

## **Response Summary for the Pre-Public Comment Stakeholder Process for the Draft Medium Concentrated Animal Feeding Operation General Permit (GP 3-9100)**

**Background:** Prior to a formal public comment period, the Vermont Agency of Natural Resources (Agency or ANR), Department of Environmental Conservation (Department or DEC), initiated a stakeholder outreach process to gather feedback on the draft Medium Concentrated Animal Feeding Operation (CAFO) General Permit (GP).

The Department reached out to all medium and large farms in the state, the Champlain Valley Farmer Coalition, the Connecticut River Watershed Farmers Alliance, the Farmer’s Watershed Alliance of Franklin and Grand Isle Counties, the Vermont Dairy Producers Alliance, Technical Service Providers, the Vermont Agency of Agriculture, Food, and Markets, the Natural Resource Conservation Service of Vermont, the University of Vermont Extension, the Vermont Housing and Conservation Board, Friends of Northern Lake Champlain, the Vermont Association of Conservation Districts, all fourteen regional conservation districts in the state, the Conservation Law Foundation, the Vermont Natural Resources Council, and the Lake Champlain Committee.

The Department provided three separate presentations on the draft general permit after making it publicly available on the CAFO Program website in March of 2021 and received both verbal and written questions and comments on the draft medium CAFO GP. The following is a summary of the written stakeholder questions and comments on the draft permit and the Department’s responses to those questions and comments. Where comments during this stakeholder process were directed at the “CAFO Rule,” the Department presumes they were intended for the draft medium CAFO GP and responds as such.

Written questions and comments on the draft general permit were submitted by the following parties: Agricultural Consulting Services, Champlain Valley Farmers Coalition, Kevin Kaija, Orleans County Natural Resource Conservation District, Poultney Mettowee Natural Resource Conservation District, Stonewood Farm, Knoxland Farm, and Taft’s Milk and Maple.



**General:**

- 1. Comment:** When the data released in the Clean Water Performance Report on January 15th of this year shows that farmers have made good progress in reducing phosphorus running to Lake Champlain, why not just renew the existing regulations? Is the expansion of the requirements, over what already exist, particularly when compared to the RAPs, really justified?

**Response:** Federal law requires ANR to periodically review and re-evaluate the terms and conditions of any general permits issued under the state administered National Pollutant Discharge Elimination System (NPDES) program as authorized by the Clean Water Act. As part of that review, ANR has relied on extensive field experience regulating discharges from CAFOs and regulatory experience in other NPDES programs to determine the appropriate revisions to the previously issued Medium CAFO GP. ANR believes these revisions are important for a farm that seeks legal authorization to discharge in compliance with the parameters of the permit and for ANR to fulfill its obligations under state and federal statutes. These requirements are separate and apart from those established by the RAPs, TMDL, or regulatory provisions under Title 6 of the Vermont statutes, which generally pertains to the Vermont Agency of Agriculture, Food, and Markets.

The Vermont Clean Water Initiative 2020 Performance Report shows that the agricultural sector is responsible for the majority of the estimated phosphorus reductions achieved in the Lake Champlain and Memphremagog basins during SFY 2016-2020. It is important to note, however, that methods are currently in place to estimate phosphorus load reductions for most types of agricultural conservation practices, while other land use sectors have gaps in methods to estimate phosphorus reductions. The relative contribution of other land use sectors to TMDL progress is expected to increase in the coming years due to new regulatory and funding programs, as well as due to the establishment of new methods to estimate phosphorus reductions for other project types. Further, 96% of the reduction attributed to the agricultural sector in FY 2020 were from annual practices with a 1-yr lifespan. In order to maintain this level of pollutant reduction these practices will need to continue to be implemented year after year.

- 2. Comment:** A concern is making sure that both the Agency of Agriculture and the Agency of Natural resources agree where the rules may impact the same farming operation, which will be the case where CAFO permits will be an option for Medium Farm Operations initially. To the farmers it is important that there is no “daylight” between the two agencies and how they interpret and manage the programs.

**Response:** ANR and AAFM have a Memorandum of Understanding regarding permit development, information sharing, and enforcement that directs the agencies to cooperate on these matters. Although ANR and AAFM do cooperate and coordinate on a number of issues, both agencies maintain



separate legal authority. ANR is committed to continuing to work with AAFM on aligning requirements and decreasing redundancy in regulation where possible, while maintaining our legal obligations under the Clean Water Act and state statutes.

3. **Comment:** What overlap is there going to be between ANR and the Agency of Ag? If a farm under this CAFO GP is found in compliance with all applicable standards, assuming that includes all RAPs, will that be enough for the Agency of Ag or should a farm expect to be subjected to multiple inspections to ensure compliance?

