

Local Food Hub Partner Manual

This document serves to outline the policies and procedures for partner producers working with Local Food Hub (LFH). It should be used in conjunction with LFH trainings and staff input to adhere to all necessary requirements to maintain in good standing as a Partner Producer.



Local Food Hub is a nonprofit organization that partners with Virginia farmers and producers to increase community access to local food. It forges close relationships with its 75+ partner producers and provides essential services for the sale of fresh, high-quality food to institutions, retailers, restaurants, and schools. Located in Central Virginia, it offers training and technical assistance to growers to advance their economic vitality and promote stewardship of their land.

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I. Background and Overview

Partnership

Local Food Hub is a nonprofit organization that partners with Virginia farmers and producers to increase community access to local food. By joining Local Food Hub, Partner Producers have access to valuable services and market outlets, and in turn are expected to adhere to specified procedures and guidelines, and actively work with LFH to ensure collective success in the marketplace.

Grower Services

Local Food Hub offers a range of services to its partner producers, including cost-share and certification assistance, with a special emphasis on quality assurance, food safety, and topics relevant to wholesale production.

Membership Requirements

Contact Local Food Hub staff for paperwork.

II. Produce Growers

New Partners

- Signed Membership Agreement
- Attestation of FSMA Status and Records
- Complete New Partner Producer Survey (via weblink or paper copy)
- Farm Visit conducted by LFH Staff
- Attendance at PSA food safety training (through LFH, Virginia Cooperative Extension, or other)
- Submit food safety documentation as requested
 - GAP certified farms must submit a copy of certificate or other verification
 - Non-GAP certified farms must submit water testing reports and water quality assessment forms (see section VII. For details)
- Submit other documentation as requested
 - Copy of Organic Certification / CNG verification
 - Copy of Permit of Poultry Exemption
 - VA Form ST-18

Annual Renewal

- Submit FSMA Attestation
- Complete annual LFH Partner Producer Survey
- Attend annual grower meeting and any required food safety / quality assurance training
- Submit GAP and other certifications
- Conduct annual water tests (if not already doing so for GAP)
- Farm visit conducted by Local Food Hub Staff

III. Value added, Dairy, Protein, and Processor Partners

We ask to be informed of the relevant food safety certifications that your business holds, as well as information on the sourcing of ingredients including produce, milk, and meat for your products.

New Partners

- Signed Membership Agreement
- Complete New Partner Producer Survey (via weblink or paper copy)
- Site Visit conducted by LFH Staff
- Appropriate food safety certification and training
- Submit food safety documentation as requested
- Submit other documentation as requested
 - Copy of Organic Certification / others
 - Copy of Permit of Poultry Exemption
 - VA Form ST-18

Annual Renewal

- Complete annual LFH Partner Producer Value Added and Processor Survey when requested
- Attend annual partner producer meeting and any required food safety / quality assurance training
- Submit relevant certifications

IV. Membership Benefits

- **Assistance identifying and accessing wholesale markets**
- **Increased exposure and marketing** for your business through LFH website and communications
- **Networking opportunities** with an increasingly collaborative group of farms and producers committed to improving regional food production, including an annual meeting in February.
- **Box Purchasing Program** to access bulk purchasing of produce boxes and packaging supplies.
- **Assistance with certifications**, specifically GAP and Harmonized GAP. One-on-One assistance available as well as cost share when funding is available.

For Produce Growers only:

V. Quality Assurance/ On-Farm Food Safety

Local Food Hub is committed to marketing safe and healthy food from small, family owned and operated businesses in Virginia. Guided by Good Agricultural Practices (GAP), we set high standards for the health and safety of our partner producers' products and the customers who consume them. Partner Producers adhere to Local Food Hub's multi-tiered quality assurance program.

Entry-level Requirements – all levels

All growers supplying Local Food Hub must meet basic requirements in the following areas:

- Attendance at PSA Food Safety Training
Local Food Hub frequently works with Virginia Cooperative Extension on food safety training opportunities. Please provide proof of attendance at a past training, or contact your local extension agent or Local Food Hub staff for information on upcoming training.
- Water quality and testing
Information on water quality and testing can be found in this document, as well as from LFH Staff.

On-Farm Food Safety Plan – level 1, level 2, level 3

All growers not pursuing or maintaining GAP certification are encouraged to participate in a risk assessment, and to develop a streamlined and scale-appropriate food safety plan.

