Summary of Comments Received in Response to the Animal Feedlots Rule Request for Comments (R-04928)

Minnesota Pollution Control Agency

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Contents

Acronyms and abbreviations

AU – Animal Unit

BMP – Best Management Practice

CAFO – Concentrated Animal Feeding Operation

CFO – County Feedlot Officer

CFR – Code of Federal Regulations

DWSMA – Drinking Water Supply Management Area

EAW – Environmental Assessment Worksheet

EIS – Environmental Impact Statement

EQB – Environmental Quality Board

EPA – Environmental Protection Agency

GHG – Greenhouse Gases

LMSA – Liquid Manure Storage Area

MDA – Minnesota Department of Agriculture

MDH – Minnesota Department of Health

MMP – Manure Management Plan

MPCA – Minnesota Pollution Control Agency

MRTN – Maximum Return to Nitrogen

NPDES – National Pollution Discharge Elimination System

OAH – Office of Administrative Hearings

PM – Particulate Matter

RFC – Request for Comments

SDS – State Disposal System

SONAR – Statement of Need and Reasonableness

SWCD – Soil and Water Conservation District

U of M – University of Minnesota

USDA – United Stated Department of Agriculture

WRAPS – Watershed Restoration and Protection Strategy

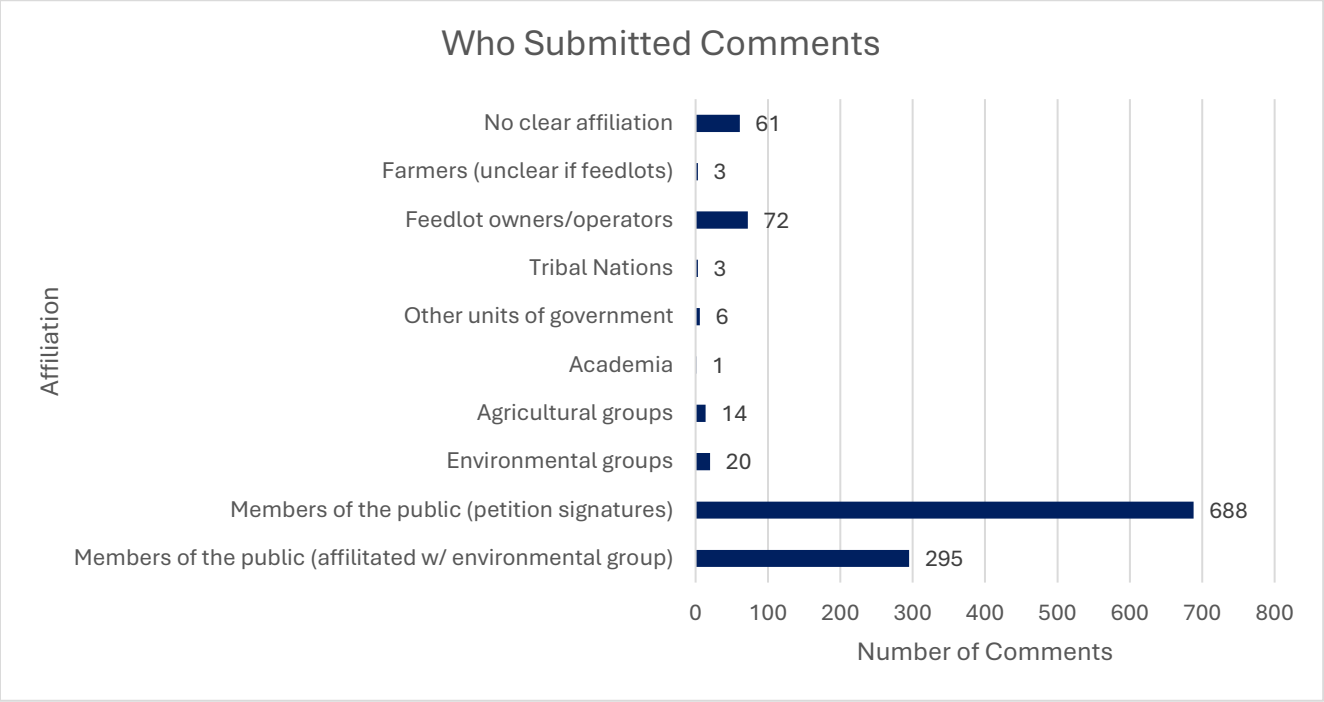
Overview

The Minnesota Pollution Control Agency (MPCA) published a Request for Comments (RFC) in the Minnesota *State Register* on March 24, 2025. Comments were received via the Office of Administrative Hearing's (OAH's)[1] eComments website and U.S. mail to OAH attn: William Moore. The MPCA did not accept comments via email due to the agency's firewall, however, OAH did accept some attachments via email. The comment period closed at 4:30 pm on July 22, 2025.

This document does not reflect the MPCA's stance on any of the concepts introduced and the comments submitted during the RFC period. This document is only intended to provide an overview and summary of the comments received in response to the agency's RFC.