**Response:** As currently exists, there will continue to be instances of overlap and coordination between ANR and AAFM. This may include on permits issued to individual farms, inspections, and enforcement actions. Coverage under the Medium CAFO General Permit would make coverage under the Medium Farm Operation General Permit unnecessary, but AAFM retains responsibility for evaluating compliance of the RAPs because they apply regardless of whether or not a facility is permitted by AAFM. ANR is unable to answer on behalf of AAFM regarding inspection or enforcement by AAFM.

4. **Comment:** Clarify whether farms can truly opt out of the CAFO permit once they have been accepted into it. In Section H, it seems to describe a different scenario that does not necessarily allow for voluntary termination of a CAFO permit, to say go back to the VAAFM MFO permit.

**Response:** Part II(H) of the draft GP indicates that a farm may terminate permit coverage if they cease operations and all waste retention structures are properly closed, if the facility is no longer a Medium CAFO that discharges waste to surface waters, or if all discharges are permanently terminated by elimination of the flow or by connection to a publicly owned treatment works. In short, a farm that does not have a discharge is not required to have a CAFO permit, and therefore, a farm that voluntarily seeks permit coverage may opt out of permit coverage by demonstrating one of the three conditions listed in Part II(H) of the draft permit.

5. **Comment:** A timeline for a farm to bring the operation into compliance will be important.

**Response:** The Medium CAFO GP is intended for farms that elect permit coverage and believe they can comply at the time of application. If a farm cannot immediately comply but wishes to seek coverage under a NPDES permit, the farm may wait to apply for coverage under the GP until they make improvements, or the farm may apply for an Individual Permit which may allow for a compliance schedule that identifies interim milestones needed to achieve full compliance over time.

6. **Comment:** Has there been any analysis of the economic impacts of these proposed rules? What will be the average cost to a farmer to comply?



**Response:** ANR revised the Medium CAFO GP to account for state specific conditions, equipment needed, and to be consistent with EPA's NPDES regulations which were subject to extensive economic analysis. The GP is intended for farms that elect permit coverage and believe they can comply. Given the varying levels of management and farm configurations, ANR believes that individual farms are best suited to determine the economic impact of compliance with the GP to their individual facilities should they elect to seek coverage under it.

7. **Comment:** The proposed CAFO rules are going to require a certain amount of additional time to record additional data. Has there been any attempt to calculate how much extra time a month that might take? Can that time be balanced by a regulatory benefit.

**Response:** ANR believes that a proactive approach that includes monitoring and reporting requirements will result in fewer discharges and will decrease the likelihood for significant enforcement actions on farms, both of which can involve considerable time and financial investment by the farm. Commitment to these monitoring and reporting requirements should act to prevent avoidable impacts to water quality, with significant regulatory benefit to the farm in avoided non-compliance. The time and cost savings from prevention of avoidable impacts should significantly outweigh the time and effort needed to comply with the monitoring, record keeping, and reporting requirements. Further, recognizing that the effort and time needed to complete the monitoring and reporting requirements scales with the size of the farm, ANR does not believe that these requirements are outside the existing capacity of medium farm operators who choose to seek permit coverage to take advantage of the benefits provided by coverage under a NPDES permit.

8. **Comment:** Does the state permit agent have a digital data library of each permitted sight [sic] and is an applicant required to submit videos and pictures (yearly documentation) of selected sights [sic] that have been a concern in any field trip reports?

**Response:** The CAFO Program will maintain an inventory of permitted facilities as permits are issued. Reporting requirements, including information related to the annual report, are found in Part IV(A)(3) of the general permit and the Program may require additional monitoring or reporting requirements under an enforcement action for areas that are out of compliance with the permit, which can include photo documentation.

9. **Comment:** What is a "point source" discharge vs. non-point source discharge. I couldn't find it in the definitions section. Maybe add it.

**Response:** A point-source discharge is a discharge through a discrete conveyance like a pipe, ditch, or culvert. A non-point discharge is not through a conveyance and is instead diffuse: a common example is runoff or erosion from farm fields which doesn't flow through a discrete conveyance to surface water.





The term point source is defined in the Clean Water Act and has been added to the definitions section in the draft general permit as well.

- 10. Comment:** In the short 2 pg. general info document, paragraph 3, bullet 2: "Medium farms that can't meet the Medium CAFO GP requirements can apply for an Individual Permit." Can you please explain which requirements a farm may not be able to meet that would cause this situation. Maybe give an example.

**Response:** One example is when considering the updated precipitation data some farms may not immediately have enough waste storage to be eligible for the general permit given their existing herd size. Unless a farm is planning to increase their storage or decrease their herd size, they may not be eligible under the general permit due to inadequate storage and would be better suited with an individual permit that can consider the improvements and timelines the farm may need to meet the storage requirements.

