Vermont Agency of Agriculture, Food & Markets

General Permit for Medium Farm Operations June 12, 2018

Anson B. Tebbetts

Secretary
Vermont Agency of Agriculture, Food & Markets

Authorized Signature

Date

Vermont Agency of Agriculture, Food & Markets 116 State Street Montpelier, VT 05620 This Page Intentionally Left Blank

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TABLE OF CONTENTS

Section 1. Definitions	. 2
Section 2. General Permit Area and Coverage	.7
Subsection a. Coverage Subsection b. Application for Coverage Subsection c. Limitations on Coverage Subsection d. Termination of Coverage Under the MFO GP Subsection e. Requiring a MFO to Obtain an IP Subsection f. Transitioning from a MFO to a LFO	.7 .8 .8
Section 3. General Standards Applicable to MFOs	.9
Section 4. Effluent Limitations and Standards	11
Section 5. Groundwater Protection Criteria	11
Section 6. Waste Management System Conditions	12
Subsection a. Structural Design and Performance Standards Subsection b. Nutrient Management Subsection c. Maintenance and Record Keeping for NMPs	12 13 15
Subsection d. Requirements for the Import and Export of Manure, Compost, and Other Wastes	17
Section 7. Monitoring and Reporting	19
Subsection a. Notice of Non-Compliance	19
Section 8. Annual Compliance Reporting Requirements	20

Medium Farm Operation General Permit Applicable Forms:

The forms referenced in this MFO GP can be found on the Vermont Agency of Agriculture, Food & Market's (the Agency) website (http://agriculture.vermont.gov/water-quality/regulations/mfo) or by contacting the Agency Water Quality Division. These forms are subject to revision so the applicant, prior to use of a form referenced in this MFO GP, should always consult the website listed above or the Agency Water Quality Division to make sure that they are using the current version.

- Notice of Intent to Comply (NOIC) Form
- Notice of Termination (NOT) Form
- Incident Report Form
- Annual Compliance Report Form
- Manure and Waste Generation, Importation, and Storage Capacity Reporting Form
- Solid Waste and Non-Sewage Waste Importation Form

Section 1. Definitions

- 1.1 <u>Animal Feeding Operation (AFO)</u> means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:
 - (a) animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
 - (b) crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two or more individual farms qualifying as an AFO which are under common ownership and which adjoin each other or use a common area or system for the disposal of animal waste, shall be considered to be a single AFO if the combined number of livestock or domestic fowl resulting qualifies as a medium farm as defined herein.

- 1.2 <u>Agency</u> means the Vermont Agency of Agriculture, Food and Markets.
- 1.3 <u>Animal Type</u> means livestock or domestic fowl type.
- 1.4 <u>Barnyard</u> and <u>Feedlot</u> means an area, either earthen or improved, where animals are confined by fences, other structures, or topography, are primarily sustained by supplemental feed, and where vegetative cover is sparse.
- 1.5 <u>Certified Nutrient Management Planner</u> means an individual certified through the completion of both the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) nutrient management certification process and the State of Vermont nutrient management certification process, when implemented, who creates, reviews, and modifies Nutrient Management Plans (NMPs).
- 1.6 <u>Certified Small Farm Operation (CSFO)</u> means a AFO that meets the criteria of Section 4.1 of the Required Agricultural Practices Rule.
- 1.7 <u>Compost</u> 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.
- 1.8 <u>Conservation Practice</u> means a specific treatment used to address specific natural resources needs and can be structural, vegetative, or land management.
- 1.9 <u>Crop and Cropland</u> means (a) plants grown for food, feed, fiber (other than trees grown for silvicultural or timber purposes), Christmas trees, maple sap,

horticultural, viticultural, orchard crops, and pasture; and (b) the land upon which they are grown.