These plans consist of a combination of checklists and simple risk assessment exercises in the following areas:

Worker Health and Hygiene

- Workers receive training in proper health and hygiene practices, and the basics of on-farm food safety.
- Individuals who are ill do not harvest or pack produce.
- Potable drinking water is available.
- Restroom and hand washing facilities are available.
- A stocked first aid kit is available.

- Smoking and eating are not permitted in harvest and post-harvest areas

Water Quality

- Annual microbial testing of all harvest and post-harvest on-farm water sources.

- Only potable water is used for washing and post-harvest handling (including ice used for cooling and hand-washing).
- Any open-source water used in irrigation is run through a drip irrigation system, or in the case of overhead irrigation or spray tanks, water treatment and/or appropriate intervals to harvest are maintained.

Soil and Manure Management

- The application of raw manure occurs at least 2 weeks before planting and a minimum of 120 days before harvest.
- Composted manure is verified through temperature and turning records.
- Manure and/or compost is stored in a location to avoid leaching or contamination of growing fields and water sources.

Domestic Animals / Wildlife

- Efforts are taken to restrict animal entry into production, post-harvest processing, and storage areas.
- Fields and structures are monitored for potential sources of contamination.

Harvest, Post-Harvest Handling, and On-Farm Storage

- All containers and tools used to harvest produce are cleaned before use and protected from potential contamination.
- Only potable water is used in harvest and post-harvest processes.
- Workers wash hands before harvest and post-harvest handling and no smoking or eating is permitted.
- Harvested crops are processed and stored in the appropriate temperature and humidity conditions as soon as possible.
- Packing facility is covered, kept clean and orderly, and efforts are made to restrict animal access.
- Packaging materials (boxes, bags etc.) are stored off the ground and protected from potential contamination.
- Crop specific harvest and post-harvest handling procedures are followed. (See LFH guidelines).

Traceability

- Records are maintained to document the movement of a crop from the field to harvest to sale.

Water Quality, Testing, and Sanitizers

Why is water quality important?

Water has widespread use on farms, throughout all stages of production and handling. Farmers often rely on multiple water sources, including “open sources,” e.g. ponds and streams, which may contain high levels of coliform bacteria and other harmful substances. Contaminated water used in farm production and post-harvest procedures can transmit disease pathogens, resulting in foodborne illness. It can also negatively impact the shelf-life and viability of produce.

How do water sources differ?

How you test and treat your water depends on its source and how it is being used on the farm.

- *Municipal water* is considered the safest source for all aspects of food production and post-harvest processing. Localities test and treat on a regular basis, and you can request a current copy of these tests.
- *Well water* is appropriate for all farm processes, but may become contaminated, especially older wells with shallow casings. It is important to test well water and treat as needed to ensure that water is potable for both irrigation and post-harvest processing.
- *Open source water* is contaminated with naturally occurring bacteria, and any additional substances carried through run-off from neighboring fields or sources upstream. Although it may be vital for farm production, it is best suited for irrigation at the soil level (drip lines). Open source water used in overhead irrigation **MUST** be treated first and appropriate pre-harvest intervals maintained.

What are LFH Water Quality Requirements?

NOTE: Operations that undergo annual, third party audits / GAP Certification **do NOT** need to complete the water quality assessment form or submit water test results. However, LFH **requires** annual audit reports or certificates to be submitted.

Levels 1, 2 and 3 per FSMA Attestation and Records form:

1. Water Quality Assessment Form

LFH **requires** that partner farms complete a one-time LFH water quality assessment form describing water sources, intended use, and delivery methods. This form should be updated if any significant changes are made to water systems.

2. Water Testing

Harvest and Post-Harvest Water (including hand-washing)

- **What should I test for?**
Bacterial analysis for the presence or absence of **total coliform** and **E. coli**, often referred to as the “Colisure” test, should be used for harvest and post-harvest water to verify that it meets EPA drinking water standards. It is important to specify which test you are ordering from the laboratory, and confirm ahead of time that the lab will be able to run the appropriate test.
- **How often do I need to test?** LFH **requires annual** water testing of all water sources used for harvest / post-harvest handling.

