



Agency of Agriculture, Food & Markets

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Response to Comments: Draft 1 of the Required Agricultural Practices

The Vermont Agency of Agriculture, Food and Markets (VAAFAM) is providing the following responses to public comments received on the first draft of the Required Agricultural Practices (RAPs) Rule for the agricultural nonpoint source pollution control program. As a result of Act 64—the Vermont Clean Water Act—signed into law in July 2015, the Agency of Agriculture was tasked with updating the Accepted Agricultural Practices (AAPs) to further reduce the impact of agriculture on water quality across the state. The RAPs are an updated version of the Accepted Agricultural Practices (AAPs), the rules which regulate farms in order to protect water quality, re-written to a higher level of performance. The Agency sought public input on its first draft of the new regulations, to ensure the draft RAPs reflected the realities of farming and the legislative intent of Act 64. The first public comment period opened on October 20, 2015, and ended on December 18, 2015. During this period, 10 public meetings were held—the first on November 12, 2015, at the St. Albans Historical Society and the last on December 10, 2016, at the Chandler Music Hall in Randolph. 21 small focus group meetings were also held throughout the state with various stakeholders.

All written comments received are part of the Administrative Record and are available upon request from VAAFAM. A summary of comments organized by section has been provided in conjunction with this Abridged Responsiveness Summary.

This response to comment, the public comment period, and the public meetings which were held are not required by law and are an informal process undertaken by VAAFAM to ensure the development of a rule which will be workable for farmers as well as able to meet the intent of Act 64. Formal rulemaking will commence in the Spring of 2016. This summary responds to aggregated comments, criticisms, and new data submitted in written or oral presentation to VAAFAM regarding the First Draft of the RAPs.

As a result of the large amount of comment received during the intimal public comment period, the Agency has substantially revised the draft rules to incorporate public input. This response to comment summary highlights some of the major comment areas and major revisions from the first draft of the RAPs. There are additional changes included in the second draft of the RAPs which are not covered in this responsiveness summary. Please read the new rule to ensure all new provisions are understood.

VAAFAM wishes to thank all members of the community who took the time to provide comments or otherwise participate in this public process. All comments received have been thoroughly reviewed and considered by VAAFAM in its decision-making process. Many recurrent comments have been aggregated and we have provided a general response in this summary. Copies of the comments have been summarized and attached to assist readers in following the responses.

For more information, please visit <http://agriculture.vermont.gov/water-quality/regulations/rap> or contact the Vermont Agency of Agriculture, Food and Markets at (802) 828-3478. Public comment on this RAPs draft should be submitted to AGR.RAP@vermont.gov

The Abridged Responsiveness Summary is organized by Section according to the first draft of the RAPs

Section I General

Comment: The First Draft RAP Document is difficult to read through, unclear and generally confusing to read and understand the rules.

Response: VAAFM has revised and reformatted the RAPs in an effort to provide clarity.

Section 2 Definitions

Comment: There are several definitions missing from the RAPs which are important to include.
i. Compost

Response: A definition of compost has been included and is consistent with the Title 10 solid waste definition of compost. Title 10 Chapter 159 Section 6002(25). The definition is included in Section 2.06 of the second draft of the RAPs.

2.06 Compost means a stable, humus-like material produced by the controlled biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

Comment: There are several definitions included in the Draft RAPs which are incomplete or require additional clarification.

- Including:
 - i. Land Subject to Flooding
 - ii. Fertilizer
 - iii. Manure
 - iv. Weather Conditions Conducive to Runoff
 - v. Swales and Ditches
 - vi. Farming
 - vii. Surface Water or Waters
 - viii. Crops—Fiber
 - ix. Waste or Agricultural Waste
 - x. Waste Management System

Response:

- i. Land Subject to Flooding
 - a. Land Subject to Flooding is more precisely defined in the second draft of the RAPs.
 - b. Flood related definitions are taken directly from the River Corridor Rule
 - i. 2.16 Flood Hazard Area
 - ii. 2.17 Floodplain
 - iii. 2.18 Floodway
 - c. Frequently Flooded Soils are referenced as a risk assessment layer for farmers to reference to assist in their determination if their land could be land subject to

flooding. This replaces 'Land Subject to Flooding' used in many sections of the first draft of the RAPs.