- 1.10 <u>Discharge</u> means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into waters of the State.
- 1.11 <u>Domestic Fowl</u> means laying-hens, broilers, ducks, turkeys, or any other number or type of fowl that the Secretary deems domestic fowl.
- 1.12 <u>Facility</u> means the location where farm infrastructure associated with the production area is located, typically a farmstead. Facility may include the livestock, barns, waste and feed storages.
- 1.13 Farm means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined in Section 2.16 of the Vermont Required Agricultural Practices Rule, and that meets the threshold criteria as established in Section 3 of the Vermont Required Agricultural Practices Rule, provided that the lessee controls the leased lands to the extent they would be considered as part of the lessee's own farm. Indicators of control may include whether the lessee makes day-to-day decisions concerning the cultivation or other farming-related use of the leased lands and whether the lessee manages the land for farming during the leased period
- 1.14 <u>Groundwater</u> means water below the land surface in a zone of saturation, but does not include surface waters.
- 1.15 <u>Injection Well</u> means any opening in the ground used as a means of discharging waste except for a dry hole not exceeding seven feet in depth which is constructed as, and used solely for, the disposal of domestic wastes.
- 1.16 Large Farm Operation (LFO) means an AFO which is required by 6 V.S.A. § 4851 to obtain a LFO permit.
- 1.17 <u>Land Application Area</u> means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, excluding the production area, to which wastes from the production area are or may be applied.
- 1.18 <u>Livestock</u> means cattle, cow/calf pairs, youngstock, heifers, bulls, American bison, swine, sheep, goats, horses, cervids, camelids, ratites, rabbits, pheasants, chukar partridge, coturnix quail, laying hens, broilers, ducks, turkeys, or any other type of fowl as designated by the Secretary. Other livestock types may be designated by the Secretary based on the potential to generate nutrients or other associated agricultural wastes.
- 1.19 Medium Farm Operation (MFO) means an AFO which houses:

200 to 699 mature dairy cows, whether milked or dry;

300 to 999 youngstock or heifers;

300 to 999 yeal calves;

300 to 999 cattle or cow/calf pairs;

750 to 2,499 swine weighing over 55 pounds;

3,000 to 9,999 swine weighing less than 55 pounds;

150 to 499 horses:

3,000 to 9,999 sheep or lambs; 16,500 to 54,999 turkeys;

9,000 to 29,999 laying hens or broilers with a liquid manure system;

25,000 to 81,999 laying hens without a liquid manure handling system;

1,500 to 4,999 ducks with a liquid manure handling system;

10,000 to 29,999 ducks without a liquid manure handling system; or, any other animal type and number that the Secretary may designate.

- 1.20 <u>Non-Sewage Waste</u> means any waste other than sewage which may contain organisms pathogenic to human beings but does not mean stormwater runoff.
- 1.21 <u>Nutrient Management</u> means managing the amount, form, placement, and timing of plant nutrient applications to obtain optimum forage and crop yields, minimize the entry of sediment and nutrients into waters of the State and groundwater.
- 1.22 <u>Nutrient Management Plan (NMP)</u> means the system by which nutrient imports and exports and animal waste generation, storage, and use is handled for the purpose of minimizing the entry of sediment and nutrients into waters of the State and groundwater, while planning nutrient applications and field management practices for optimum forage and crop yields including the related management aspects of fertilizer nutrients, conservation practices, animal mortalities, clean water, chemical handling, waste and soil testing, and record keeping. An NMP must include all production areas and land application areas owned, rented, or operated by the farm operating under the MFO GP.
- 1.23 <u>Pasture</u> means perennial vegetation used for grazing, which is not a barnyard or feedlot.
- 1.24 <u>Permit Decision</u> means a decision by the Secretary to issue a MFO General Permit (GP) or permits, to issue a subsequent MFO GP or permits, or to require a farm to obtain an Individual Permit (IP) in order to continue in operation.
- 1.25 <u>Permittee</u> means a person or business that has received coverage under the MFO GP.
- 1.26 Person means:
 - (a) an individual, partnership, corporation, association, unincorporated

organization, trust or other legal or commercial entity, including a joint venture or affiliated ownership; or