- 11. Comment:** In the draft document, p.1 states "...operators of medium...(CAFOs)...are authorized...to discharge in accordance with the effluent limitations, monitoring requirements, and all other terms and conditions set forth herein." This makes it sound like as long as you meet conditions (such as effluent limitations), you can discharge on a regular/ongoing basis ("...discharge in accordance with the effluent limitations..."). From the meeting today it sounded like you can have a weather related discharge ONLY, and not be liable if you meet the conditions of the permit. These are two very different scenarios. Which is the case?

**Response:** A farm is indeed authorized to discharge when it meets the conditions in the permit, but the effluent limitation establishes that discharges are only authorized as a result of precipitation so long as the production area is properly designed and operated. This means that the only allowable discharges would be those that were caused by rain and only if the production area met the design standard in the permit, which is that it has adequate storage for the waste generated during the storage period (11/1 – 4/30) and from the 25-yr, 24-hr rain event. The permit does not authorize a continuing or ongoing discharge, but rather only as a result of precipitation presuming the production area meets the design standard. It's meant to acknowledge that there are very large storms or excessively wet conditions where a discharge is allowable, but not to authorize a continuous or ongoing discharge.

- 12. Comment:** Please explain the following section. It also makes it sound like discharges are allowed/covered more than during a weather-related event.

PART I. B. Permit Coverage

This permit covers any operation which:

4. Meets either one of the following conditions:
  - a) Pollutants are discharged into waters of the State through a man-made ditch, flushing system, or other similar man-made device.



b) Pollutants are discharged directly into waters of the State which originate outside of and pass over, across, or through the facility..."

**Response:** Parts I(a) and (b) are describing Medium CAFOs that must be covered under a Clean Water Act permit (since a medium farm cannot discharge without a Clean Water Act permit). This is somewhat different than the conditions for when a CAFO permit is required for a large farm. Once a Medium CAFO is permitted, they need to comply with the effluent limit in the permit. Going forward, ANR generally expects to engage with farms with existing discharges by requiring corrective action in order to cease the discharge or bring the farm into compliance with the effluent limit under an individual permit.

**13. Comment:** PART I. C. Eligibility for Coverage

"Unless excluded from coverage in accordance with Subpart I.D. or Subpart I.E. of this permit.....". Then in PART I. D. Limitations of Coverage "This permit does not authorize:

3. New dischargers....unless the owner or operator:

What is meant by "new discharges"? The paragraph continues on with a), b), c), c)I., c) II. etc. that spell out exceptions which seem to say if your discharge doesn't contain the pollutant that causes a water to be impaired, or doesn't "contribute to exceedance of water quality standard..." and/or "the discharge of the pollutant...will meet in-stream water quality criteria at the point of discharge..." that you may still be able to get coverage. Please explain/give an example of this. It is very confusing.

**Response:** Part I(D)(3) of the draft general permit has been revised to state "Discharges that the Secretary, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to non-compliance with the Vermont Water Quality Standards. Where such a determination is made prior to authorization, the Secretary may determine that an individual NPDES permit application is necessary or the Secretary may authorize coverage under this permit for the discharge provided the applicant includes appropriate controls and implementation procedures in their NMP designed to ensure the discharge is in compliance with water quality standards."

This language is consistent with regulatory requirements in the Code of Federal Regulations and removes the determination related to new dischargers.

**14. Comment:** In situations where a discharge had occurred but is not discovered until after it has ceased, or there is evidence of a discharge having happened but is not currently happening, what would a farm be expected to sample and analyze?

**Response:** Part VI(J)(2) of the draft permit requires that discharges be sampled upon discovery. Observation of a past discharge would not trigger the sampling requirements of this section but would trigger the



notification requirements in Part VI(J)(1) of the permit, which requires that permittees notify the Department verbally within 24-hrs and in writing within 5 days of becoming aware of a discharge. Requirements in Part VI(J)(1) are not limited to active or ongoing discharges and includes scenarios where the farm becomes aware of a discharge that has ceased.

- 15. Comment:** Part III- Sec A, subsection 5f- does this mean that any erosion of driveways, access roads, parking areas or other earthen surfaces will be considered a discharge if it reaches a ditch or surface water or only when mixed with other farm waste? From just the production area or from lanes adjacent to fields as well?

**Response:** Part III- Sec A of the draft General Permit applies to the production area only. The farm will need to ensure that access roads and other surfaces within the production area do not discharge sediment or agricultural waste to surface waters. Inclusion of sediment in the definition of waste is consistent with the MFO General Permit administered by AAFM.

- 16. Comment:** Part VII- Process Wastewater- should not include bedding unless it says “Soiled” or “Used” bedding. Why should water that comes into contact with sawdust, sand, straw, or other unused material be treated the same as water coming from manure?

**Response:** The definition in Part VII of the draft general permit is consistent with that in 40 CFR 122.23, which includes raw materials and specifically bedding. Raw materials, including bedding, and runoff from raw materials contain nutrients and other pollutants which may not be discharged, except in accordance with the effluent limits in the permit.