475 comments and 688 petition signatures were received for a total of 7,495 pages of comments and attachments.

Figure 1. This chart depicts who submitted comments in response to the RFC.



[1] *AH's name was changed in a 2025 session law effective August 1, 2025 after the close of this rule's comment period. They are now known as the Court of Administrative Hearings (CAH).*

Summary of comments

In developing the Animal Feedlot Rule, the MPCA posed nine questions in the RFC to guide comments and feedback on the rulemaking. The comments that were received in response to these RFC questions and other general comments that were received are summarized below. The MPCA has not vetted the claims made by commenters cited in this document for truth or accuracy.

1. Are there parts of the current rule (Minn. R. Ch. 7020) that are no longer applicable or needed?

One commenter stated that some existing provisions such as Open Lot Agreements are now outdated and recommended that these provisions should be re-evaluated for relevance. The commenter also noted that the rule requires a certified letter for Liquid Manure Storage Area (LMSA) closure where alternative methods such as digital reporting may be more efficient.

One commenter stated that they, "support the need to update the rules to remove irrelevant wording and include the use of electronic systems for registrations, permitting, and manure management plans."

One commenter stated that the rule includes some outdated references such as "SW-A permits" which no longer serve a practical purpose. This commenter also suggested that the requirement to update feedlot registrations every four years may create confusion as the registration updates are shifted to digital systems, and recommended the MPCA re-evaluate this fixed four-year registration update cycle. Another commenter requested that duplicative paperwork that replicates NPDES reporting for small or non-NPDES sites be removed from the rule.

One commenter stated that under part 7020.2002, the requirement for feedlot operators to notify the commissioner or County Feedlot Officer (CFO) should be removed and exempted from ambient air quality standards.

One commenter proposed that the public notice requirements under part 7020.0202 subp. 4 item D and part 7020.2000 subp. 4 be removed as they provide no measurable benefit and are redundant. The commenter also stated that mandating newspaper notices or mailed letters under these parts contradicts the agency's intent to modernize and streamline permitting through electronic systems.

2. What specific changes to the current rules, including permit requirements (part 7020.0405), water quality discharge standards (part 7020.2003), location restrictions and expansion limitations (part 7020.2005), liquid manure storage area standards (part 7020.2100), or land application of manure (part 7020.2225) would provide improved regulations that prevent nitrate contamination to ground and surface waters and fish kills? Should any of the following bullets be considered? If so, at what size (in AU)?

Several commenters stated that the permittee should be the food industry sponsor, parent company, or contracted company owner rather than the feedlot owner/operator. These commenters stated that these companies externalize costs and liabilities by putting it on landowners and the public.

Several commenters stated that the MPCA should require and enforce "no discharge" requirements for all size feedlots. One commenter similarly stated that the MPCA should prohibit discharges from production/land application areas that may pollute and limit the use of groundwater as a potable water supply.

Several commenters stated that manure should be required to be composted.

One commenter stated that the MPCA should release a database of feedlots to allow for research on their impacts and stated that all feedlots should be registered regardless of size (in AU).

One commenter stated that controlling leachate is critical, and leachate from compost contains similar pollutants as liquid manure as well as elevated risks that pathogens will infiltrate groundwater.

One commenter suggested that under part 7020.3000 subp. 1, "Expand the definition of feedlots to include areas that state agencies and departments, including the MN DNR, County and local jurisdictions and municipalities, develop, either intentionally or by accident, that attract and concentrate wildlife, at levels that are not natural, where the wildlife concentration causes animal waste accumulation and concentration to negatively affect public and private lands and waters and the quiet use and enjoyment of said lands and waters and where such wildlife activities are such that vegetative cover cannot be maintained where the wildlife have been attracted."

One commenter stated, "under the description of the protection method please describe the differences of floodplain, special protection area. It would clarify the requirements."

One commenter stated that Minn. R. Ch. 7020 should clarify that a new feedlot must be located a minimum of 1,000 ft. from a public water supply well located in a vulnerable DWSMA.

One commenter stated that feedlots with 10 AU or more in a vulnerable DWSMA should be required to register. The commenter also stated that the language regarding the use of an interim permit to correct feedlot pollution in a vulnerable DWSMA should be clarified.

Several commenters stated that there should be no changes made, stating that the current rules are reasonable, effective, and easy to understand and follow.

Several commenters stated that the MPCA should not make changes to the AUs in the rule based on weights or genders of livestock or poultry.

Another commenter similarly stated that the EPA's use of animal head counts and animal units used in neighboring states are inconsistent with the MPCA. The commenter recommended that the MPCA should convene a working group to compare definitions and calculations and determine the best approach.

Another commenter similarly stated that they opposed increasing any of the animal unit values (such as increasing a dairy cow AU from 1.4 to 1.6). The commenter went on to state that this could place farms over the 1,000 AU threshold requiring an NPDES permit, and they would face a cost of compliance without additional income to cover the expense.