- (b) a municipality or state agency; or
- (c) individuals and entities affiliated with each other for profit, consideration or any other beneficial interest derived from agricultural land management, including lessors and lessees.
- 1.27 <u>Production Area</u> means those areas of a farm where animals, agricultural inputs, or raw agricultural products are confined, housed, stored, or prepared whether within or without structures, including barnyards, raw materials storage areas, heavy use areas, fertilizer and pesticide storage areas, and waste storage and containment areas. Production areas include egg washing or egg processing facilities, milkhouses, raw agricultural commodity preparation or storage, or any area used in the storage, handling, treatment, or disposal of mortalities.
- 1.28 <u>Realistic Yield Goals</u> means yield goals established using actual field-by-field yields collected by the MFO instead of soil factsheet yield values. The actual field-by-field yields must be collected by the MFO during the most recent five years. Actual field-by-field yields older than five years cannot be used in the calculation of realistic yield goals.
- 1.29 Required Agricultural Practices Rule (RAPs) means the Vermont Required Agricultural Practices Rule adopted pursuant to 6 V.S.A. § 4810.
- 1.30 Rule means the Medium and Small Farm Operation Rules for Issuance of General and Individual Permits under 6 V.S.A. § 4858(b).
- 1.31 <u>Ruling</u> means a determination by the Secretary, after notice and an opportunity to be heard by a medium farm, that a medium farm is required to apply for and to obtain an IP in order to continue in operation, and/or a determination by the Secretary to deny an application by a medium farm for coverage under an IP or the MFO GP.
- 1.32 <u>Secretary</u> means the Secretary of the Agency of Agriculture, Food & Markets.
- 1.33 <u>Solid Waste</u> means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment or solid or dissolved materials in industrial discharges which are point sources subject to permits under the Water Pollution Control Act, 10 V.S.A. Chapter 47. For the purposes of these rules, solid waste

that is also hazardous waste, as defined by 10 V.S.A. § 1222(6), is subject to further regulation under the Vermont Hazardous Waste Management Regulations.

- 1.34 <u>Surface Water or Waters</u> means all rivers, streams, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border the State or any portion of it.
- 1.35 <u>Waste or Agricultural Waste</u> means material originating or emanating from a farm that is determined by the Secretary or the Secretary of Natural Resources to be harmful to the waters of the State, including: sediments, minerals including heavy metals, plant nutrients, pesticides, organic wastes, including livestock waste, animal mortalities, compost, feed and crop debris, waste oils, pathogenic bacteria and viruses, thermal pollution, silage runoff, untreated milkhouse waste, and any other farm waste as the term "waste" is defined in 10 V.S.A. § 1251(12).
- 1.36 <u>Waste Management System</u> means an on-farm waste management program and conservation practices which may include one or more of the following:
 - (a) an adequately sized waste storage facility, field stacking, composting, leachate and other runoff control systems, bedded pack systems, and milkhouse waste system;
 - (b) contracts which transfer the ownership of wastes generated at a production area to another person for storage in a manner consistent with NRCS or equivalent standard; and/or
 - (c) a NMP for all wastes to be applied in compliance with this permit.
- 1.37 <u>Waste Storage Facility</u> means an impoundment made for the purpose of storing agricultural waste by constructing an embankment, excavating a pit or dugout, fabricating an in-ground or above-ground structure, or any combination thereof.
- 1.38 <u>Waters of the State</u> include for the purposes of this permit surface water and groundwater as applied.

Section 2. General Permit Coverage and Application

(a) <u>Coverage</u>

- (1) The MFO GP is designed to ensure that MFOs generating animal waste comply with the water quality standards of the State.
- (2) Unless otherwise given notice by the Agency, all farms meeting the definition of a MFO in Vermont are required to operate under the coverage of this MFO GP.
- (3) It is prohibited under coverage of this MFO GP to operate a production area in a manner that causes a discharge of wastes to waters of the State or violates State groundwater standards.
- (4) Obtaining coverage under the MFO GP does not release the MFO from any legal responsibility to meet other federal, state, or local laws.

(b) Application for Coverage

- (1) All AFOs meeting the definition of a MFO, unless exempted by the Secretary, shall seek coverage under this MFO GP.
 - (A) An existing MFO must submit a Notice of Intent to Comply (NOIC) Form with the conditions set forth in this MFO GP to the Agency within 180 calendar days of the effective date of this MFO GP;
 - (B) A new operation that meets the definition of a MFO must submit a NOIC Form to the Agency prior to operation; or
 - (C) Any other AFO that plans on increasing animal numbers to meet the definition of a MFO must submit a NOIC Form to the Agency prior to increasing animal numbers that meet or exceed the minimum threshold set forth by the MFO definition.
- (2) Pursuant to 6 V.S.A. § 4861, a permit applicant or permittee aggrieved by a final ruling of the Secretary on an application of coverage under a MFO GP may appeal to the environmental division of the Superior Court; provided, however, that the appeal is limited in scope to whether the medium farm complies with the terms and conditions of the MFO GP.
- (3) All MFOs seeking coverage under this MFO GP shall:
 - (A) comply with the requirements and conditions of this MFO GP;