- 17. Comment:** Part VII- Production Area- If mortality handling sites are off the main farm or if the farm operates satellite storage facilities do these count as “production areas”?

**Response:** Yes, all animal confinement areas, raw materials storage areas, waste containment areas, and mortality storage, handling, or disposal areas are included in the definition of production area.

**Public notice:**

- 18. Comment:** Under the new CAFO permits more of a farm’s business will be exposed to public scrutiny, how that is managed and to what degree information is exposed will be important. Traditionally non-farmers have not understood many of the aspects that farming requires. It will be important to re-assure the farmers that this is necessary and advances the effectiveness of regulation.

**Response:** The CAFO Program is aware that there is some anxiety around public review of application materials. All application materials for CAFO permits are considered public documents and are subject to public review and comment. This is a federal requirement for all National Pollution



Discharge Elimination System permits issued under the Clean Water Act and is consistent with the opportunities for public review and comment for other types of permits issued by DEC, including for stormwater and wastewater discharges, as well as other activities that require permits. The opportunity for public review is an important part of maintaining public trust and confidence in regulatory programs and is a strength of the CAFO permit. Public comment is limited to the public comment period (14-days under the general permit) and can bring to light important information that strengthens a permit application, resulting in better written, more legally defensible permits.

**19. Comment:** Public participation should be limited to those who can demonstrate that they will be directly affected by a farm's actions, that they can demonstrate "standing".

**Response:** The opportunity for public review and comment is required under 40 CFR 124.11 and 10 VSA c. 170. Limiting public review and comment is inconsistent with state and federal regulations.

**20. Comment:** Is there a timeframe laid out for how long public comments can be accepted and/or is there a methodology explained for how to respond to the public comments?

- Will farms be expected to respond to the comments or does ANR?
- What timeframe will changes be expected to be made from the farm? IE, ANR decides some things need to change or be addressed differently will it be expected to be done within a day, week, month, growing season or "it depends on the situation"

**Response:** The application materials will be made available digitally through the Department's Environmental Notice Bulletin for 14 days following a determination that the application is technically complete. The public has an opportunity to review and provide comment on the materials during that time. ANR will respond to comments and may or may not incorporate suggestions from the comments.

The Department may reach out to the farm for assistance in responding to public comment, which creates an opportunity for the farm to provide input and clarify any responses. Regarding changes to application materials or additional information required as a result of comment, Part II- Sec. C of the draft permit specifies that those materials must be furnished within sixty days. It's important to note that this is the timeframe required for changes to application materials, but not necessarily for the implementation of changes on the farm that result from those revised application materials. See comments 5 and 10 for a discussion of individual permits and compliance schedules.

#### **Buffers:**

**21. Comment:** What evidence is there that necessitates an increase of a 25-foot buffer to a 35-foot buffer? If there is no evidence, and not just an isolated few instance, then we urge you to stay with the 25-foot buffer. There are significant economic consequences to a farm.



**Response:** Section Part IV(A)(1)(1)(1) of the draft general permit has been revised to require a 25-ft vegetated buffer for surface waters, ditches, and conduits to surface water that are downslope of land application areas.

- 22. Comment:** A Diversion is something like, but not really, a grassed water way designed to move water slowly, designed to stop erosion and movement of sediment, designed to go across slope at usually a 1% pitch to a tile outlet designed to move water by pipe down slope without causing erosion.

The tile outlet stand pipe limits water intake to slowly remove water from the basin around the stand pipe; thus reducing water flow. This in turn helps reduce flooding. Diversions are designed to slow down water movement. They should not be penalized with a 35 ft. buffer.

**Response:** See response to comment 21. If a diversion is a conduit to surface water and is down slope of the nutrient application area, a farm seeking coverage under the CAFO GP will need to establish a 25-ft vegetated buffer. Farms interested in the legal coverage of a NPDES permit and who believe that their site-specific conditions provide the same or better pollutant reduction than CFR requirements may provide documentation of the conditions and pollutant reduction for consideration by the Secretary and apply for an Individual Permit.

- 23. Comment:** A farm that consistently injects their manure should be allowed more leeway in the buffer requirements.

**Response:** See response to Comments 21. Farms that employ alternative conservation practices, such as injection, along with vegetated buffers may apply for an individual permit that can accommodate practices not included in the general permit. ANR sought supporting evidence for alternative practices during the stakeholder process but did not receive adequate supporting data.

- 24. Comment:** Can you tell a little bit about how you define downslope when determining requiring 35ft buffers/if there is an official definition of this.

**Response:** See response to Comment 21 above regarding buffer width. The Code of Federal Regulation doesn't define downslope or downgradient but does define a vegetated buffer as: a permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters. Practically speaking this buffer and setback will be required along the stretches of ditches or surface waters that receive runoff from fields as overland flow (be it concentrated or distributed) from a field where land application occurs. The NMP submitted with the application will have to clearly identify these



areas. If the program finds that some downslope ditches and surface waters have been omitted the NMP will need to be updated to include buffers on these areas.

