[Your farm name and address here]

[Date]

RE: Comments on General Permit MNG440000 Animal Feedlot Permit

To Whom It May Concern:

We write in response to several concerns with the proposed 2021-2026 NPDES Permit. The permit should make the following changes before approval.

1. Cover crops should not be required for September manure applications. While cover crops continue in adoption, we do not yet have systems in place to ensure they lead to the outcomes desired.
   1. A 2005 Literature Review done by the MPCA showed that manure improves soil tilth and reduces runoff. If these are the outcomes desired of cover crops, manure application may be achieving this already (Water Quality/Feedlots 1.08, January 2005).
   2. Technology developed over the next five years will likely tell us how and when cover crops can be helpful for reducing soil erosion and better water quality.
   3. The current proposal does not consider corn silage roots plus stalks or alfalfa may still be covering the soil and holding it with manure.
   4. Adding requirements in September and October limits the days in which manure can be applied, and could create worse consequences in the spring. Also, see concern #6.
2. Direct injection should be added as a Best Management Practice. With rapid adoption of direct injected manure, MPCA has never recognized it as a Best Management Practice despite its known benefits. Direct injection:
   1. Limits soil compaction.
   2. Preserves more soil organic matter and soil structure.
   3. Allows for application to growing crops and can be similar to no-till in results.
   4. Reduces rick of P runoff and particulate P loss is reduced.
   5. Reduced N volatization loss, resulting in retention of plant-available N.
   6. Reduced odor issues.
3. Proposed October Best Management Practices are not practical. Fall weather is difficult to predict, with October being one of the most variable in range from year-to-year. The use of the proposed BMPs may result in manure being applied in worse conditions in November or later. For these reasons we would suggest not implementing these October BMPs. If BMPs in October must be followed:
   1. 50o F is not a magic number, but a recommendation or suggestion. Below 60o F maybe just as beneficial to the environment but much more flexible to farmers.
   2. Direct injection should be added as BMP.
   3. The suggested required cover crop BMP should be planted, not “established.”
4. Winter applications should follow field conditions, not the calendar. The University of Minnesota’s Research and Outreach Centers in Lamberton, Morris, and Waseca collectively have data showing the soil temperature above 33 o F at (at least) one of the centers in 2017-2020 (data at 2” and 8” at Morris, and 2”, 6”, and 8” at Lamberton and Waseca):
   1. February 1 and 2
   2. February 21-24
   3. March 9
   4. March 13-31

This means in the previous four years, 24 days of the two months had an appropriate soil temperature for manure application somewhere in Minnesota. This does not count local conditions, which can vary significantly. In many cases, solid manure application requires just one or two days to keep animals’ areas clean and keep animals healthy. Prohibiting two calendar months such as February or March would likely result in more winter applications in January and April, when conditions may not be as ideal for manure application.

1. Minnesota Agriculture Water Quality Certification Program enrollees should have assurance. The MAWQCP farms should have assurance that their already agreed to BMPs fit within the framework of this proposal.
2. Allowing manure storage beyond 14 months would help achieve some of these BMPs. One limitation in Minnesota guidance is a 14-month limit on manure storage, even when producers aim to have up to 24-months for flexibility and to obtain more BMPs. With our current 14-month limit enforced by MPCA, our manure application windows become emergencies, driving up the cost of application and hours required by applicators to apply manure in an effective manner.

[Your Name]