- (B) be subject to inspection at least every three years pursuant to 6 V.S.A. § 4858(b)(3);
- (C) pay an annual operating fee pursuant to 6 V.S.A. § 4858(e); and
- (D) comply with Annual Compliance Reporting Requirements in Section 7 of this MFO GP.
- (4) The owner or operator of a farm that has fewer animals than the minimum threshold set forth by the MFO definition may seek coverage under this MFO GP by certifying to the Secretary, in a manner specified by the Secretary, that the farm complies with the requirements and conditions of this MFO GP.
- (5) The Agency shall post on its website the farm's name, the town in which the farm is located, and that the farm has sought coverage under this MFO GP. Interested persons may obtain detailed information about the nature and extent of the activity proposed to receive coverage under the MFO GP as provided for in 6 V.S.A. § 4858 (b)(3) by making a written request to the Agency's Water Quality Division.

(c) Limitations on Coverage

The MFO GP may not cover:

- (1) Farming operations that operate under a MFO IP;
- (2) Farms that have been notified by the Agency to apply for a MFO IP or a LFO permit;
- (3) MFOs that export all of their wastes to another person or discharge to a permitted waste disposal system; or
- (4) MFOs required by the Secretary of Natural Resources to obtain a permit under 10 V.S.A. § 1263 pursuant to federal regulations for concentrated animal feeding operations. Coverage under the MFO GP is rendered void by issuance of a permit to a farm under 10 V.S.A. § 1263.

(d) <u>Termination of Coverage</u>

(1) A MFO that has submitted a NOIC Form that subsequently maintains animal numbers lower than those defined by 6 V.S.A. § 4857(2) may terminate coverage under this MFO GP by submitting a completed Notice of Termination (NOT) Form to the Agency for its review and

approval. If the farm meets the definition of a Certified Small Farm Operation (CSFO), as defined in Section 1.6 of this MFO GP, the farm shall comply with CSFO requirements including annually certifying compliance with the Required Agricultural Practices (RAPs).

- (2) If a farm submits a NOT Form but later decides to continue operating as a MFO, the farm shall submit a new NOIC Form.
- (3) A farm that has submitted a NOIC Form but has animal numbers below the MFO threshold and has not submitted a NOT Form must comply with this MFO GP.

(e) Requiring a MFO to Obtain an Individual Permit (IP)

- (1) The Secretary may require a farm to apply for and obtain an IP according to the Rule.
- (2) An owner or operator of a farm may petition the Secretary to request issuance of an IP according to the Rule.
- (3) When an IP is issued to an owner or operator otherwise subject to the MFO GP, coverage under the MFO GP is automatically terminated on the effective date of the IP.

(f) Transitioning from a MFO to a LFO

- (1) A MFO must apply for and must obtain, a LFO Permit prior to performing activities that trigger the requirement to obtain a LFO Permit under the Large Farm Operations Rules.
- (2) If a MFO performs activities that trigger the requirement to obtain a LFO Permit prior to submitting a complete LFO Permit application to the Agency, then coverage under the LFO Permit may be denied and the farm may be required to reduce animal numbers below the LFO animal threshold until a LFO Permit is issued by the Secretary and the terms of the LFO Permit are met.

Section 3. General Standards Applicable to MFOs

- (a) A MFO is required to comply with the RAPs.
- (b) A MFO is required to comply with the Rule.
- (c) At the time of an inspection or an investigation a MFO shall be able to provide the Agency with:

- (1) a complete and up-to-date NMP as described in Section 6(c) of this MFO GP; and
- (2) records in accordance with the Rule and VT NRCS 590 Conservation Practice Standard or an equivalent standard as approved by the Secretary.
- (d) A MFO shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or managed by the MFO to achieve compliance with the MFO GP.
- (e) Pursuant to Subchapter IX of the Rule, the Secretary may, after due notice and an opportunity for a hearing with the permittee, revoke coverage under the MFO GP when, after investigation, the Secretary deems the permittee to be in violation of any of the terms or conditions of the MFO GP, provisions of 6 V.S.A. Chapter 215 Subchapter 5 Regulation of Medium and Small Farm Operations, or provisions of the Rule.
- (f) Pursuant to Subchapter X of the Rule, the Secretary may seek enforcement remedies, including reduction of herd size and administrative penalties, with regard to any person who violates the terms or conditions of the MFO GP, provisions of 6 V.S.A. Chapter 215 Subchapter 5 Regulation of Medium and Small Farm Operations, or the Rule.
- (g) Even if the MFO meets all terms and conditions of the MFO GP, if the MFO causes a discharge of wastes to waters of the State or causes a violation of the primary or secondary groundwater standards, the MFO may be subject to investigation and enforcement by the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 47.
- (h) Even if the MFO meets all terms and conditions of the MFO GP, if the MFO causes a discharge of wastes to waters of the State or causes a violation of the primary or secondary groundwater standards, the Agency may require modification of the MFO in accordance with the Rule. The Agency may also require an IP in accordance with Subchapter VII of the Rule.
- (i) A MFO shall allow any agent of the Agency, at reasonable times, to:
 - (1) enter upon the farm;
 - (2) have access to and copy, including photograph, any records required by the MFO GP; and
 - (3) inspect or investigate any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under the MFO GP and the Rule. Inspection and investigation includes the

- taking of photographs that are necessary for the carrying out of the inspection or investigation.
- (j) Unless terminated, this MFO GP continues in effect for a period of five (5) years from the date of issuance or until the Agency issues a new MFO GP and the MFO submits a new NOIC Form to the Agency.

Section 4. Effluent Limitations and Standards

- (a) Conservation practices shall be in place to assure that there are no discharges of wastes from the production area to waters of the State.
- (b) A MFO shall be managed in accordance with the provisions of the NMP developed pursuant to Section 6(b) of this MFO GP.
- (c) A MFO shall implement erosion and sediment control practices for land clearing, field drainage, ditching, or other field maintenance activities to prevent adverse water quality impacts to surface water, groundwater, and to prevent movement of sediment across property boundaries.

Section 5. Groundwater Protection Criteria

- (a) A MFO shall be conducted so that wastes do not reach or exceed groundwater standards as established by the Agency of Natural Resources. Where monitoring indicates that wastes have reached or exceeded these standards, the Secretary may require corrective modifications to the MFO's NMP, waste management system, or other corrective actions as needed.
- (b) The Secretary may conduct groundwater sampling:
 - (1) at sites selected by the Secretary where well owners have volunteered or agreed to participate in the sampling program;
 - (2) at sites upon the request of a well owner;
 - (3) at sites selected by the Secretary based on the results of other sampling data or the existence of vulnerable site characteristics;
 - (4) at sites with activities or operations permitted or regulated by the Secretary; and
 - (5) at sites where the Secretary has received a complaint from a well owner in the vicinity of an agricultural operation that the operation has contaminated the drinking water or groundwater of the well owner.
- (c) Under Subchapter XI. C. of the Rule, the Secretary shall:

- (1) conduct a groundwater investigation at sites where the Secretary has received a complaint from a well owner in the vicinity of an agricultural operation that the operation has contaminated the drinking water or groundwater of the well owner; and
- (2) investigate the occurrence of contamination where sampling indicates that drinking water or groundwater contains detectable concentrations of agricultural contaminants.
- (d) When the Secretary has made a determination that a MFO poses a threat to human health or the environment, the Secretary may require the cost of continued groundwater monitoring be paid for by the MFO.

Section 6. Waste Management System Conditions

- (a) <u>Structural Design and Performance Standards</u>
 - (1) A MFO shall have a waste management system capable of storing all waste generated and imported to the farm for a total of 180 consecutive days.
 - (A) The waste management system may be comprised of a combination of waste storage facility, field stacking, composting, or contracts which transfer waste to another party for management in another waste storage facility.
 - (B) The Agency may require a MFO to provide total waste generation calculations prepared or approved by a professional engineer.
 - (2) A MFO shall manage and maintain each waste management system consistent with the requirements of Operation and Maintenance Plans.

Freeboard volume for a waste storage facility shall be in compliance with the standards set forth in the VT NRCS Conservation Practice Standard for Waste Storage Facilities (313).

(3) Any farm structure, agricultural waste storage facility, or component of a waste management system as defined in the Rule causing groundwater to exceed State groundwater standards or causing a discharge to waters of the State may be required to meet applicable VT NRCS Conservation Practice Standards, equivalent standards certified by a professional engineer licensed in the State of Vermont, or otherwise approved by the Secretary.

