POTABLE WATER USAGE AND REQUIREMENTS ON MOFGA CERTIFIED ORGANIC FARMS

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As a certified producer, you are responsible for the quality of the water used to grow, wash, and process food. MOFGA Certification Services’ Practices Manual states that water used to rinse produce must be potable. Potable water is water that is safe to drink or use for food preparation without the risk of health problems. Water contamination can occur from biological and chemical contaminants, and different tests are needed to ensure your water is safe.

Biological Contamination

Microbiological contamination of water used for washing, rinsing, or cooling vegetables—and even for irrigating crops—can make people sick. This is not good for the person, producer, certifier, or the organic movement! Some crops are particularly vulnerable, such as “ready to eat” vegetables and leafy greens. Most farms in Maine use well water to wash, rinse and cool vegetables. If you use well water the expectation is to test this water with a basic water test for bacteria once a year. For more information on this test please see the link at the end of this article.

Water used for irrigation presents different challenges. Water taken from open sources such as irrigation ditches, ponds, rivers, lakes, or shallow wells is most likely to have microbiological contamination. Open water sources are difficult to test because they are vulnerable to change during the year. When water levels are lowest, the risk of contamination is often highest. Surface runoff after rainfall can also heighten the risk of contamination. Many tests might be needed to assess risk each year. Any time there is a change in the irrigation source, water levels, or upstream activity, risk increases. If you suspect, that the water you use for irrigation has an increased risk for pathogens, consider stopping your irrigation two weeks before harvest. It also makes sense to use types of irrigation (e.g. drip) where water will not touch the edible portion of the crop. Please note that once the FDA starts enforcing the water regulations under the new Food Safety Modernization Act (FSMA) rules, the testing requirements for irrigation water could be extensive. Please see “Key Requirements for Agricultural Water”: https://www.fda.gov/food/guidance regulations/fsma/ucm334114.htm. The implementation timeline for these requirements has been extended due to the complexity and confusion from growers.

Chemical and heavy metal contamination

Contamination of crops or land with pesticides, chemical fertilizers, or industrial waste is prohibited. This could occur either in irrigation or wash water. Watch for higher risk contaminants such as industrial wastes and substances applied directly into water. If you farm in an agricultural area, watch for high concentrations of fertilizers or chemicals from conventional farming practices upstream from you. You are required to report possible contamination to MOFGA Certification Services (MCS). We do not normally ask for a general chemical screen on water because there are so many chemicals, including minerals, in water that it is best to test only if there is a specific concern. Furthermore, concerns around surface water differ from groundwater sources. This is why your Organic Farm Plan asks you to identify possible sources of contamination around your property or known contaminants in the water.

Keep in mind that water in Maine is often high in arsenic, radon, and uranium. The small amount of wash water your clients will consume from eating crops washed with water that has high arsenic is probably negligible compared to using this water for drinking water. Therefore, as recommended by the State of Maine, conducting a basic water test every year for bacteria, nitrates and nitrites and a full water test every 3 to 5 years for chemicals such as arsenic, radon and uranium is highly recommended.

Use of Billboard Tarps on Organic Farms

Last year, participants at MOFGA’s Farmer to Farmer Conference discussed the use of billboard tarps on organic farms for smothering weeds. Please know that our research on billboard tarps has revealed that many of them are made with an outer layer of PVC.

NOP 205.601 Synthetic Substances allowed for use in organic crop production states that plastic mulch and covers are allowed if they are petroleum based other than Polyvinyl Chloride (PVC). PVC is not allowed due to its toxicity. It is made from vinyl chloride, which the Environmental Protection Agency (EPA) has classed as a carcinogen. Furthermore, the PVC manufacturing process releases vinyl chloride and other toxins, notably dioxin and hydrogen chloride, into the environment. While the NOP rule does allow using tarps or coverings as a kill step for smothering weeds, you will have to make sure they are not made with PVC. If they are made with PVC, the rule prohibits the use of them. MOFGA Certification Services (MCS), along with MOFGA’s Agricultural Services department, will continue to research this option. Please check with MCS prior to using any tarp or covering to ensure it is allowed as a mulch.

Materials Review and Approval

MOFGA Certification Services’s website has a wealth of information! One new feature on the page is information about materials review and approval. Please check http://www.mofgacertification.org/?page_id=3663

Answers to questions such as what materials can be used, how often MCS re-assesses approved materials, explanation on the national list and much more can be found here.