



Act 64 Implementation:

2nd Draft Required Agricultural Practice (RAP) Rules



What are the RAPs?

Act 64

- VAAFM was directed by the Legislature to draft the RAPs pursuant to Act 64, signed into law on June 16, 2015.
- VAAFM has been charged with revising the RAPs by rule on or before **July 1, 2016**



RAPs

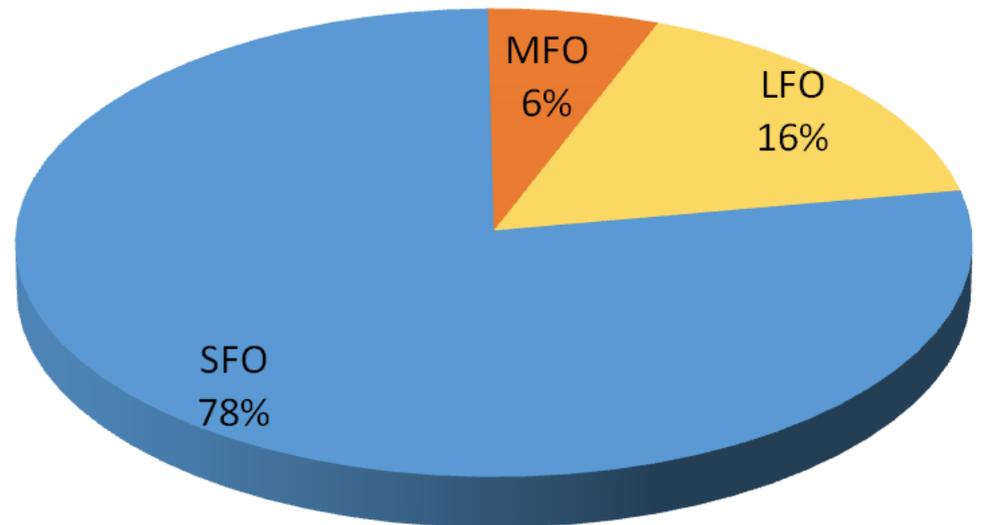
- AAPs Since 1995
- Act 64 requires that the revised RAPs include requirements for:
 - small farm certification,
 - nutrient storage,
 - soil health,
 - buffer zones,
 - livestock exclusion, and
 - nutrient management.
 - *Tile Drainage Rules for Jan 15, 2018*