Pre-Harvest (ex. irrigation, spray applications, frost protection)

- **Do I need to test pre-harvest water?**
LFH **does NOT require** testing of pre-harvest water as long as the water used is not likely to contact the harvestable portion of the crop, OR controls are put in place to mitigate any potential contamination if contact does occur – specifically the use of a pre-harvest time interval between application and harvest, or treatment of water with an approved sanitizer. If pre-harvest water contacts the harvestable portion of the crop and sufficient controls are not put in place, LFH reserves the right to request

that the farm test the associated water source for quantitative levels of E. coli and further action may be required depending on the results.

- **What should I test for?**

The “Colilert” test provides a quantitative count of **total coliform** and **E. coli**, which is needed when testing open source water or agricultural wells used for pre-harvest purposes. It is important to specify which test you are ordering from the laboratory, and confirm ahead of time that the lab will be able to run the appropriate test.

- **How often do I need to test?**

If LFH requests testing on pre-harvest water, required frequency will be determined in consultation with LFH staff and food safety experts within Virginia Cooperative Extension.

Please contact LFH with any questions.

Water Testing Laboratories:

Private water testing laboratories are certified by the Virginia Division of Consolidated Laboratory Services (DCLS). If using a private lab, please ensure they are certified.

VDACS offers low-cost (\$20/sample) water testing to farmers at their five labs across the state:

Harrisonburg

261 Mount Clinton Pike
Harrisonburg, VA 22802
(540) 209-9130

Ivor

34591 General Mahone
Blvd. Ivor, VA 23866
(757) 859-6221

Lynchburg

4832 Tyreeanna Road
Lynchburg, VA 24504
(434) 200-9988

Warrenton

272 Academy Hill Road
Warrenton, VA 20186
(540) 316-6543

Wytheville

250 Cassell Road
Wytheville, VA 24382
(276) 228-7643

Water Sanitizing Solutions

Sanitizing solutions can help reduce the microbial contamination of fresh produce and food-contact surfaces in the packing shed, and during the post-harvest handling process. The following sanitizers are the most commonly used on small-scale farms. Not all produce requires a wash step and it is important to note that any time water is used, there is an increased chance of contamination and microbial growth.

Regardless of the sanitizing solution you use, make sure that the wash water is less than 10°F cooler than the produce. If the water is more than 10°F cooler, the solution can be readily absorbed into the plant tissues. If the produce is more than 10°F warmer than the wash water, hydro-cool in pure water before introducing your sanitizer solution.

Commercial Sanitizing Products

There are a variety of commercially available sanitizers that are considered “New Generation Washes”. They produce more uniform and effective results, and are biodegradable and safer to use. Although they are more expensive than chlorine or hydrogen peroxide, if used properly they can be a cost-effective component of post-harvest processing and result in a better quality product. Examples include:

- **PRO-SAN LC**
www.millertechintl.com/prosan.htm
 Source: <http://www.microcide.com>

- **Sanidate 5.0** (manufactured by BioSafe)
www.biosafesystems.com/Product-PH-SaniDate5.asp
 Local sources: Helena Chemical Company, Seven Springs Farm (drop ship)

- **Tsunami 100** (manufactured by Ecolab)
<http://www.ecolab.com/solution/produce-processing-wash-and-treat-solutions/>

Hydrogen Peroxide

Food-grade Hydrogen Peroxide can be used as a fresh produce disinfectant and is recognized as a safer alternative to chlorine, with a relatively low toxicity rating. A concentration of 3% has been proven to destroy pathogens. Care must be taken when preparing the solution, as concentrated Hydrogen Peroxide can be both explosive and corrosive.

	Volume Hydrogen Peroxide	Volume Water
Food-grade Hydrogen Peroxide (35%)	1 part	11 parts

Local source: Countryside Organics in Waynesboro, <http://www.countrysideorganics.com/>

Chlorine (sodium hypochlorite):

NEW: ONLY FOOD GRADE BLEACH can be used in farm harvest and post-harvest practices. Source at big box stores or through restaurant supply stores.

- The ideal concentration for most produce is 75-150 ppm. Damage can occur above 200 ppm for most produce and above 100 ppm for leafy greens.
- The concentration must be monitored with chlorine test strips (available at pool supply stores) as the effectiveness of chlorine declines with exposure to light and organic matter.

- Chlorine is most effective in room temperature water with a pH 6.5-7.5
- Care must be taken that chlorine does not mix with other chemicals that in combination could produce lethal chlorine gas.