- i. USDA Soil Survey Flooding Frequency Class is available from the USDA Web Soil Survey online tool:

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

- ii. Fertilizer

- a. The Definition of Fertilizer is included in the second draft of the RAPs and is taken from 6 VSA Ch. 28.
- b. Fertilizer means any substance containing one or more recognized plant nutrients that is used for its plant nutrient content and that is designed for use or claimed to have value in promoting plant growth or health, except unprocessed animal or vegetable manures and other products exempted by the Secretary.

- iii. Manure

- a. The definition of manure remains unchanged and can be found in Section 2.23 of the second draft of the RAPs.
- b. The definition of manure is based on statutory language directly from Act 64 of 2015. Section 4802(4) of Title 6 now states:
"Manure" means livestock waste in solid or liquid form that may also contain bedding, spilled feed, water, or soil.

- iv. Weather Conditions Conducive to Runoff

- a. Section 5.5(d) updated language can be found in 6.05(d) of the second draft of the RAPs. "Expected Weather" has been removed from the rule. Actual field conditions will be used to set standards for manure application in inclement field conditions.
- b. 2nd Draft RAPs 6.05(d) Manure or other wastes shall not be spread when field conditions are conducive to flooding, runoff, ponding or other off site movement or can be reasonably anticipated to result in flooding, runoff, ponding or other off site movement.

- v. Swales & Ditches

- a. The definition of intermittent water has been replaced with the definition of a Ditch. This new definition can be found at 2.11 in the 2nd draft of the RAPs
- b. 2.11 Ditch means a constructed channel primarily associated with land drainage or water conveyance through or around private or public infrastructure.

- vi. Farming

- a. Many comments received asked for clarity regarding the definition of farming. For clarity, the definition that has been used is the definition of farming found in Title 10; the Act 250 definition and has been the definition used in this rule since 1995.
- b. The definition of farming can be found in Section 2.14 of the second draft of the RAPs.

- vii. Crops & Fiber

- a. Comment was raised regarding the inclusion of 'fiber' in the definition of fiber, where the growth of trees for silvicultural or timber purposes could have been interpreted to fall under the practice of farming.

- b. A clarification has been added to the rule to make clear that fiber is not intended to include trees grown for silvicultural or timber purposes. Christmas Trees and Trees for Sap production are still considered Crops.
 - c. 2nd Draft RAPs 2.08 Crops, for the purposes of this rule, means plants grown for food, feed, fiber (other than trees grown for silvicultural or timber purposes), Christmas trees, maple sap, horticultural, and orchard crops.
- viii. Wastes or Agricultural Waste
 - a. Many comments asked for additional clarifications around the perceived distinction between compost, manure and agricultural wastes. A definition of compost has been provided in the new rule.
 - b. The definition of Wastes (§2.27) in the first draft of the RAPs has been revised to §2.31 in the 2nd draft of the RAPs. The new definition of ‘Wates’ or ‘Agricultural Wastes’ has been taken directly from Act 64 of 2015. The new definition can be found in 6 V.S.A. § 4802 (7).
- ix. Waste Management System
 - a. Bedded Pack systems have been added to the list of waste management systems.

Section 3 Required Agricultural Practices Activities:

Comment: Small Farm Definition – received substantial comment on numerous parts of Section 3 of the 1st draft of the RAPs. It was noted that the list of animals that would trigger ‘farm’ status and thus the need to follow the RAPs is different from the list of what would trigger small farm certification. People commented on the \$2,000 threshold being too low to trigger RAP compliance—would pull in many ‘micro-farms’. Questions were raised about the list of animals used as a criterion for triggering the RAPs. We received comment that Animal Units (AU) should be considered as a threshold, to account for diversified farming operations.

Response: The livestock thresholds for RAP compliance are based on the pre-existing thresholds for the definition of a farm structure from the AAPs. These thresholds have been in place since 1995. The Agency’s goal is to align the definition of a farm structure with the definition of a farm for clarity relative to municipal zoning authority. The Agency’s experience with complaints on properties of this size is that they are rarely pertinent to water quality, are typically non-commercial backyard operations that are best managed at the municipal level.