1st Draft Public Outreach

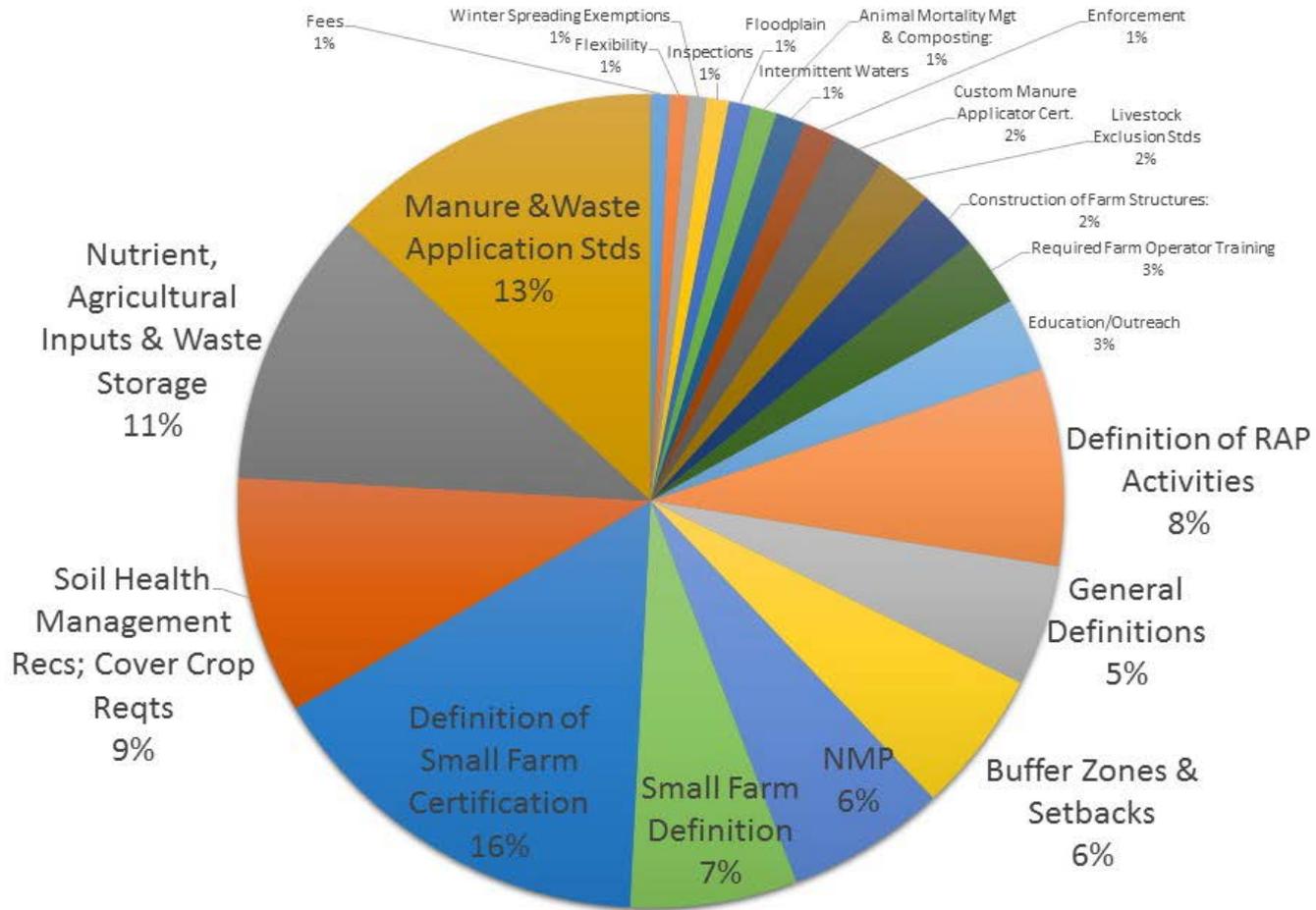
10 Public Meetings
21+ Small Stakeholder
Meetings

800+ attendees
169 individuals provided
written comment

Farm Attendance by Farm Size



Summary of Major Comment Areas



This document is the second draft of the Required Agricultural Practices (RAPs) developed pursuant to Act 64 (2015 session). This draft is not the final draft which will be submitted for formal rulemaking. Formal rulemaking will be initiated in the spring of 2016 and will be subject to public hearing and comment prior to rule finalization. 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.

REQUIRED AGRICULTURAL PRACTICES RULE FOR THE AGRICULTURAL NONPOINT SOURCE POLLUTION CONTROL PROGRAM

Section 1. General

- 1.1 **Introduction:** As defined in Title 6 of the Vermont Statutes Annotated, Chapter 215, §§ 4810 and 4810a, Required Agricultural Practices (RAPs) shall be management standards to be followed by all persons engaged in farming in this State. These standards shall

address activities which have a potential for causing agricultural nonpoint source pollution to enter the ground, form, pursue, active farm, the State, apply who agricultural quality Secret

2nd Draft RAPs

to enter the ground, form, pursue, active farm, the State, apply who agricultural quality Secret

- 1.2 **Purpose:** The purpose of this rule is to manage and ground minimum ways, river

2/23/2016

- 1.3 **Authority:** 4810, 4810a, and 4811, and Act 64 of the Vermont General Assembly (2015 session).

- 1.4 **Enforcement:** Violations of this rule are subject to enforcement by the Secretary and the Attorney General under the provisions of 6 V.S.A. §§ 4991 - 4996 and additional remedies available to the State under other applicable Vermont law.

Section 2. Definitions

- 2.00 **Agency** means the Vermont Agency of Agriculture, Food and Markets.
- 2.01 **Agricultural Product** means any raw agricultural commodity, as defined in 6 V.S.A. § 21(6), that is principally produced on the farm and includes products prepared from the raw agricultural commodities principally produced on the farm.



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Response to Comments: Draft 1 of the Required Agricultural Practices

The Vermont Agency of Agriculture, Food and Markets (VAAFM) 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, 2006, 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 VAAFM. 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 VAAFM 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 VAAFM regarding the First Draft of the RAPs.

