

Required Agricultural Practices (RAPs) Summary for Vermont Vegetable Farmers

Becky Maden and Vern Grubinger
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This document is intended to help commercial vegetable farmers defined as 'Small Farms' to understand what is required to comply with the Required Agricultural Practices (RAPs) rule. The RAPs are rules for agricultural land management that are intended to improve the quality of Vermont's waters by reducing and eliminating cropland erosion, sediment losses, and nutrient losses. There are additional details in the RAPs beyond those listed here especially for other farm definitions, which is why this summary notes the applicable sections of the rule. Please refer to the full text of the RAPS for the details.

All 'small farms' are required to comply with RAPS (Section 3.1) These include farms with:

- \$2,000 or more in average annual gross income from the sale of agricultural products, or
- 4 acres or more of contiguous land used for growing and harvesting crops for sale.
- If a farm has 50 or more acres of vegetable/cover crop production, they would be termed a 'certified small farm operation' which includes additional requirements (see below.)

All small farms must engage in nutrient management (Section 6.03) which means:

- Take soil samples from all fields where nutrients are applied, at least once every five years
- Send soil samples to a testing lab that uses the modified Morgan's extract (such as UVM, UMass, UMaine or Cornell.
- Use soil test recommendations from UVM to determine nutrient needs for all fields/crops.
- Account for all sources of nutrients when determining application rates to meet crop needs, including compost, manure, and cover crops as well as fertilizer.
- Keep records of soil tests and all soil amendments applied, for a period five years.

All small farms must manage for soil health (Section 6.04) which means:

- Reducing tillage as much as practical; avoiding mechanical activities on saturated soils; maintaining organic matter using manure, compost, sod and/or cover crops as appropriate for crop nutrient recommendations.
- Adopting practices that retain soil by preventing erosion.
- Sowing fall cover crops on fields that are prone to flooding, where practical.

All small farms must manage manure, compost, and other nutrient applications (Section 6.05) by not applying these materials:

Between Dec. 15 and April 1.

- When fields conditions are conducive to flooding, runoff, ponding; saturated with water; frozen or snow covered.
- Where the slope exceeds 10% unless there is a permanent 100-foot vegetated buffer zone downslope between the field and any adjacent surface water.
- Within 100 feet of a private water supply, or within 200 feet of a public water supply.
- In buffers along surface waters, ditches and surface inlets or open drains
- In quantities that provide an excess of nutrients, based on soil tests and recommendations.

All small farms must maintain vegetative buffer zones¹ (Section 6.08) which means:

- Maintain perennial vegetation of at least 25 feet between cropland and the top of the bank of surface waters, surface inlets, and open drains.
- Maintain at least 10 feet of perennial vegetation between ditches and cropland.
- No manure or agricultural waste is applied on vegetative buffers; use of fertilizer or compost for establishment and maintenance of a required vegetative buffer is allowed based on soil tests and recommendations.
- Tillage in a perennial buffer zone is prohibited except for establishment and maintenance; harvesting a perennial crop a buffer zone is allowed.

Small farms engaged in on-farm composting (Section 6.09) must:

- Import no more than 1,000 cubic yard of food residuals annually, without a permit from the Dept. of Environmental Conservation.
- Follow set-back requirements: 200 feet from top of bank of surface water; 200 feet from a public or private water supply not owned by the farm; 300 feet from a neighboring residence or public building; 200 feet from a property line; 100 feet from a ditch.
- Not compost in areas subject to flooding or concentrated runoff; or on exposed bedrock.

Small farms must maintain stable banks of surface waters (Section 6.10) by:

• Leaving areas from the top of a bank to the edge of the water in their natural state². This includes keeping garbage or other materials off the bank.

Small farms constructing farm structures (Section 9) must:

Notify the zoning administrator or the town clerk of the town prior to building.

¹ Exceptions to the required vegetative buffer zone widths, including the requirements of Section 6.05(f), may be considered upon request on a site specific basis according to standards approved by the Secretary, but in no case shall a buffer zone be less than 10 feet in width.

² Except as allowed by State statute and the standards established for the pasturing of livestock (Section 7.)

- Follow local setbacks, and setbacks described in RAPs.³ If you cannot meet local or RAP specific setbacks, you need to request a variance from the Agency of Agriculture.
- Obtain a permit from ANR for structures in Flood Hazard Areas and River Corridors.
- Construction of new farm structures must obtain authorization from the ANR before commencing with land disturbance or construction activities exceeding one acre.
- Have a minimum of 50 feet to the top of the bank of any surface waters.³

<u>Vegetable farms with 50 or more acres of cash crop and cover crop land are considered</u> <u>'Certified Small Farms' so they must also:</u>

- Annually certify compliance with RAPS, in a manner to be established by the Secretary.
 Certification begins July 1, 2017.
- Obtain at least 4 hours of approved water quality training in a 5 -year period. (Section 5.0)
- Undergo inspection by the Agency to assess compliance with the RAPs. (Section 4.3)
- Notify the Secretary within 30 days of a change of ownership or of lessee for a whole farm (not a field) (Section 4.3).
- Complete a field-by-field nutrient management plan consistent with the requirements of the USDA NRCS Nutrient Management Practice Code 590 or other equivalent standards approved by the Secretary.⁴ (Section 6.03c)
- Implement strategies to reduce P level in fields with soil test levels greater than 20 ppm P, including eliminating or reducing manure applications. (Section 6.03d)
- Maintain records of all nutrient applications and provide these to the Secretary upon request showing: date of application; field location; application rate; source of nutrients applied; and weather and field conditions at the time of application. (Section 6.03f)

What do the RAPS require for high tunnels on small farms?

There is no direct reference to high tunnel or greenhouse in the rule. Thus, a small farm is required to:

- Soil test each tunnel every five years.
- Use UVM soil test results and recommendations to guide fertilization.
- Keep records of all amendments applied.
- Avoid application of excess P (based on soil test recommendations.)
- Obtain ANR authorization prior to constructing a tunnel or greenhouse that is in a flood hazard area or river corridor, or if it exceeds 1 acre in size.

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³ Unless the Secretary has approved a farmer's written request for other reasonable setbacks for the specific farm structure being constructed or maintained in accordance with Section 9(b).

⁴ "Other equivalent standards" for vegetable farms are being developed by UVM Extension/VAAFM.