- 25. Comment:** Is there a good distinction between the definitions of "ditch", "swale" "diversion" or a grass-lined waterway when the concern is nutrient runoff to surface waters (especially when all these features are frozen in midwinter or spring thaw)?

**Response:** The GP buffer and setback requirements do not distinguish between surface waters and conduits to surface waters that are downslope of nutrient application areas. For example, if a ditch or diversion is downslope of the nutrient application area and is a conduit to surface water, it will need to be protected by the same buffer as a surface water.

**NMP:**

- 26. Comment:** Recognize the fallibility of totally relying on the NMP as a regulatory tool. Farming is subject to nature and therefore events can occur that disrupt a cropping plan, sometime quite dramatically. Section B. Duty to Comply seems to state that the farm would need to adhere to the NMP or it would be grounds for enforcement. The language that was alluded to regarding flexibility does not come through here. What discretion would a farmer, in consultation with his TSP, be allowed to maintain some flexibility in reaction to prevailing weather circumstances?

**Response:** The NMP submitted at the time of application will identify which approach the planner has taken (Linear Approach or Narrative Approach) and this in turn will dictate which aspects of the NMP will become terms of the permit. In order to clarify this, we have added the phrase 'the terms of the NMP' to the language in the Duty to Comply section which now reads, 'The permittee shall comply with all terms and conditions of this permit, including the terms of the CAFO's site-specific NMP incorporated by the Secretary into their authorization to discharge'. We have also added 'the terms of' to Part IV(A)(4). This replaces previous language which stated that the entire NMP would be incorporated into the authorization.

The Narrative Rate and Linear approaches are explained in Appendix A of the draft GP. The Narrative Rate approach is the more flexible approach as it incorporates the methodologies by which the NMP is developed as terms of the permit. Under the Narrative Rate approach, the NMP terms of the permit would include Part IV (A)(1)(a-o) of the draft GP and the following:

- The maximum herd size;
- The maximum amount (pounds) of N and P generated, imported, and managed by the farm;
- The outcomes of the P-Index and Nitrogen Leaching Index for each field; and
- The crops to be planted in each field or any other uses such as pasture or fallow fields (including alternative crops identified in accordance with 40 CFR part 122.42(e)(5)(ii)(B)).



- The realistic yield goal for each crop or use identified for each field.
  - The nitrogen and phosphorus recommendations according to UVM guidance or from sources specified by the Director for each crop or use identified for each field.
  - The methodology by which the NMP accounts for the following factors when calculating the amounts of manure, litter, and process wastewater to be land applied:
    - Results of soil tests conducted in accordance with protocols identified in part IV (A)(1)(i) of the draft GP.
    - Credits for all nitrogen in the field that will be plant available.
    - The amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.
    - Accounting for all other additions of plant-available nitrogen and phosphorus to the field.
    - The form and source of manure, litter, and process wastewater.
    - The timing and method of land application.
    - Volatilization of nitrogen and mineralization of organic nitrogen.
    - Alternative crops that are not in the planned crop rotation but that are listed, by field, where the plan includes the realistic crop yield goals and the nitrogen and phosphorus recommendations for each such crop.

Under the Narrative Rate approach, the following projections in the NMP are not enforceable terms of the NMP:

- The planned crop rotations for each field for the period of permit coverage.
- The projected amount of manure, litter, or process wastewater to be applied.
- Projected credits for all nitrogen in the field that will be plant available.
- Accounting for all other additions of plant-available nitrogen and phosphorus to the field.
- The predicted form, source, and method of application of manure, litter, and process wastewater for each crop.
- Timing of application for each field, as far as it concerns the calculation of rates of application.

The table below provides a summary of the NMP components that are permit terms for both the Linear and Narrative Rate approaches.

NMP Components	Enforceable Permit Term – Linear Approach	Enforceable Permit Term – Narrative Rate Approach
Part IV (A)(1)(a-o) of the GP	X	X
Total herd size	X	X
Fields available for land application	X	X
Outcome of the P-Index and Nitrogen Leaching Index	X	X



Planned crops	X	X
Realistic crop yield goals	X	X
Total N and P recommendations per crop	X	X
Credits for plant available N	X	
Accounting for all other additions of plant available N and P	X	
Method and timing of land application	X	
Form and source of manure, litter, and process wastewater	X	
Maximum pounds of N and P from manure, litter, and process wastewater	X	
Methodology to account for the amount of N and P in manure to be applied	X	
Crop rotation	X	
Maximum amount of N and P from all sources		X
Alternative crops		X
Methodology to account for: - Soil test results - Credits for plant available N - Amount of N and P in manure, litter, and process wastewater to be applied - Accounting for all other additions of plant available N and P to the field - Form, source of manure, litter, and process wastewater - Timing and method of land application - Volatilization of N and mineralization of organic N		X

**27. Comment:** What changes to the NMP are considered ‘significant’? Which changes to the NMP would require that the NMP be noticed to the public again?