As a result of the large amount of comment received during the initial 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.

VAAFM 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 VAAFM 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

Act 64 requires that the revised RAPs include requirements for: (Changes in 2nd Draft highlighted in Red)

- **small farm certification** (ex: 50+ mature dairy cows, 75+ beef cows)
- **nutrient storage** (siting and management requirements)
- **soil health** (required erosion to T and cover crop standards)
- **buffer zones** (25' all streams, 10' all ditches)
- **livestock exclusion** (all production areas and in pastures where erosion exist)
- **nutrient management** (590 standard for certified SFO and planning for rest)
- **required education/training for farms** (4 hours/5 years)
- **custom manure applicator training** (8 hours/5 years)
- *tile drainage rules for Jan 15, 2018*

Activities to be managed by local town/municipality

Parcels smaller than 4 acres in size and manages

- a) four equines;
- b) five cattle, cows, or American bison;
- c) 15 swine;
- d) 15 goats;
- e) 15 sheep;
- f) 15 cervids;
- g) 50 turkeys;
- h) 50 geese;
- i) 100 laying hens;
- j) 250 broilers, pheasant, Chukar partridge, or Coturnix quail;
- k) three camelids;
- l) four ratites;
- m) 30 rabbits;
- n) 100 ducks;
- o) 1,000 pounds of cultured trout; or
- p) other livestock types, combinations, and numbers as designated by the Secretary

A farm can demonstrate they are a farm that should be regulated under the RAPs by income or a prospective business plan.

Small Farms Requiring Certification

Livestock Farm

- 10 acres used for farming, and
- At least 25% of Medium CAFO numbers

Produce Farm

- 10 acres used for farming, and
- Must comply with all requirements of the Produce Safety Rule of FSMA

Commodity Crop Farm

- 10 acres used for farming annual commodity crops (defined as those not for human consumption), and
- Apply nutrients to those acres

Proposed Requirements Only For: Certified Small Farm Operations

Annual Compliance Reporting

Minimum inspection within **7** years

590 Nutrient Management Plan Required

Required Education for Farmers



Annual Compliance Report

Farm/Business Name:	Owner/Operator Name:
Reporting Period (mm/dd/yyyy): ____/____/____ to ____/____/____	
I. TYPE AND NUMBER OF ANIMALS	
Report the maximum number of each type of animal confined at all of the facilities covered under the MFO GP at any one time.	
Type	Number of Animals
Mature Dairy Cows (lactating and dry)	
Youngstock and Heifers	
Veal Calves	
Cow/Calf pairs	
Swine (55 lb. or more)	
Swine (under 55 lb.)	
Horses	
Sheep or Lambs	
Turkeys	
Chickens (w/liquid system)	
Chickens (w/out liquid system)	
Ducks (w/liquid system)	
Ducks (w/out liquid system)	
II. MANURE AND WASTE PRODUCTION	
Report the estimated amount of manure and waste generated from or imported to the facilities under this permit during the 12-month period covered by this report. Waste includes: spoiled feed, manure, milkhouse waste, washwater, leachate, used bedding, rainfall into waste storage structures, barnyard runoff, anaerobic digester substrates, and other dirty water.	
A. Amount of liquid manure and waste generated or imported during the 12-month period covered by this report.	_____ gallons
B. Amount of solid or semi solid manure and waste generated or imported during the 12-month period covered by this report.	_____ tons
III. MANURE AND WASTE TRANSFERRED TO OTHER PERSONS	
Report the estimated amount of waste transferred to other persons from the facilities under this permit during the 12-month period covered by this report.	
A. Amount of liquid manure and waste transferred during the 12-month period covered by this report.	_____ gallons
B. Amount of solid or semi solid manure or waste transferred during the 12-month period covered by this report.	_____ tons

- Shall notify Secretary of changes in whole farm ownership or land base (including changes of leased land) within 30 days.

Discharges:



(a) Farms subject to regulation under these Rules **shall not create any discharge of wastes** from a production area or waste management system into the surface waters of the State through a discrete conveyance such as, but not limited to, a pipe, ditch, or conduit without a permit from the Secretary of ANR.