Several commenters cautioned that changes to AUs has the potential to effect local zoning, cost-share eligibility, manure management, land application, NPDES/SDS permitting requirements, and soil manure testing requirement thresholds that could have large impacts.

One commenter stated that the rule changes should include regulations for feed storage.

Another commenter stated that feed storage runoff is a minor source of nutrient runoff, and any upgrades will not increase revenue for the farm.

One commenter requested greater clarity around the definition of "intermittent streams" in part 7020.2225. The commenter stated, "it would be beneficial to limit this restriction to intermittent streams that exhibit a defined channel or channelized flow at the time of land application. Currently, some intermittent streams identified on maps may no longer exist or have been significantly altered since the maps were created."

Another commenter agreed that intermittent streams should not include those that are farmed through and support agricultural crop production.

One commenter stated that they would support a regulation that requires all manure to be incorporated within 24 hours of land application.

A. Operating permits (NPDES or SDS) for feedlots less than 1,000 AUs.

Proposed recommendations for the size (in AU) for which this regulation should apply varied, with some commenters requesting that operating permits be required for feedlots with 100, 250, 300, 500, or 600

or more AUs. Some of these recommendations were dependent on whether the feedlot was located in a vulnerable groundwater area or karst region.

Several commenters cited concerns that feedlots operate just below the 1,000 AU threshold (i.e. 999 AU) in order to avoid permitting fees and stricter regulations under the NPDES and SDS permits.

One commenter recommended that the MPCA should require NPDES permits as opposed to SDS permits for feedlots that meet the EPA's Medium CAFO thresholds (40 CFR 122.23).

One commenter stated that neighbors and community members should be notified of a proposed feedlot operation in their township or watershed before the permitting process has proceeded far enough that the MPCA has a vested interest in the project moving forward.

Several commenters stated that increased permitting is an undue burden that would only increase paperwork while not directly resulting in decreased pollution. Concerns over the cost of the permit itself and the cost of compliance were also raised.

Several commenters requested that the threshold for a feedlot needing an operating permit be increased to reflect the large number of AUs needed for a feedlot to remain economically viable. One commenter suggested that the threshold for requiring an operating permit be raised by at least 500 AUs (to 1,500 AUs), "with an automatic annual adjustment based on inflation or USDA cost indexes".

One commenter noted that if the threshold is lowered, feedlot owners will have to choose to either expand operations to cover the costs incurred or cease operations.

One commenter stated that while they do not think the 1,000 AU threshold for operating permits should be lowered, they do think that there needs to be consistency in how all sizes of feedlots and municipalities that have the potential to discharge are regulated.

One commenter noted that a feedlot with less than 1,000 AUs can already choose to apply for an NPDES permit if they want to which offers them civil protections.

One commenter expressed concern that lowering the operating permit threshold would move feedlots from the CFO's jurisdiction to the MPCA's. This commenter stated that utilizing CFOs allows the local offices to monitor regional changes more closely and reduces the burden on the MPCA.

One commenter expressed concern that if any size (in AU) farm is considered a feedlot, there will be costly annual registration.

One commenter stated that no matter what threshold the MPCA sets for permitting, there will always be facilities designed to stay just under that threshold to require a permit.

B. Submittal of manure management plans and land application records for feedlots without operating permits.

The recommended threshold for which these requirements should apply varied. While some commenters stated that these requirements should apply to feedlots of all sizes regardless of whether they have an operating permit or use a commercial applicator, others recommended a threshold of 300 or more AU.

Several commenters requested that the data be made available to the public and uploaded to a new MMP mapping tool.

Several commenters stated that further inspections and follow-up by the agency are needed to determine whether the MMP or land application records are being followed.

One commenter recommended that steep fines be imposed for failure to submit an MMP.

One commenter requested that nutrient management plans consider all sources of nitrogen, not just those from manure or synthetic fertilizers.

One commenter stated that MMPs should be required for feedlots with more than 300 AU and must be submitted through the online Nutrient Management Tool. The commenter also stated that feedlots from out of State that apply manure in Minnesota must also submit these records, and the information from the online tool should be publicly available.

Several commenters stated that they already keep some form of records and do not believe it necessary or reasonable to submit those records to the agency.

One commenter stated that part 7020.2225 subp. 4 item A already grants the MPCA and CFOs the authority to request a feedlot's MMP. The commenter went on to state that subp. 5 requires feedlots over 300 AUs to keep records of manure application for a six-year timeframe, and the same requirement applies to feedlots with 100 AUs or more in drinking water supply management areas (DWSMAs) with vulnerable aquifers. The commenter stated that mandating the submission of these records to the agency would increase administrative costs, increase staff workload, and slow targeted enforcement.

One commenter stated that requiring the submission of MMPs and land application records was proprietary business information and would constitute a breach of privacy.