**Response:** Substantial changes require notice. Substantial changes include: the addition of new land; changes to the field specific maximum annual rates for land application (Linear Approach); changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop (Narrative Rate Approach); addition of a crop not included in the NMP at the time of application; and changes to the NMP that are likely to increase the risk of nitrogen and phosphorus transport to waters of the State.

Results of calculations made in accordance with the requirements of Subpart IV.(A) and Appendix A of the GP would not trigger submission of the NMP to ANR or be considered substantial changes.

**28. Comment:** Clarifying the annual reporting requirements making sure they consider the amount of nutrients, generated and managed, waste storage tests for each location, updated soil tests, reconciled P-index, for example.

**Response:** Part IV(A)(3) which describes the minimum annual reporting requirements, was revised to include 'reconciled P-Index'.

**29. Comment:** On page 8, E. Authorization to Discharge, it states that "the entire site-specific NMP shall be incorporated by reference". On the call with District partners, there was talk about when NMPs needed to be updated related to their permit, in other words, what would trigger a farm's need to file a new NMP version with their permit. Each new year? Every time farms updated fields or spreading allocations? I would like to recommend that some method besides providing printed copies of their plans is allowable. Perhaps farms can notify the program when they have a change and certify that their plan is updated but supply the plan when requested (not every time there is a change). I think that the printing of these plans over and over will contribute to excess paper use as well as provide a hurdle for farms interested in participating in the program.

**Response:** The NMP and application materials will be submitted to DEC digitally unless the farm specifically requests otherwise (for example, if they don't have access to a computer). See responses to comment 26 and comment 30 for additional details.

**30. Comment:** I am not certain what 'incorporated by reference' means exactly, perhaps it refers to the fact that you might not have the NMP in house at DEC, but it will still be part of the permit?

**Response:** The NMP submitted at the time of application can be a 'maximum plan' showing maximum herd numbers, nutrients, land base, runoff and leaching risk etc. As long as the farm is operating below those maximum levels, they shouldn't need to update their permit (due to NMP related items) or submit their NMP to DEC again. The NMP needs to be submitted to DEC during the application process. By incorporating that NMP by reference into the permit the herd numbers, nutrients, land, runoff risk etc. of that plan will become maximum



thresholds and permit conditions for that farm. If the farm anticipates changes that affect the 'maximum plan' (such as the management of new land, or increased herd) or if we document changes in exceedance of the 'maximum plan' through annual reporting or an inspection, an updated NMP will need to be submitted to DEC and noticed to the public. Please see Comment 26 for additional details on the NMP permit terms.

- 31. Comment:** On p.18 - in the chart, second section, there is reference to manure spreading records and "total N and P applied, including calculations." Can you please explain this. Is the total N and P based on manure sampling? What calculation? Perhaps this is provided in the NMP...?

**Response:** 'total N and P applied, including calculations' has been removed from the recordkeeping requirement since it is redundant with the annual reporting requirements.

- 32. Comment:** Discussions and some of the language hints at but I don't see it clearly laid out that an NMP will be submitted that is meant to represent multiple years of planning. Seems like the expectation is that an NMP is developed that would cover the farm for 5 years (+/-) and only substantial changes would need to be submitted annually. I fail to see a scenario where a plan can be developed that *won't* require annual updates to maximum spreading rates, if for no other reason, than the actual manure spreading activities and residual N within those fields cannot be truly anticipated 1, 2, 3 or more years out from the initial development of the NMP. If this is all that needs to be updated annually it's certainly a simplification of the planning process overall but it's a little unrealistic to think that we can know where manure will be spread, timing of spreading, and rates of spreading multiple years out from the actual activity. Not to mention how potential and planned yields may and will vary from the actual within given fields over multiple years.

**Response:** The NMP submitted at the time of application needs to project the entire permit period, and the NMP needs to be updated every year to reflect actual activities on the farm, recent manure samples, recent soil samples, etc. Whether the farm has chosen to develop the NMP using the Linear Approach or the Narrative Rate Approach will determine whether parts of these annual updates are changes to the terms of the NMP, and which are considered substantial changes (see comment 27).