Nutrient, Agricultural Inputs & Waste Storage Production Areas

- Production areas shall utilize runoff or leachate **collection, diversion or other management strategy** to prevent discharge of waste or indirect discharge to groundwater.
- All Ag Wastes shall be properly stored
- Waste Storage Facilities:
 - Must be properly maintained
 - ~~At least 1.0 ft. of freeboard~~
 - **Adequate Volume to prevent overflow**
 - May be required to meet and certify compliance with NRCS Standard



Nutrient, Agricultural Inputs & Waste Storage Field Stacking of Manure

Proposed Changes:

Increased stacking setbacks
from water and wells plus
365 day ~~and 1 in 4 year~~
storage minimums



- Prohibited to be stacked in a floodway or in an area subject to flooding
- **If not approved consistent with NRCS Standards or Approved by Secretary:**
- Manure stacks must meet the following setbacks:
 - 100' from property lines
 - 200' from top of bank of surface waters
 - 200' from public or private water supplies
 - 200' from any public water supply
 - 100' from ditches, or conveyance to surface water
 - As authorized by Secretary—no less than 100' top of bank surface water or well**
- Field Stacks **shall be land applied annually**

Soil Health Management Recommendations: Cover Crop Requirements



Proposed Changes:



Manage gully erosion and reduce overall erosion to T

Cover Crop Floodplains
(broadcast by 10/1 or drilled by 10/15)

- Cropland shall be cultivated so that average soil loss will be less than or equal to the tolerable soil loss (T) for a particular soil. RUSLE₂
- Field born gully erosion will be managed through appropriate BMP.

- Annual croplands subject to flooding are required to plant cover crops.
 - Broadcast by **October 1**
 - Drilled by **October 15**
 - **USDA Soil Survey Flooding Frequency Class:**
 - “Frequently Flooded”
 - **30% Residue after Oct 15**

Shortened url: go.usa.gov/cddEz

The screenshot displays a web-based GIS application interface. The browser address bar shows the URL `anrmaps.vermont.gov/websites/anra5/`. On the left, a 'Layers' panel lists various data layers, with 'Floodable Soils - NRCS' highlighted by a red box. The main map area shows a satellite view of a river and surrounding land, with blue shaded regions indicating floodable soils. A 'Quick Tools...' button is visible at the top of the map. The bottom of the map includes a Bing logo, a scale bar (0 to 100m), a scale of 1:4,513, and a 'help' link. A copyright notice at the bottom right reads '© 2010 DigitalGlobe. Image courtesy of U.S. Department of Agriculture'.

"Frequent" means that flooding is likely to occur often under normal weather conditions. The chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year.

Proposed Manure & Waste Application Standards

Manure may not be spread within **frequently floodable soils as defined by NRCS soils layer:**

- After October 15 or Before April 15
- Injected or incorporated within 48 hrs (does not apply to no-till)



Winter Spreading Ban

- No Manure or Waste application spread between December 15 and April 1
 - Secretary may prohibit between **12/1-12/15 and 4/1-4/30** of any calendar year
 - Emergency exemptions
 - Manure or other agricultural wastes shall not be spread when field conditions are conducive or can reasonably be anticipated to flood, runoff, pond, or other off-site movement

Winter Manure Spreading Exemptions



Seasonal winter
spreading exemptions

- RAPs revise and set new standards for winter manure and wastes spreading ban.
 - Requirements for requests
 - Standards for approvals
 - Guidelines for manure application

Manure & Waste Application Standards

Proposed Changes:

When Weather conditions conducive to runoff



Manure and other wastes shall not be spread when **actual or expected weather and/or** 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

Proposed Manure & Waste Application Standards

Farms required to have a 590 NMP must have a P Reduction Strategy when annual cropland, grass, hayland STP reaches > 20 ppm

No Manure Application on annual cropland w/ slopes $> 10\%$ w/o 100' grass buffer & manure setback

No Manure Application on bedrock, frozen, saturated or snow covered ground (unless approved in advance)



Buffer Zones & Setbacks

Proposed Changes:

Increased buffers and
manure setbacks
(25' streams and 10'
ditches)