C. Monitoring of feedlots and land application sites for subsurface discharges of manure or nitrate to groundwater.

Several commenters requested monitoring at the feedlot itself, at land application sites, and at drain tiles to identify both point and nonpoint sources of pollution. Some also requested monitoring of discharges into surface waters.

The proposed size (in AU) for which this regulation should apply varied, with some commenters stating that all feedlots should monitor groundwater, while others requested monitoring only for NPDES/SDS permitted feedlots.

Several suggested that groundwater monitoring should depend on whether the feedlot is located in a karst or non-karst region, with different AU thresholds depending on the feedlot's location.

Several commenters also requested that baseline ground and surface water assessments should occur before a feedlot is permitted, with ongoing monitoring required to compare back to the baseline levels to monitor for nitrates, phosphorus, pesticides, fungicides, pharmaceuticals, and fecal coliform.

Several commenters stated that feedlots that show elevated levels of any sampling baselines should be required to upgrade or install additional liners in their manure storage areas, be charged fines, or have their permits rescinded.

Several commenters suggested that feedlots should have to submit a water monitoring/protection plan when they apply for a permit.

One commenter stated that underground monitoring for subsurface discharges should be based on the requirements of a Subsurface Discharge Monitoring Plan.

One commenter noted that in order to verify that discharge from feedlots is not occurring under part 7020.2003, the MPCA should require monthly monitoring of ground and surface water for every feedlot and land application site and make this information publicly available.

One commenter suggested that each feedlot likely has a slightly different microbial profile in their animals' manure that may be used to determine the source of pollution.

One commenter noted that the safe level of nitrates in drinking water was set at 10 mg/L in 1962 and asked whether this standard was still backed by current science.

One commenter provided a specific request that any storage of manure in a lagoon, pit, or tank, "with capacities over 5000 gallons individually, or cumulatively within ¼ mile shall be required to have ground water monitoring plan approved by the MPCA".

One commenter suggested that groundwater monitoring also be extended to improperly abandoned wells, landfills, and septic tanks.

Several commenters stated that if regulations are imposed, the agency should consider the age of the groundwater and only consider samples from compliant and up-to-date wells.

Several commenters noted that septic systems in rural areas, wells with eroded casings, and municipal sewage ponds/sludge could be contributing to groundwater discharges.

One commenter urged the MPCA to work with local Soil and Water Conservation Districts (SWCDs) for historical groundwater testing information prior to any rule changes.

One commenter noted that lakes in the Twin Cities area have been closed as a result of E. coli contamination, however, there are no feedlots located near those areas and feedlots are often blamed for such contaminations.

One commenter stated that they are required to test well water on irrigated fields as part of their MMP, and, "I have found the nitrogen levels well below EPA standards with most close to zero."

One commenter pointed out that in the MPCA's response to comments on the draft NPDES/SDS permits, the MPCA asserted that it would be unreasonable to require groundwater monitoring of every field in Minnesota and outlined the challenges of water-quality monitoring near feedlots.

D. Additional restrictions on manure application rates.

Several commenters stated that agronomic rates should be customized for particular soil and geological features that focus on sensitivity to nutrient loss rather than maximizing crop yield. Similarly, one commenter stated that the MPCA should replace the agronomic approach to land application rates with a pollution reduction approach.

Several commenters stated that manure application rates should not be allowed to exceed agronomic rates in vulnerable groundwater areas.

One commenter stated that the U of M's maximum return to nitrogen (MRTN) values are not designed to protect water quality.

One commenter similarly stated that the MPCA should reduce application rates to the rates recommended by the U of M with no deviations or use of rates from contiguous states allowed.

One commenter stated that manure is manure and nitrogen is nitrogen regardless of the type of animal it comes from or the form it is stored in, and if waters are being polluted by nutrients from manure then the solution is to decrease nutrient loading.

One commenter stated that the MPCA should decrease the current allowable quantity of manure land applied.

Several commenters stated that the current rules limiting nutrient application according to realistic nitrogen use rates on crops are adequate.

Several commenters stated that farmers should be allowed to use their own crop data from previous year averages to calculate manure application rates because U of M recommendations do not always reflect reality.

One commenter stated that the current corn on corn nitrogen allowances in the rule are inadequate.

One commenter stated that nitrate requirements should be regionalized.

One commenter stated that the U of M Extension is now recommending rates of 210 lbs. of nitrogen per acre and the commenter thought that depending on the situation this may not be sufficient. The commenter went on to state that farmers do not want to overapply nitrogen and waste money, but there is an economic and yield curve that they are trying to achieve.

One commenter similarly stated that the MPCA's regulations rely on average application rates and yields, but "average" performance risks economic failure for farmers, and application rates should not be averaged across the entire State because it encourages farmers to overapply to meet high yield targets in low yield areas and penalizes other farmers in high yield areas.

One commenter stated that the MPCA should adopt nitrogen use efficiency (NUE) metrics using tools like the U of M's nitrogen rate trials, regional yield data, and the Nature Study's finding to guide manure application rates. The commenter also noted that other states like Iowa and North Dakota adjust nitrogen rates based on soil tests and crop needs.