\$2,000 Gross Farm Income threshold remains as the threshold to be considered a ‘farm’. For context, In the AAPs, the threshold for ‘farm’ status was set at \$1,000. The \$2,000 gross farm income threshold was taken from the Land Use Value Program threshold definition of “Agricultural Land” Title 32 Chapter 124 § 3752. It is intention that the definitions of minimum thresholds of ‘farming’ to be consistent.

In response to many comments that Animal Units should be used as a trigger threshold for ‘farming’, the Agency agrees that such a threshold should be included in the RAPs. New language has been added in the second draft of the RAPs to address this threshold: Section 3.1(a)(P) other livestock types, combinations, and numbers as designated by the Secretary.

Section 4 Small Farm Certification

Comment: Small Farm Certification Threshold—the Agency received substantial comment regarding the thresholds used in the first draft of the RAPs which would trigger Small Farm Certification. Many comments felt that the thresholds were set farm too low and would be burdensome to the small farmers of Vermont. Many comments suggested that Animal Units should be used to account for diversified livestock operations. Significant comment was also received in written comment and also at the public meetings that the definition intended for ‘cropland’ Small Farm Certification trigger was too ambiguous and would pull in any Small Farm with more than 10 acres used for farming which spreads manure—greater clarity to the definition for Small Farm Certification Thresholds for crop farms has been added. Many comments suggested that commercial fertilizer application should be included as a trigger for small farm certification.

Response: The Agency has revised the small farm certification threshold for livestock upwards from the threshold set in the first draft of the RAPs. The threshold has been set consistent with the LFO and MFO programs, which are derived from the Environmental Protection Agency (EPA) threshold for a Confined Animal Feeding Operation (CAFO) threshold. The new threshold is established at 25% of the Medium Farm Operations (MFO) threshold. This threshold, based primarily on the CAFO threshold is adopted after consideration of many variables including waste and nutrient generation by species. It must also be made clear that operations below these certification thresholds must still comply with the RAPs, they will not be required to self-certify, however.

The Agency believes this is the appropriate threshold because it is estimated that this threshold would ensure that at least 76.4% of the liveweight of all animals in the state would fall under a state certification or permit program. In addition, it is estimated that 94.2% of all dairy cows in the state of Vermont would be covered under a certification or permit program at the 25% of MFO threshold. The Agency believes the number of farms represented by this threshold is appropriate given the Agency’s resources and the requirements for managing inspection and certification.

In response to many comments that Animal Units should be used as a trigger threshold for Small Farm Certification, the Agency agrees that such a threshold should be included in the RAPs. New language has been added in the second draft of the RAPs to address this threshold: Section 4.1(a)(3)(xv): ‘any combination of animal types or numbers exceeding 60,000 pounds of total live animal weight (animal units) other livestock types, combinations, and numbers as designated by the Secretary.’ For all other farms subject to the RAPs, the Secretary has the authority to require compliance for any combination of species or numbers to address this concern.

Further subcategorization has been established in the RAPs regarding cropland and annual cropland to reflect the comments regarding further need for refinement of the threshold set in the first draft of the RAPs. It is important to note an important change to the definition of ‘Annual Cropland’ to include only annual commodity crops and not crops grown for human consumption. This distinction allows for the refinement of the threshold for ‘Small Farm Certification’ for farms whose primary enterprise is not livestock to reflect the intent of Act 64 that crop farms of a certain size be included in the Small Farm Certification Program. Please see

Section 4.1(b) and 4.1(c) for the definitions. These definitions include the provision that ‘fertilization’ is a use that could trigger Small Farm Certification.

Comment: More clarity is needed regarding which farms are needed to enter into Small Farm Certification where land ‘is used for the preparation, tilling, fertilization, planting, protection, irrigation, and harvesting of crops for sale.’

Response: A close reading of the second draft of the RAPs is needed to recognize a new and very important distinction being made in the rule—definitions between ‘Annual Cropland’ and ‘Cropland’. This distinction is based on substantial input and comment from a variety of farm types that are not livestock operations.

