] none
   - [ ] clear cutting
   - [ ] shelterwood cutting
   - [ ] selective harvest
   - [ ] thinning cuts
   - [ ] crown release cuts
   - [ ] tree radius release cuts
   - [ ] tree spacing cuts
   - [ ] improvement cuts
   - [ ] transplanting of seedlings
   - [ ] other

11. If "other," explain.

12. How are trees marked during cutting?

13. How are competing trees removed (cutting, girdling, etc.)?

14. Describe any erosion issues or road cuts and how you plan to correct these.

15. What other practices are used to ensure tree health is maintained? Check all that apply.
   - [ ] leaving windbreak when cutting
   - [ ] pruning
   - [ ] fertilization
   - [ ] ensuring sharp bits are used for tapping
   - [ ] bit sanitation
   - [ ] spout cleaning
   - [ ] taphole sanitation
   - [ ] disease control
   - [ ] conservative tapping
   - [ ] offsetting taps from previous tapholes or other tree scars
   - [ ] expert consultation
   - [ ] no vacuum pumping, or low vacuum pressure
   - [ ] spout removal during dormancy
   - [ ] no livestock grazing on wooded parcels
   - [ ] pest control
   - [ ] fire prevention
   - [ ] other

16. If "other," explain.

17. What do you use as criteria for fertilization? Check all that apply.
   - [ ] not applicable
   - [ ] slow growth/loss of vigor signs
   - [ ] soil testing
   - [ ] symptoms of maple decline
   - [ ] foliar deficiency signs
   - [ ] other

18. If "other," explain.

19. What pest problems do you have in the sugarbush?
   - [ ] none
   - [ ] insects
   - [ ] deer
   - [ ] rodents
   - [ ] other
20. If "other," explain.

21. How are pests controlled?
- not applicable  - tree shelters  - fencing  - repellents  - pesticides  - other

22. If "other," explain.

23. What disease problems (if any) do you have in the sugarbush? Note N/A if not applicable.

24. How is disease controlled? Note N/A if not applicable.

Question(s) not listed are for office use only.

SAP COLLECTION NOS §§205.201, .270, .272
All collection equipment must be in good condition and properly used. All cleaning materials used must be allowed, or must not present a contamination risk.

27. What tap size and depth (bark excluded) do you use?

28. Describe your criteria for number of taps per tree, and what is your maximum number of taps per tree?

29. Do you use the same drill size for double tapping?
- Yes  - No  - N/A

30. How do you determine when to tap?
- follow the experts  - calendar  - climatic data  - journal/activity log  - weather forecasts  - other

31. If "other," explain.

32. Where is tubing located after the sugaring season?
- not applicable  - left in sugarbush  - stored

33. Do you use a vacuum pump for collection?
- Yes  - No

34. If "yes," how do you monitor pressure?

35. At what pressure level is the vacuum set at the pump and at the taps?

36. Do you use a pump for transport of sap after initial collection?
- Yes  - No

37. If "yes," specify how.

38. How is microbial growth controlled prior to sap storage? Check all that apply.
- not applicable  - flat screen filtration  - pop filter  - ultraviolet lights  - cartridge filter  - diatomaceous earth, silica powder, or clay filter
- frequently empty collection containers during warm periods  - other

39. If "other," explain.

40. If you use a sap storage tank, what is it made of and where is it located? Note N/A if not applicable.

41. If you use a sap storage tank, how is it kept cool?
- kept in shade  - kept underground  - reflective paint  - cover allows air circulation  - other

42. If "other," explain.
Describe how outdoor sap collection equipment is cleaned in the table below. All cleaning materials must be listed on the Crop Input Inventory. Provide product labels and ingredient information for inputs not OMRI listed or previously approved by MOSA.

Please verify the lines below. Use the table to add new items. If there isn’t enough room, attach a separate list with the same column layout.