The change noted in comment 32 has to do with maximum field-specific annual application rates, which is a term of the NMP when using the Linear Approach. 40 CFR 122.42 (e)(6)(iii)(B) states that substantial changes to the NMP include 'Any changes to the field-specific maximum annual rates for land application, as set forth in paragraphs (e)(5)(i) of this section (the Linear Approach), and to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop, as set forth in paragraph (e)(5)(ii) of this section (the Narrative Rate Approach)'. Example: If a farm is unable to apply manure to a given field in Year 3 as planned in the NMP, then the maximum field-specific annual rate for that field may increase



due to fewer nutrient credits available than planned for in Year 4. If the farm needs to increase the maximum annual rate for that field in order to meet the crop's needs in Year 4, and the NMP was developed using the Linear Approach, this would be considered a substantial change subject to part IV(5)(b) of the draft GP. However, if the farm's NMP was developed using the Narrative Rate Approach, changes to the annual rate will not be considered a substantial change so long as the maximum nutrient recommendation for that crop in that field is not exceeded considering all sources (manure, fertilizer, nutrient credits) and the application rate is calculated according to UVM guidance, the field-specific crop yield goal, etc. If the farm wants to increase the maximum nutrient recommendation for that crop in that field in order to account for an increased crop yield, this is a substantial change that will be subject to part IV(5)(b) of the draft GP.

Language clarifying that the field-specific maximum annual rate is associated with the Linear Approach, and the maximum amounts of N and P from all sources is specific to the Narrative Rate Approach has been added to the 'Changes to the NMP' section of the draft GP. Please see response to comment 26 for additional information on NMP terms of the permit.

**33. Comment:** Part III- Sec A, subsection 5g- if a farm has multiple facilities this means each one requires a rain gauge and its own set of records? Does distance apart affect this? For example, a main farm and heifer farm across the street from one another? Same separation of animal facilities but one mile apart from one another? 2 miles? Etc?

**Response:** Part III(A)(5)(g) has been updated to indicate that facilities located within a 2.5-mile radius may share a rain gauge and associated recordkeeping. This is based on the geospatial analysis used in the generation of the rainfall data in Appendix B. This analysis used 4-km grids, which are approximately 2.5 miles in extent. Facilities located more than 2.5 miles from another facility with a rain gauge will need to maintain a separate gauge and records. Rain gauges may be measured manually, or automated weather stations may be used.

**34. Comment:** Part III- Sec B, subsection 2- Why 2 inches? NY state for example has 4 inches as their limit in similar if not equal risk considerations; do you envision any particular way to record that soil was not frozen, ie, will a farmer's word that it wasn't be enough?

**Response:** This threshold is taken from the VT 590 standard; the farmer will have to document field conditions as part of recordkeeping and the CAFO Program will rely on that record keeping unless there is reason to believe it is inaccurate.

**35. Comment:** Part III- Sec B, subsection 2- Should qualify this as *surface applied* to frozen ground, "...April 1<sup>st</sup> of each year or *surface applied* on frozen, snow covered, or saturated ground..."



**Response:** The RAPs do not make an exception for the injection of manure during the winter spreading ban or to frozen, snow covered, or saturated ground. The draft GP mirrors this requirement.

**36. Comment:** Part IV- Sec A, subsection 1-i- Should read "...have a soil test less than two years old when developing the *initial* NMP." 590 calls for samples to be taken every 3 years so is your intention to shorten that window to once every other year?

**Response:** This section has been updated to include the word 'initial'.

**37. Comment:** Part IV- Sec A, subsection 5-cI- Clarification, if new land is included in another CAFO permitted farm's plan then it doesn't constitute a "Substantial" change? What if it's still on a regulated farm covered by an individual permit and overseen by the agency of ag?

**Response:** Because of the difference in public notice requirements between the two agencies, adding land that was formerly managed by a permitted LFO will still be considered a significant change.

**38. Comment:** Appendix A- So if I understand this right:

- the first method is expressed in lbs of available N and P for a given field and crop on that field, showing a farm the maximum level of both N and P they can apply within each growing year for the crop planned on that field
- the second method is expressed in terms of gallons or tons per field or acre of each source of manure the farm can apply within a growing year to a field given a specific crop on that field.
- Is this based on *Crop* year or *calendar* year?
- Subsection 2-I- Field specific determination of soil N levels are not a realistically achievable goal. There are very few, time consuming, and temporal methods for determining these levels and to require them on all fields all years is infeasible. Many farms use field relativity methods, a sample from a group of fields planted similarly, with similar soil types, and/or spread the same gives a relative idea but there is still no reliable method for determining N levels within soils.

**Response:** Soil N testing requirement has been removed. Please see the responses to comment 32 and 26 above for discussion of the linear and narrative rate approach.

#### **Storage:**

**39. Comment:** Part III- Sec A, Subsection 1.a.II- Why the storage period of 11/1 to 4/30? Why not 12/15-4/1? Or 12/1-4/1?



**Response:** This storage period is greater than Vermont's winter spreading ban in order to align with the 180-day storage requirement for MFOs and LFOs. The dates of the storage period are for sizing purposes of waste storage facilities but do not restrict when nutrients may be applied, which is regulated by other parts of the draft permit and the RAPs.