One commenter stated that the RFC listed increased reliance on commercial application of manure including the use of manure pipeline/hoses to move liquid manure further from the point of origin under "Change in Livestock and Poultry Production Techniques and Practices". The commenter stated that they believe this is a good thing because fields adjacent to feedlots get a lot of manure, so the use of manure pipelines/hoses allows farmers to utilize fields that are farther from the feedlot site that have historically received less manure.

One commenter stated that precision agriculture allows farmers to apply manure at prescribed rates according to soil samples.

One commenter stated that application rates should be guided by crop nutrient needs and actual yield results rather than modeled economic assumptions.

One commenter stated that the agency should adopt a tiered nitrogen rate based on county level yield averages, soil productivity zones, and other data sources specific to the region.

One commenter similarly stated that the U of M's recommendations are based on MRTN which they do not believe is best suited for the entire State and recommended that application rates be based off field-specific data.

One commenter similarly stated that the MPCA should accommodate the entire range of nitrogen recommendations published by the U of M and not arbitrarily select a value within that range. The commenter went on to state that a range of available nitrogen within 10 to 15% of recommendations should be considered compliant. The commenter also stated that the ability to apply remedial applications as guided by the university "Supplemental N needs worksheet" should remain in rule (Part 7020.2225 subpart 3, item A, subitem (2)).

One commenter stated that rather than setting application rates in rule, the permits should address land application rates based on soil and manure tests.

One commenter stated that the current requirements are adequate but specifically pointed out in reference to part 7020.2225 subp. 3, item A, subitem (1), that deviations to the U of M's recommendations are allowed for recommendations from another land grant college in a contiguous State, but the commenter noted that the current recordkeeping forms and MPCA's online tool do not allow for deviations from U of M. The commenter stated that this provision should remain in rule, but that the recordkeeping tools should be updated to accommodate this exception.

One commenter stated that for organic farms, they only apply manure and do not utilize commercial fertilizer or other chemicals. A restriction on nitrogen application rates would be problematic because only 75% of N is available to plants the first year, so restricted rates would result in smaller crops. The commenter noted that the U of M has updated their recommendation for N to 210 lbs/acre.

E. Soil nitrate tests prior to land application of manure.

Several commenters requested that this requirement be specific to counties that are identified as hotspots for nitrogen overload, including Cass, Carlton, Morrison, Martin, Winona, Hubbard, Rock, Clearwater, and Stearns counties.

One commenter stated that phosphorus soil testing should also be required.

One commenter noted that feedlots with 300 or more AU are currently only required to test and report soil phosphorus levels and stated that this requirement should be expanded to include nitrogen as well.

Several commenters stated that they already perform some degree of manure and soil testing prior to land applying manure.

Several commenters, while generally opposed to additional regulations, did suggest that the agency give serious consideration to requiring annual manure nutrient testing for every registered feedlot in the State regardless of size. One of these commenters noted that this could benefit farms by not underapplying nutrients in addition to possibly overapplying.

One commenter stated that the rules already require soil nitrate testing when a MMP is required.

F. Increased setback distance for land application of manure near sensitive features.

Recommendations for what those setbacks should be varied among those commenting, but some of the specific setbacks cited included:

- Karst features, sinkholes, or other direct conduits to groundwater: 300 ft. upslope or 100 ft. downslope
- Public waterways or tributaries: 50 ft./300 ft. upslope
- Trout streams, springs, seeps, or tributary to a trout stream: 300 ft.
- Trout streams on land with slope of six degrees or more: 1,000 ft.
- Private wells: 250 ft.
- Community wells: 1,000 ft.
- Sensitive features: More than 300 ft.

Several commenters recommended that setbacks be determined on a case-by-case basis because of varying site characteristics such as slope, ground cover, and soil types.

One commenter stated that the feedlot rule should be revised to required at least a 100-foot setback to sensitive features including water supply wells, sinkholes, mines, or quarries in accordance with federal feedlot rules for CAFOs. The commenter also noted that Wisconsin requires even more restrictive setbacks in areas of shallow bedrock.

One commenter recommended that well setbacks should be updated to align with the Minnesota Department of Health's (MDH's) setbacks to eliminate confusion and streamline compliance.

One commenter noted that an increase in tiled agricultural land has create a point-source that conveys pollution to streams and groundwater.

One commenter stated, "I am wondering why vegetative buffers are 100 feet for lakes, but 50 feet for streams. It seems that they may be backwards, why not have them the same. Especially in the steep valleys of the driftless area."

Several commenters stated that the current setbacks are adequate, and they currently observe those setbacks when land applying manure.

Several commenters stated that buffer strips (as required by the "Buffer Law" under Minn. Stat. § 103F.48) should be included in the setback. One such commenter stated that increasing setbacks without crediting existing compliance would be duplicative and inequitable.