A MFO may be required to meet the design and performance standards above through a schedule of compliance, and/or may be required to apply for an IP if a component of the waste management system does not prevent discharges of agricultural wastes from the production area to waters of the State, or violates state groundwater standards, or has not been certified by VT NRCS or by a Vermont licensed professional engineer to meet or exceed VT NRCS Conservation Practice Standards or was incorrectly certified as an acceptable structure for the intended use.

(4) The burden of proof that all structures meet design, construction, and operation and maintenance performance standards lies with the MFO.

(b) <u>Nutrient Management</u>

- (1) A MFO shall have a field-by-field NMP. The NMP shall:
 - (A) comply with the RAPs and the criteria of Subchapter XII. B. 1. a), of the Rule;
 - (B) meet the format as prescribed by the Agency;
 - (C) be developed or approved by a certified nutrient management planner or the MFO in accordance with the VT NRCS 590 Conservation Practice Standard and Specifications unless an alternative standard has been approved by the Secretary; and
 - (D) be up-to-date, as described in Section 6(c) of this MFO GP.
- (2) All land-applied nutrients and wastes shall be applied at rates according to the NMP consistent with the requirements of the VT NRCS 590 Conservation Practice Standard or other required standards by the Secretary.
- (3) Waste generation calculations used in the NMP shall be completed on a facility-by-facility basis and may be required to be prepared or approved by a professional engineer.
- (4) Up-to-date soil tests must be used in the NMP. Up-to-date soil tests are those that are no older than 3 years and the area represented by a soil test.
- (5) Nutrient recommendations (lbs. N, P₂O₅, and K₂O per acre) in the NMP shall be made based on the University of Vermont "Nutrient Recommendations for Field Crops in Vermont" (and/or industry practice when recognized by the University) using up-to-date, actual soil test

laboratory results, realistic yield goals as defined, management capabilities, Nitrogen (N) contributions from any manure application in the past two years, prior crop N credits, Vermont Nitrogen Leaching Index (VT NLI) and Vermont Phosphorus Index (VT PI). Other University recommendations for Nitrogen and Potassium, that are appropriate for the geographic area, may be used.

- (6) Every waste that is land applied shall have its nutrient value tested using appropriate testing protocols and integrated into the NMP nutrient application recommendations.
- (7) Each waste storage facility must be sampled and utilized in the NMP based on the following:
 - (A) An average of all of the waste storage facilities on the MFO shall not be used to develop the NMP;
 - (B) Manure and/or waste storage facilities shall be sampled annually (upon thorough agitation of liquid systems);
 - (C) Satellite waste storage facilities must be sampled if the manure is stored there more than 3 months; however, if the storage is used temporarily then it can use the main storage where it was transferred from as the sample for planning purposes;
 - (D) Weighted averages of manure samples may be used when storage facilities are mixed, for example when storage facilities are physically connected or waste is transferred between storages. Weighted averages must consider the volume of manure per the sample value to give a new weighted average; and
 - (E) Actual manure sample values collected by the MFO must be used in the NMP in lieu of text book values when available sample values are less than five years old. Sample values older than five years cannot be used in developing an average manure value. Out of the five most recent annual sample manure values, the highest and lowest values are to be removed, leaving three values left to be averaged and used as the final manure sample value, allowing for a realistic manure sample average to be established.
- (8) All land receiving application of nutrients shall have a risk assessment for potential Nitrogen transport into groundwater as part of a NMP using the Vermont Nitrogen Leaching Index (VT NLI) per the VT NRCS 590 Conservation Practice Standard and include the following:
 - (A) The VT NLI must be completed for all fields;