### Maple Syrup Equipment Cleaning

<table>
<thead>
<tr>
<th>Equipment description</th>
<th>Cleaning method</th>
<th>When cleaned</th>
<th>Cleaning materials used</th>
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**Additional Comments**

44. Indicate how you ensure cleanser/sanitizer residues do not contaminate organic products. Check all that apply.
   - [ ] residue testing on food contact surfaces
   - [ ] pH testing of rinseate
   - [ ] use of sanitizer with ingredients on the National List
   - [ ] other

45. If “other,” explain.

**Question(s) not listed are for office use only.**

**PROCESSING NOS §§205.201, .270, .272**

Maple syrup processing and handling must meet the processing and handling requirements of the National Organic Standards. All materials used must be allowed or must not present a contamination risk. Agricultural defoaming agents must be certified organic for syrup to be sold as organic. A safe Ecoli/fecal coliform test result is required for non-municipal water sources for water used in processing. Submit test results to MOSA.

48. **EVAPORATOR/EQUIPMENT:**
   What evaporator design do you use?
   - [ ] batch type
   - [ ] semi-continuous (ex, multiple kettles)
   - [ ] continuous (flue type, 2 section)

49. What size (length x width) and capacity (gal/hr) is your evaporator?

50. What is your evaporator made of (stainless steel, galvanized steel, etc.)?

51. How is your evaporator fueled?
   - [ ] wood
   - [ ] oil
   - [ ] natural gas
   - [ ] propane
   - [ ] steam
   - [ ] other

52. If “other,” explain.

53. What methods do you use to increase evaporator efficiency?
   - [ ] none
   - [ ] reverse osmosis
   - [ ] preheating
   - [ ] forced draft
   - [ ] vapor compression
   - [ ] piggyback
   - [ ] other

54. If “other,” explain.

55. If you use reverse osmosis, describe techniques, membrane cleaning solutions and disposal.
Describe the cleaning of all sugar house equipment in the table below. All cleaning materials must be listed on the Crop Input Inventory. Provide product labels and ingredient information for all inputs not OMRI listed or previously approved by MOSA.

Please verify the lines below. Use the table to add new items. If there isn’t enough room, attach a separate list with the same column layout.

### Sugarhouse Equipment Cleaning

<table>
<thead>
<tr>
<th>Equipment description</th>
<th>Cleaning method</th>
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<th>Cleaning materials used</th>
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### Additional Comments

57. Indicate how you ensure cleanser/sanitizer residues do not contaminate organic products.
   - residue testing on food contact surfaces
   - pH testing of rinseate
   - use of a sanitizer with ingredients on the National List
   - other

58. If “other,” explain.

59. **SYRUP PROCESS:**
   What do you use as a defoaming agent (product, brand name, and organic status)? List defoamers on the Crop Input Inventory.

60. If the defoamer is organic, who is the organic certifier of this product?

61. How do you determine when to draw off?
   - blow test
   - apron test
   - boiling temperature elevation
   - automatic drawoff
   - hydrometry
   - other

62. If “other,” explain.

63. Where is syrup finished (in evaporator, in fresh pan, etc.)?

64. How do you filter syrup after evaporation? List any filters and/or filtering agents on the Crop Input Inventory. Filters must be food grade.
   - not applicable
   - sedimentation tank
   - cone filter
   - flat filter
   - other

65. If “other,” explain.

66. What grade is your syrup?
   - AA
   - A
   - B
   - not applicable

67. **OTHER MAPLE PRODUCTS:**
   Describe the processing for all other organic maple (or other species) products you produce such as candy or cream.

68. Are any ingredients or processing aids (besides syrup, filtering agents, and defoaming agents listed above) used to produce these products?
   - If “yes,” complete and submit an Organic Product Profile form for each product listing all ingredients and processing aids.
   - Yes
   - No

69. **COMPLETE:** Is your Organic System Plan complete?
   - Yes
   - No

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