Several commenters expressed concern that increased setback requirements could render some fields ineligible for manure application which could result in an increased use of commercial fertilizer.

Several commenters stated that modern technology such as precision agriculture, variable rate application, and GPS mapping of sensitive features and soil tests allows them to avoid overapplication of manure and avoid sensitive areas altogether.

One commenter stated that the rule already provides reasonable restrictions and listed those already included in the rule:

- Part 7020.2225 subp. 4 item D subitem (9): “a MMP must include protective measures for application of manure in special protection areas and floodplains.”
- Part 7020.2225 subp. 7 item B: “requires all manure applied within 300 feet of open tile intakes to be injected or incorporated within 24 hours of application, or other agency-approved practices that demonstrate equal water quality protection.”
- Part 7020.2225 sub. 8: “prohibits manure application within 50 feet of wells, sinkholes, mines, and quarries. Manure applied within 300 feet of a sinkhole without diversions must be injected or incorporated within 24 hours of application. “

One commenter recommended that the agency introduce tiered setbacks based on application timing and soil conditions.

One commenter requested that the agency recognize and incentivize direct-injection and dragline systems by allowing extended application windows and reduced setbacks.

One commenter stated that the current setbacks are confusing and inconsistently enforced across counties.

G. Restricting land application of manure in areas with high levels of nitrate in waters or in areas with existing high densities of feedlot operations.

Several commenters recommended restricting application rates in vulnerable areas such as those with karst geology and sandy soils.

Several commenters cited concerns over health issues caused by high nitrates in groundwater including cancer and birth defects.

Several commenters stated that land application in these areas should be prohibited until remedial actions are successful in reducing nitrate levels.

One commenter stated that they are alarmed by policies that continue to allow more application of nitrogen than crops can use.

One commenter stated that such restrictions should also apply to vulnerable groundwater protection areas, DWSMAs, recreation areas, and protected wildlife and nature preserves.

One commenter stated that there should be more stringent land application requirements in areas with vulnerable groundwater along with mandated cover crops.

One commenter stated that limiting manure application would not necessarily reduce nitrogen in the watershed but rather, it would shift the nutrient source elsewhere and increase costs for farmers. The commenter also stated that restricting manure application based on feedlot density would result in more manure being hauled/transferred or more nitrogen fertilizer would be used in place of manure.

One commenter stated that in their MMP, feedlots are already required to include protective measures for land application in DWSMAs with vulnerable aquifers and to soils within three feet of limestone bedrock.

One commenter stated that it is burdensome to differentiate vulnerable acres from non-vulnerable acres when looking at maps. The comment also questioned the accuracy of such maps, stating, “looking at the map there are "random" small acres of fields all over our area that are listed as vulnerable surrounded

by 1000s or acres that are not listed." The commenter also stated that we need to protect the karst regions.

3. The State Disposal System (SDS) and National Pollutant Discharge Elimination System (NPDES) feedlot general permits apply to feedlots that currently have capacity, or are proposing to have capacity, for a total of 1,000 or more AUs (part 7020.0405). These permits include additional requirements as outlined in the following bullets. Should any of these requirements or other requirements in the permits be incorporated into the rule to apply to facilities with less than 1,000 AU capacity?

One commenter stated that the MPCA should incorporate all of the recent updates to the NPDES permit requirements to all size feedlots.

One commenter stated that the MPCA should, "Include similar cover crop / perennial requirements, application timing in the fall and manure application restrictions defined for Vulnerable DWSMAs, surface water DWSMAs, and vulnerable groundwater areas for feedlots between 300 and 1000 animal units similar to the language included in the revised NPDES General Permit for feedlots over 1,000 animal units."

One commenter stated that no SDS permits should be allowed because SDS permits assume that feedlot discharge would provide a benefit to water or living organisms.

One commenter stated that the MPCA should add the following provisions to part 7020.0505 subp. 4:

> A. Require the identification of all Class 2A waters (per MPCA rule), designated trout streams (per DNR rule), tributaries of Class 2A waters and designated trout streams, and springs and groundwater seeps that flow into these waters on land where manure will or may be applied and locations where any land within 100' of these water resources where slope exceeds 6%.
>
> B. Identify any land proposed for manure applications where manure is already being applied from another source, and identify the source and amount
>
> C. Identify the number and locations of all sinkholes on the property where manure will be applied"

One commenter noted that, "changes to the land application rules such as limiting the amount, timing, setbacks, and location will influence storage needs for existing and new facilities."

One commenter stated that feedlot risk should not be based on feedlot size in animal units, but rather their animal unit to contracted acres for manure application ratio. The commenter stated that land application regulations should be outcome-based according to soil temperature, crop uptake stage, and risk modeling, not fixed calendar dates.

One commenter asked why they need to do a permit modification to add a field to their MMP to apply manure on it.

One commenter stated that everyone should be "on a level playing field (under 300 AU, 300 to 1,000 AU, NPDES sites, and municipalities)" otherwise the different groups will always blame each other.