- (B) The planned rates of Nitrogen application must be consistent with the VT NLI risk assessment and associated management recommendations per crop; and
- (C) Conservation practices for Nitrogen management shall be recommended and implemented based on the VT NLI, including:
 - (i) When the VT NLI is greater than 10 directly adjacent to a private well, the agricultural waste and nitrogen fertilizer application setback distance shall be 100 feet.
 - (ii) When the VT NLI is greater than 10, then all requirements in the VT NRCS 590 Conservation Practice Standard for high NLI soils must be followed, including avoiding fall manure spreading on bare ground or dormant crop.
- (9) All land receiving application of nutrients shall have a risk assessment for potential phosphorus transport into waters of the State as part of a NMP using the Vermont Phosphorus Index (VT PI) per the VT NRCS 590 Conservation Practice Standard. The VT PI must be completed for all fields in the state of Vermont. The planned rates of Phosphorus application must be consistent with the VT PI risk assessments and associated management recommendations per field. Nutrient applications shall be consistent with results of the VT PI, UVM nutrient recommendations and crop removal rates.
- (10) Implementation of additional conservation practices and/or nutrient application rate modifications as deemed necessary by the Secretary may be required when the following conditions exist:
 - (A) A use of an unproven, experimental technology;
 - (B) A determination by the Secretary that a field is no longer acceptable for manure, compost, and other waste application; or
 - (C) Any circumstances of potentially significant contamination to surface water or groundwater.
- (c) <u>Maintenance and Record Keeping for NMPs</u>
 - (1) A MFO shall keep its NMP up-to-date and include all land, rented or owned, operated by the MFO under this permit. This means the MFO must update its NMP routinely, which includes making changes to the NMP to account for any changes from the previous crop year.

- (A) A MFO is required to ensure that soil tests, waste storage analyses, crop rotations, soil erosion calculations and P-Index as required in the VT NRCS 590 Conservation Practice Standard, nutrient applications, and increases or decreases in animal numbers or land base used to develop the NMP are current and comprehensively inclusive of the farm operation under this permit.
- (B) A MFO has flexibility in implementing their NMP to make real time changes as needed, so long as the plan would have been able to support the management changes according to the P-Index, NLI, soil loss calculations and agronomic rates.
- (C) Any changes made to a NMP shall:
 - (i) be maintained on the farm as part of a NMP showing what was planned and the actual management practices that were implemented; and
 - (ii) prior to the next growing season, the changes that were implemented need to be included in the NMP to ensure the planned practices can meet the VT NRCS 590 Conservation Practice Standard.
- (2) A MFO shall retain a copy of its NMP on the farm for a period of no less than five years.
- (3) A MFO shall keep records pertaining to the development, implementation, and maintenance of the NMP on the farm for a period of no less than five years and shall include:
 - (A) the actual certified laboratory results for soil, manure, crop nutrient content and other laboratory tested materials utilized and included in the NMP; and
 - (B) field-by-field yearly records maintained for crop yields and nutrient applications including manure, fertilizer, and agricultural waste in accordance with VT NRCS 590 Conservation Practice Standard; and
 - (C) a copy of Annual Compliance Report Forms submitted to the Agency; and
 - (D) for MFOs utilizing manure injection equipment, nutrient application records using flow meters and data loggers or other means determined comparable by the Secretary, so the Agency can confirm accurate application.

- (4) The Agency may request additional information from a MFO relating to the NMP, including the location of facilities, number of animals, and the amount of waste generated, exported, and imported.
- (5) The Agency may require a MFO to submit information used in developing the NMP such as electronic records, spatial information including GIS shapefiles, VT NLI, VT PI, RULSE2, and aerial photography maps which may include farm identification, tract and field identification, and acres and land use determinations.
- (d) Requirements for the Import and Export of Manure, Compost, or Other Wastes
 - (1) When a MFO exports MFO-generated manure, compost, or other wastes from the MFO, the MFO must:
 - (A) Maintain records on the farm showing the amount of manure, compost, or other wastes that leaves the MFO, and the associated dates;
 - (B) Report the total quantity of manure, compost or other wastes exported in the Annual Compliance Report Form;
 - (C) Document and incorporate any export of manure, compost, or other wastes into the NMP;
 - (D) Provide the recipient(s) with representative information on the nutrient content of the manure, compost, or other wastes; and
 - (E) Ensure management of exported manure, compost, or other wastes is in compliance with the RAPs.
 - (2) When a MFO imports manure, compost, or other wastes to the MFO, the MFO must:
 - (A) Maintain records on the farm showing the amount of manure, compost, or other wastes that were imported to the MFO, and the associated dates;
 - (B) Report the total quantity of manure, compost, or other wastes imported in the Annual Compliance Report Form;
 - (C) Retain records on the farm of the representative information on the nutrient content of the manure, compost, or other wastes imported;