‘Annual Cropland’ is a new definition provided under the second draft of the RAPs which reads:

2.02 *Annual Cropland means, for the purposes of this rule, land devoted to the production, cultivation, harvesting, and management of annual row crops and commodity crops, but does not include vegetable, fruit, or berry crops grown for human consumption.*

‘Crop’ and ‘Cropland’ are a new definition which is included in the second draft of the RAPs which reads:

2.08 *Crop and Cropland, for the purposes of this rule, means plants grown for food, feed, fiber (other than trees grown for silvicultural or timber purposes), Christmas trees, maple sap, horticultural, orchard crops, and pasture.*

The Agency has used this distinction to provide greater clarity regarding which small farms would need to enter into Small Farm Certification based on the following subcategorization: 1) those farms which manage more than 10 acres of ‘Annual Cropland’ and 2) those farms which raise crops (produce) for human consumption. This subcategorization enables the Agency to create threshold triggers based on scale for two distinct groups which in the first draft of the RAPs were grouped together under the cropland definition. The new subcategorization allows for the distinction between all those that grow crops for livestock feed on more than 10 acres and those that grow crops for human consumption at a scale where farms need to follow the FDA Produce Safety Rule.

It is also important to note that ‘Annual Cropland’ also further limits which farms would need to follow certain provisions of the second draft of the RAPs, including:

- § 6.04(d) Cover Crop Requirements
- § 6.05(c) Manure and Waste Application Standards and Restrictions: Frequently Flooded
- § 6.05(f) Manure and Waste Application Standards and Restrictions: Greater than 10% slope

Comment: Received numerous comments that inspection cycle of 10 years was too long.

Response: Based on the reduction in total number of Small Farms that would be required to Certify under this rule, the Agency believes that the inspection interval can be reduced from 10 to seven years based on existing Agency resources. Also added to the certification interval is the provision from Act 64 of 2015 that allows for the prioritization of inspections by the Secretary. See Section 4.3(b).

Comment: Make the reporting requirements for Certified Small Farms of 30 days from change of ownership or lease to annual reporting (Section 4.10(c) of first draft of RAPs.)

4.10(c) Small farms required to certify shall notify the Secretary of any changes in ownership or land base, including changes in leased land of the farm within 30 days. Each notification of change in ownership or land base shall include certification of compliance with these Rules.

Response: It is the Agency's interpretation of Act 64 that only the sale or lease of an entire small farm would trigger this requirement. Reference for this section can be found at: 6 V.S.A. §4871(f)

4.12 Required Farm Operator Training

Comment: Farmer Water Quality Training—many comments suggested that this requirement was not sufficient and should be increased.

Response: The Agency feels this is the appropriate requirement as the training aspects of the new law are phased in. Though 4 hours is the requirement, it is anticipated that there will be numerous opportunities for training in a variety of venues over the training phase in period.

Comment: Clarification was sought regarding who from a farm operation must attend a training. Comment received also suggested that details of the small farm training program be placed in the rule.

Response: The Agency has clarified that Owners or Operators are the individuals who will be required to attend farmer training. Details of the training process will be established via policy much as pesticide re-certification processes are. Placing specifics of the training process in the rule would eliminate any flexibility on the part of the Agency to manage the program.

Comment: Change the 60-day notification for third parties who wish to offer water quality training to farmers.

Response: The Agency has revised the rule to reflect these comments. The 60-day notification has been changed to 30-day notification. See Section 4.2(c)

5.2 Nutrient, Agricultural Inputs and Waste Storage

Comment: Moving a field stacking site every year for four years is onerous for all size farms; moving a field stack every 180 days is onerous for all size farms.

Response: The Agency has revised the rule to allow more flexibility around these management practices while still ensuring water quality protection. The Agency has removed the 1 in 4 year field stacking standard based on comment. The 180-day storage period has been increased to annually (365 days). See Section 6.02 for more information.

Comment: First Draft RAPs: Section 5.2(b)—comments suggested expanding the list of materials included for proper storage, handling and disposal.

Response: The Agency has replaced this section with ‘Agricultural Wastes’ and ‘Waste Management System’ which is now defined in the law. See Section 6.02(a) and 6.02(b) for more information

Comment: 1.0 feet of freeboard—comment received suggested this amount of freeboard is unnecessary in many cases.