A. Enhanced manure management planning and record keeping requirements for transferred manure.

Several commenters stated that anyone who purchases or accepts manure from the feedlot should follow the feedlot's MMP.

Several commenters requested that the MPCA eliminate occurrences of "field sharing" by multiple feedlots or "self-transfers" of manure from the feedlot owner to themselves to avoid record keeping requirements.

Several commenters recommended that those receiving transferred manure from a feedlot should have to report to the MPCA or delegated county, the amount, location, and date of manure application.

One commenter stated that CAFOs are often sited on only a few acres of land but then enter into "manure easement agreements" to spread their manure on nearby fields without having to disclose any information about the manure transferred.

One commenter stated that field sharing occurs without the MPCA or public knowing, but requiring additional records such as land ownership and manure recipient disclosures for transferred manure would increase transparency and ensure that field sharing is not occurring in Minnesota. The commenter recommended that the MPCA consider Michigan's requirements.

Several commenters did agree that transferred manure should be managed according to the feedlot source's MMP but expressed concern over the legality of regulating a recipient of manure. Some commenters were also concerned that the feedlot owner would be held liable if the transferee does not follow the feedlot's MMP.

Several commenters stated that if a non-livestock farmer purchases the manure, they should be responsible for their own MMP.

Several commenters also stated that increased recordkeeping for transferred manure would devalue manure and push the use of synthetic fertilizers instead or could lead to overapplication on some acres.

One commenter stated that the MPCA has not provided evidence that transferring manure ownership increases environmental risk.

One commenter stated that additional recordkeeping may discourage the transfer of manure where, "the MPCA should be encouraging the transfer of manure to as wide a geography as is practical to move manure to acres that need the nutrients".

One commenter noted that if manure recipients begin turning down transferred manure because of the additional recordkeeping requirements, it will require feedlots to have more on-site manure storage which comes at a cost.

One commenter stated that the neighbor taking their manure does not want their field fertility and yield information to be made public, and expressed concern that enhanced MMP may require online reporting in which case the neighbor may need to hire someone to complete that reporting.

B. Visual inspections of manure land application fields for signs of discharges.

One commenter stated that the rules should require monitoring for surface discharges at feedlot production and land application areas.

One commenter stated that field audits under Minn. Stat. §103H.151, subd. 4 should be mandatory for all feedlots and agricultural operations.

One commenter asked who would do visual inspections and asked if the State can hire people to drive around and watch manure be spread.

C. Additional best management practices for land application of manure during the months of September through November.

Several commenters submitted general comments supporting best management practices for fall applications of manure.

One commenter stated that the rules should require cover crops or diversified crop rotations if manure is land applied in the fall.

Several commenters voiced concerns that fall application of manure may be limited under the new rules, and stated that many farmers hire companies to land apply their manure in the fall, so they are at the

mercy of their manure hauler and they need this time to haul otherwise they would either run out of storage capacity for their manure or incur a large cost to upgrade to nine months of storage.

One commenter stated that they operate an organic farm, and they want their commercial applicator to land apply manure when it is colder, so restricting land application of manure during this time would shrink the window of opportunity for application and force them to land apply in early to mid-December when the ground is too frozen to incorporate. The commenter stated that this would be ineffective both for the environment and the effectiveness of their nitrogen utilization, but their only alternative would be to purchase their own equipment to land apply manure which would not be affordable for their small farm operation.

Several commenters provided similar concerns that fall harvest, weather, and manure storage capacity already limits the window to land apply manure in the fall, and they need fall application for timely nutrient placement, preserving soil structure, reducing spring workload, tillage and incorporating to reduce runoff risk, nutrient stabilization, and freeze-thaw cycles that help alleviate compaction.

Several commenters stated that should fall land application of manure be restricted, spring application is less desirable because it is a time of increased rain events and will result in more field runoff, increased soil compaction, decreased seedbed qualities, reduced planting timeliness, reduced acres planted, reduced crop evenness, , decreased crop yields, limitations on custom manure applicator availability (labor shortages), and spring road restrictions may limit transport capacity and result in more trips, fuel use, and increase wear and tear on rural roads.

One commenter stated that they rely on split applications in both the spring and fall.

One commenter also noted that while dragline hoses are a useful tool to overcome these barriers, they are not universally applicable.

One commenter stated that any new requirements that shorten this window for land application will result in the need for winter application which is counterproductive to proper nutrient management.

D. Restricting land application of manure on frozen or snow-covered fields.

Several commenters stated that liquid manure application to frozen or snow-covered fields should be restricted.

Several commenters stated that application of manure in the winter should be prohibited whether the manure is wet or dry.

One commenter stated that the existing rules fail to consider snow, freeze, and melt conditions that increase winter runoff.

One commenter stated that, “Animal feedlots should be treated essentially as a kind of industrial point-source for pollution; and spreading manure on fields, particularly in winter, should be considered a form of discharge and be regulated and monitored accordingly.”