Buffer Zone Requirements

- Surface Water shall be buffered 25'
- **Ditches** shall be buffered 10'
- **Surface inlets or open drains shall be buffered from croplands by 25 feet of perennial vegetation**
- Harvesting of Vegetated Buffer is Allowed
- No spreading manure or wastes in the vegetated buffers
- Fertilizer **and compost** may be used per NMP to establish or maintain buffer
- No Tillage Allowed in Buffer except for establishment or Maintenance

Site Specific Variances

- Variances for vegetated buffers may be considered based on a site specific characteristics

Animal Mortality Management & Composting

Proposed Changes:

Mortalities must be
disposed in 48 hours



Animal mortalities being disposed of on the farm within 48 hours according to the following standards:

- Compost
- Burial
- Render

On-Farm Composting of Imported Food Processing Residuals

Proposed Livestock Exclusion Standards

Establish standards for livestock exclusion from waters.
Production & Pasture Areas
(3" minimum growth in buffer zones—25'/10')



Production Area & Immediately Adjacent areas

- No Access to Surface Water except:
 - At defined crossing
 - Where prescribed rotational grazing plan exists (3" residual)
 - In areas approved by Secretary
 - Adequate vegetative cover shall be maintained to protect banks of surface water

Outside Production Area (Pasture)

Livestock shall not have access to surface water outside of production area that:

- Have unstable banks of surface water
- Areas designated by Secretary where actual or potential threat exists

Custom Manure Applicator Certification

Train & license
custom manure
applicators



- Custom Manure Applicators shall be certified by the Secretary
 - Must demonstrate knowledge of RAPs and NRCS 590 standard
 - Must demonstrate competency in methods and techniques to ensure appropriate nutrient application in compliance with environmental standards.
- Certified custom manure applicators shall train all employees and seasonal workers in methods and techniques to meet RAP and NRCS 590 standards for nutrient application
- Certification is valid for 5 years; Shall complete 8 hours of training in each 5 year period.

Construction of Farm Structures

- Construction of farm structures in Flood Hazard Areas and River Corridors are required to obtain a Flood Hazard Area and River Corridor permit from ANR
- Prior to construction of farm structures, the farmer must notify the zoning administrator or town clerk in writing of the proposed activity
 - Must contain a sketch of the proposed structure including the setbacks from adjoining property lines, roads and right-of-ways
- The Secretary may grant a variance to municipal and local setbacks that will represent the minimum alternative that will afford relief and will represent the least deviation possible from these regulations
- **Following minimum setbacks for all new WSF:**
 - 100 feet from centerline of public road
 - 100 feet from abutting property line
 - 100 feet from the top of bank of any surface water
 - 200' from public or private wells

Site Specific On-Farm Conservation Practices

- When the Secretary determines, after inspection of a farm, that a person engaged in farming is complying with the Required Agricultural Practices Rule but there still exists the potential for agricultural pollutants to enter the waters of the State, the Secretary shall require the person to implement additional, site-specific, on-farm conservation practices designed to prevent agricultural pollutants from entering the waters of the State.
- When requiring implementation of a conservation practice, the Secretary shall inform the person engaged in farming of the resources available to assist the person in implementing the conservation practices and complying with the requirements.



USDA NRCS: \$45 million over 5 years



AGENCY OF AGRICULTURE, FOOD & MARKETS

<p>VT Agency of Agriculture, Food & Markets BEST MANAGEMENT PRACTICE & ALTERNATIVE MANURE MANAGEMENT PROGRAMS</p>	<p><u>Return Application to:</u> 116 State Street Montpelier, VT 05620-2901 (802) 828-1410 fax</p>	<p><u>Engineering Contact:</u> Rob Achilles, P.E. (802) 917-1397 cell Alyson Allen, E.I (802) 522-0857 cell <u>Payment Contact:</u> Jeff Cook (802) 828-3474 office</p>
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Technical and Financial Assistance Available for all Farms in Vermont

Vermont Clean Water Fund:
 \$1.75 Million Proposed for Farms



State of Vermont RCPP: \$16 million
Long Island Sound RCPP: \$10 million
VACD RCPP: \$800,000
Memphremagog RCPP: \$600K



AGR.RAP@vermont.gov

Additional Information:

agriculture.vermont.gov/water-quality/regulations/rap

Or:

go.usa.gov/cdGew



AGENCY OF AGRICULTURE, FOOD & MARKETS