- (D) Perform nutrient analysis, or use current nutrient analysis from source, of any import of manure, compost, or other wastes and use this information to document and incorporate the materials into the NMP; and
- (E) Ensure management of imported manure, compost, or other wastes is in compliance with the RAPs.
- (e) Requirements for Importation of Solid Waste and Non-Sewage Waste on MFOs
 - (1) When a MFO imports solid waste and non-sewage waste, the MFO must:
 - (A) Maintain records on the farm showing each importation of solid waste and non-sewage waste that takes place on the MFO. Records must include:
 - (i) the volume of the imported material;
 - (ii) from whom the material was imported;
 - (iii) the date of importation; and
 - (iv) the type of material, nutrient content, and composition of the imported material.
 - (B) Report the total volume of imported solid waste and nonsewage waste accepted in the previous 12 months in the Annual Compliance Report Form;
 - (C) Receive current waste analysis results from the source for solid waste and non-sewage waste from the exporter or generator of the material prior to its arrival on the MFO; and
 - (D) Maintain 180 days of sufficient waste storage and adequate land-base capacity to handle imported material; and
 - (E) Follow Section 6(e)(3) for imported non-sewage waste or Section 6(e)(4) for imported solid waste.
 - (2) Document and incorporate all nutrients from solid waste and non-sewage waste into the NMP.
 - (3) When a MFO imports non-sewage waste, the MFO must:

- (A) Request permission from the Agency to import a specified volume of the proposed material onto the MFO through submission of a Manure and Waste Generation, Importation, and Storage Capacity Reporting Form and a Solid Waste and Non-Sewage Waste Importation Form;
- (B) Import non-sewage waste only from generators, who have obtained an ANR Indirect Discharge Permit that lists the MFO as a recipient of non-sewage waste; and
- (C) Comply with conditions in the ANR Indirect Discharge Permit.
- (4) When a MFO imports solid waste, the MFO must:
 - (A) Request permission from the Agency to import a specified volume of the proposed material onto the MFO through submission of a Manure and Waste Generation, Importation, and Storage Capacity Reporting Form and a Solid Waste and Non-Sewage Waste Importation Form;
 - (B) Contact the Solid Waste Program of ANR to determine if the MFO needs to obtain a Solid Waste Certification or Registration if processing or treating solid waste at the MFO; and
 - (C) Comply with the Vermont Solid Waste Management Rule as applicable.
- (5) Commercial feed under 6 V.S.A. Chapter 26 imported onto a MFO and utilized directly by livestock on the MFO is not considered an import for the purposes of this section.

Section 7. Monitoring and Reporting

(a) Notice of Non-Compliance

A MFO shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in non-compliance with the MFO GP. Providing advanced notice does not preclude the MFO from possible enforcement action for non-compliance with the MFO GP.

- (b) Notice of Accidental Discharge
 - (1) If there is an accidental or unexpected discharge of wastes from the production area to the waters of the State, a MFO shall notify the Agency

within 24 hours from the time that the MFO became aware of the discharge.

- (2) The MFO must submit to the Agency a signed and fully completed Incident Report Form within five (5) calendar days of the discharge.
- (3) The MFO shall make all information and data related to the accidental or unexpected discharge available to the Agency upon request.
- (4) The MFO shall retain copies of all records relating to any accidental or unexpected discharge for at least five (5) years from the date it submits the Incident Report Form to the Agency, and for a longer period of time if the Agency requests it to do so.

(c) Record Keeping and Record Requests

- (1) A MFO shall maintain a copy of the NMP and other records as required by the MFO GP on the farm at all times.
- (2) A MFO shall provide to the Agency upon the Agency's request any other records that the Agency determines are necessary for the purpose of monitoring compliance with the MFO GP. The MFO shall provide these records within 10 business days of the request to the Agency. Upon receiving the Agency's request for these records, it is the responsibility of the MFO to coordinate with the Agency if an extension beyond 10 business days is necessary to retrieve and submit the records to the Agency.

Section 8. Annual Compliance Reporting Requirements

A MFO must submit a signed and completed in full Annual Compliance Report Form, made available by the Agency, to the Secretary by April 30 of each year. The Annual Compliance Report Form will specify the information that the MFO must provide. This information will include, but is not limited to, the information listed in the Rule for annual compliance reporting (Subchapter XIII. B.) and the information listed in the Rule for nutrient management reporting (Subchapter XIII. D.).