Response: The Agency has revised the rule to reflect these comments.

Comment: 5.2(c) of the first draft of the RAPs was interpreted by many commenters to mean that all manure pits will need to be lined.

Response: This section is rewritten and can be found in Section 6.02(d). The new language clarifies that on a case by case basis a waste storage facility may be required to meet improved standards. Statutory authority is also provided 6 V.S.A., Chapter 215, §4815.

5.3 Nutrient Management Planning

Comment: Many comments suggested that soil sampling every three years for small farms would be an economic burden.

Response: The Agency has revised the rule to reflect these comments; the sampling period has been changed from every three years to every five years which is the current standard for unpermitted farms.

Comment: Many comments suggest that the development of a 590 Nutrient Management Plan for the smaller end of the Small Farm Certification Threshold would be unnecessary and burdensome for small farms.

Response: With the increase of the livestock threshold for Small Farm Certification to 25% of the MFO threshold, the Agency anticipates that the 590 Nutrient Management Planning Requirement will no longer be a burden to the smallest SFO producers. All farms above the RAP threshold are still

required to conduct Nutrient Management Planning to the standards outlined in the second draft of the RAPs.

5.4 Soil Health Management Recommendations; Cover Crop Requirements

Comment: Many farmers from many different sectors offered comment on the cover crop requirement. Some comments addressed flexibility being needed in the RAPs to account for seasonal variation, others noted how Produce Farms would not be able to grow many fall vegetable crops with a competing cover crop.

Response: Cover cropping was well received as a practice farmers are committed to performing, however the set date restrictions offered challenges to many farm operations. Specifically, vegetable, grain, and other late fall crops would not be able to seed a cover crop by the suggested dates in the first draft. In the second draft we added language to address that crops that cannot be harvested by October 15th (the cover crop date) would have to have at least 30% crop residue on the field throughout the non-growing season if they were not going to plant a cover crop. On a case-by-case basis the Secretary can also review whether alternative management plans exist that would still meet the water quality goals and support the agricultural operation.

Comment: Soil Health Management Recommendations—Numerous comments received suggested that these recommendations did not belong in the RAPs.

Response: Changed ‘recommended’ to ‘shall be considered’. Act 64 of 2015 requires the inclusion of this recommendation in the RAPs 6 V.S.A. § 4810a(4)(B).

Comment: Gully Erosion—comments received suggested that an array of management options should be available to treat gully erosion and sediment discharges.

Response: The Agency has revised the rule to reflect these comments. Gully erosion has now been linked with a ‘sediment discharge’.

5.5 Manure and Waste Application Standards

Comment: The agency received significant comment regarding the prohibition of the application of manure on fields with greater than 20ppm soil test Phosphorus stating that it was overly burdensome to many operations throughout the state.

Response: The latest draft is more focused to require certified and permitted farms to have a phosphorus reduction strategy submitted to the Agency annually as part of annual reporting. This strategy will be used to determine whether nutrient management planning is being implemented on the farm during compliance checks. See Section 6.03(d) for the proposed standard.

Comment: Many comments requested clarification on ‘fields subject to flooding’.

Response: Frequently Flooded Soils are referenced as a risk assessment layers for farmers to reference to assist in their determination if their land could be land subject to flooding. This replaces ‘Land Subject to Flooding’ in § 5.4(c). USDA Soil Survey Flooding Frequency Class is available from the USDA Web Soil Survey online tool:
<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Comment: The 10% slope and a manure prohibition is onerous for hay fields on farms of all sizes throughout Vermont.

Response: The 10% slope and no manure within 100' of surface water received a great deal of comment. In reviewing the comment, it became clear that the hay producers with smaller fields were much more challenged by this proposed requirement. The Agency clarified that the intent is to ensure the manure applications on ‘Annual Crop’ field be adequately protected to ensure the manure does not reach surface water.

Annual Cropland means, for the purposes of this rule, land devoted to the production, cultivation, harvesting, and management of annual row crops and commodity crops, but does not include vegetable, fruit, or berry crops grown for human consumption

5.7 Buffer Zones and Setbacks:

Comment: The use of ‘swale’ leaves the buffer zone setback requirement too ambiguous as it could mean any wet spot in a field.