- 40. Comment:** Appendix B- Are the rest of the years' data available and do we assume correctly that it should be used along with the 6 months currently presented?

**Response:** The remaining data has been added to Appendix B.

- 41. Comment:** What funding will be available to farms? When designing a new pit will NRCS pay for additional storage required for CAFO or would the farm need to pay for the difference.

**Response:** Farms covered under the CAFO GP will be eligible to apply to the same cost-share programs as they are eligible to apply for under the MFO GP. Ranking of projects will continue to be in the control of the organizations administering the cost-share. The CAFO Program's understanding from conversations with NRCS is that funding will be available to comply with the storage requirements since NRCS needs to accommodate state regulations. Further, NRCS has independently updated their precipitation data in order to improve pit sizing, and the NRCS Waste Storage Facility standard (Practice Standard Code #313) encourages NRCS to design for more than 180 days and up to 270 days of storage. The Program has confirmed that NRCS can use the precipitation data specified in the permit with their existing waste storage facility sizing calculator.

- 42. Comment:** If we truly want to say as an industry that we want to minimize risk of discharges and/or underutilized field applied nutrients we need more storage than 180 days.

**Response:** Storage above the 180 days required in the permit is encouraged and may be funded by NRCS (up to 270 days). The CAFO GP's increased storage requirements due to updated precipitation data is an important step forward, and the CAFO Program will continue to encourage farms to further increase their margin of safety through manure management or by obtaining additional storage to ensure application of nutrients at the most agronomically advantageous time.

- 43. Comment:** To document manure pit status I think sending a cell phone picture would be good. We can measure it using a gauge but gauges don't account for frozen mounds of manure. Sampling discharges is a good idea but a cell phone picture would be good too in an emergency.

**Response:** The CAFO Program will establish the minimum monitoring requirements on a form and post to the CAFO website for use by permittees in documenting their weekly inspections. Alternatively, the



permittee may develop their own form that collects the same information as that required on the Department's form. Table IV. A. Record Keeping and Reporting Requirements has been revised to state that documentation shall be on a form provided by the Secretary or developed by the permittee.

- 44. Comment:** How do we get a response within 24 hours when our problem occurs on Christmas Day when that day falls on a Friday? Or any Friday or Saturday night?

**Response:** During certain times of year, CAFO Program staff will monitor their phones over the weekends and on holidays but ultimately the monitoring and reporting requirements were written to start communication before an emergency occurs. If a farm has tried to contact ANR they are in compliance with the 'reporting' conditions of their permit even if ANR has not responded. The farm should document and keep a record of their attempts to reach ANR, through phone calls and email, in order to demonstrate compliance with the monitoring requirements.

- 45. Comment:** Part VII- Emergency Level- should read "...and the runoff from the 25 year, 24-hour precipitation event from the facility's drainage area *already directed to storage facilities.*" The way it reads currently makes it sound like the farm has to have emergency storage levels reserved for what would fall onto the storage itself as well as *anything* that would drain off the facility *anywhere*. This would be prohibitive for useable storage facilities so my language tries to address what I think you were going for, 25 year storm event rainfall on the storage and on areas that drain into the storage.

**Response:** The definition has been updated to read '...and the runoff from the 25-year, 24-hour precipitation event from the waste storage facility's drainage area'.

#### **Agrichemical:**

- 46. Comment:** What kind of private domestic well water testing is needed near fields that have historically been the corn winter rye rotation when the use of herbicides has occurred for more than 10 yrs running? (within 100meters of any manure application for instance).

**Response:** The Required Agricultural Practices prohibit manure or other agricultural waste application within 100 feet of a private water supply or 200 feet of a public water supply. Well water testing through the Agency of Agriculture is available to individuals who live in proximity to agricultural land, this testing includes pesticide degradants. AAFM can advise further on when testing is recommended.

- 47. Comment:** Table IV- page 19- identify all "chemicals" used or stored is extremely broad and vague. Does this mean those applied only to fields? To cows? Used in the washing system between milkings? All of the above?  
Any *potentially* used chemicals, for instance an insecticide that may not be





needed one year but is the next and not stored on the farm? What happens if the custom sprayer uses a different formulation or different product entirely but it has the same effect?

**Response:** 40 CFR 122.42 (e)(1)(v) requires that ‘the nutrient management plan must, to the extent applicable; ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants.’ Because this language is reflected in subparts III. (A)(5)(c) and IV. (A)(1)(g) of the GP, the recordkeeping requirement was removed from Table IV.

**48. Comment:** What type of insight does EPA and the VT DEC have in the persistence of pharmaceuticals in manures that have been stored and field applied in liquid form?

**Response:** VT DEC does not regulate the use of veterinarian pharmaceuticals on CAFOs or evaluate the persistence of pharmaceuticals in manure that is stored, or land applied.