Response: The term swale was commented on quite a bit, with concerns over the discretion the Agency would use in making a determination in the field about a swale. We read through the comment and decided that most of the comments were focused on the lack of a clear connection to surface water. The intent was always to have the term swale be associated with areas that are directly connected to waters and hence we took out the term swale and left ‘ditch’ which more clearly defines the intent.

The definition of intermittent water has been replaced with the definition of Ditch. This new definition can be found at 2.11 in the 2nd draft of the RAPs

2.11 Ditch means a constructed channel primarily associated with land drainage or water conveyance through or around private or public infrastructure.

Comment: If fertilizer is allowed to maintain a vegetated buffer under the RAPs, then finished compost should also be allowed for maintenance of the vegetated buffer.

Response: The Agency has revised the rule to reflect these comments. See Section 6.07(e) for language.

Comment: Comments suggest that the RAP Buffer definition and requirements are inadequate or ineffective.

Response: The definition of buffer in the RAPs is based on statutory language directly from Act 64 of 2015. Section 4810(a)(6)(A) of Title 6 now reads that the RAPs shall:

“Require a farm to comply with standards established by the Secretary for maintaining a vegetative buffer zone of perennial vegetation between annual croplands and the top of the bank of an adjoining water of the State. At a minimum the vegetative buffer standards established by the Secretary shall prohibit the application of manure on the farm within 25 feet of the top of the bank of an adjoining water of the State or within 10 feet of a ditch that is not a surface water under State law and that is not a water of the United States under federal law.”

The goal of a buffer in Title 6 is to eliminate tillage, eliminate manure application and establish perennial vegetation for filtering purposes. These buffers have been understood to be allowed to be managed and harvestable if so desired by the farmer since the original promulgation of the AAPs. In addition, the rule provides that no activities take place over the top of the bank and that those areas are to be left in their natural state.

Comment: In this new draft the Agency eliminated the term “intermittent waters” and instead included a definition of a “ditch”, this change addressed the concern that intermittent waters was a very broad term as defined.

Response: As a result of this change there is more clarity around what needs a buffer and how wide the buffer needs to be. This draft states that all surface waters (includes all rivers and streams-perennial or intermittent) need to have a 25 foot no manure setback and be vegetated with perennial vegetation. Ditches need a 10 foot no manure setback and be vegetated with perennial vegetation.

5.8 Animal Mortality Management and Composting:

Comment: RAPs should address on-farm composting of imported food processing residuals

Response: The Agency has revised the rule to reflect these comments for operations importing less than 1,000 cubic yards of food processing residuals. Please see section 6.09 for more information. On-farm composting or anaerobic digestion of food residuals and food processing residuals may require registration or permitting by the Vermont Waste Management & Prevention Division. More information can be obtained by calling (802) 828-1138.

6.0 Livestock Exclusion Standards

Comment: Many comments demonstrated a misunderstanding in regards to what parts of a farm or stream would require livestock exclusion

Response: The Agency has added language to further clarify that livestock access from streams is only required in the production area, with exceptions, and in pastures outside of the production area

where erosion is present. The Agency has also clarified that the 3" of vegetative growth is required in the same setback distances as buffer requirements (25' from streams and 10' from ditches).

Comment: Minimum setbacks should be required for the construction of new waste storage facilities.

Response: The Agency has revised the rule to reflect these comments. The rule proposes that minimum setbacks shall apply to all new waste storage facilities proposed on sites where no waste storage facility or production area previously existed. Please see Section 9(e)(2) for specific language.

Comment: Add language relative to farm structure requirements and flood hazard and river corridor rules.

Response: The Agency has revised the rule to reflect these comments.

Appendices:

Comment: Please include language regarding water withdrawal and irrigation to meet Water Quality Standards.

Response: The revised rule includes an informational section which provides information from many state regulatory programs including standards for water withdrawal.

Construction of New Farm Structures

Flood Hazard Area and River Corridor General Permit:

Comment: Comments regarding consistency of definitions and requirements in the RAPs and River Corridor/NFIP requirements.

Response: The Agency has revised the pertinent RAP sections based on comments received.