One commenter stated, “We acknowledge that this may require additional public cost-share for enhanced manure storage for some smaller facilities.”

Several commenters stated that small feedlots will be most affected by these regulations because they do not have adequate manure storage facilities like large CAFOs. These commenters also stated that such regulations could push small feedlots out of business unless funding is made available to improve their manure storage facilities.

Several commenters noted that less winter application is occurring in the State compared to in the past.

One commenter stated that such regulations would hurt small feedlots, but did note that the rules could regulate land application in the winter to avoid sensitive areas.

Several commenters provided specific scenarios in which land application of manure on frozen or snow-covered fields is critical for their feedlot operations:

- One commenter stated that they own and operate a small farm and they need to be able to haul manure every day.
- One commenter said that they finish applying manure around Thanksgiving every year, and though they try to finish before the ground is frozen, they sometimes have to incorporate through a few inches of frost. The commenter stated that applying in the fall or on half-frozen ground is better than it would be to let the barn overflow because it allows the manure to be spread on fields instead of becoming a point source of pollution from the feedlot.
- One commenter stated that their young livestock are housed on manure packs, and as the packs thaw, they release ammonia into the sheds. The sheds then need to be cleaned out monthly starting at the end of January, otherwise the animals may develop pneumonia. This commenter cited several implications for restricting winter manure application including the cost of manure storage facilities for small feedlots, dairy and cattle farmers going out of business, the loss of hay and pasture ground to corn and soybeans as a result, and if manure must be applied in a wet spring; increased soil compaction.
- One commenter similarly stated that land application of manure on frozen or snow-covered fields should be allowed for bedding pack because it is best for animal welfare.
- One commenter similarly stated that hauling pen pack/semi-solid manure during the winter months is critical for animal husbandry to keep animals clean and dry to prevent illness.
- One commenter similarly stated that when the temperatures warm to above 32 degrees F, the manure pack warms and can cause respiratory infections in animals and the easiest way to avoid having to use drugs to treat the infections is to clean the barns and land apply the manure to the fields.
- One commenter stated that no farmer wants to spread manure in the winter, but some farms may not be able to store manure for long enough periods of time to get through the frozen months. The commenter recommended that the MPCA work with feedlot owners/operators to identify times throughout the winter when manure application presents little risk to water quality.
- One commenter stated that prohibiting manure application in March would force farmers to wait until April which would compress manure application and spring planting into a narrow window that may result in missed opportunities to apply manure in ideal conditions simply because of the calendar date.
- One commenter stated that a ban on winter hauling of manure is not an option because mixtures of manure and snow cannot be stockpiled easily due to winter melt that then freezes to the ground again and becomes difficult to manage.
- Another commenter similarly requested more research on not applying manure in March, stating that the manure scraped from open lots in late winter months is mixed with snow making application rates less than normal fall application. The commenter suggested that the MPCA consider a March manure application permit that could be applied for annually that would allow feedlots to land apply manure in March on a case-by-case basis.
- One commenter stated that weather and calendar-related regulations result in costly storage, labor, and loopholes such as using commercial fertilizer, and went on to state that expanding these regulations to smaller feedlots would be, “devastating, impractical and only minimally environmentally beneficial in some areas of the state”.
- One commenter stated they are not in favor of applying manure on frozen ground, but when soil temps are right and conditions are workable, fall application is the most responsible choice. The

commenter also stated that winter application bans should be based on slope and method of application rather than broad assumptions.

- One commenter noted that small farms lack the storage capacity and/or the equipment needed to eliminate winter spreading. They noted that the U of M Extension recommends that when winter manure application can't be avoided, manure should be applied, "at the lowest necessary rate, on fields with flat slopes, in accordance with all applicable setbacks including waterways, and avoided before a significant snowmelt event."
- One commenter stated that in certain areas of the State, like the bluff regions of SE Minnesota, they are facing labor shortages, aging operators, and difficult terrain, so the transition from winter manure hauling to long-term storage would be challenging to implement.
- One commenter stated that by chiseling the field in winter and land applying 3-4,000 gallons per acre, the snow melts into the chiseling and there is little runoff.

E. Best management practices for land application of manure when there is a high probability of rain predicted.

Several commenters submitted general comments supporting best management practices for land application of manure when there is a high probability of rain predicted.

One commenter recommended manure application be prohibited "within 24 hours of a previous of forecasted rainfall (50 percent or greater chance of precipitation according to National Weather Service)."

Several commenters stated that weather reports are not a reliable source to determine when a rain event is going to occur, and that weather forecasting is not advanced enough to base the rules upon it.

Several commenters stated that when soil is fully saturated, farmers can't land apply manure anyways because their equipment will get stuck in the field and/or their soil will be compacted by equipment.

One commenter stated that they already use common sense practices to avoid runoff such as not applying to saturated fields and timing applications to avoid heavy rainfall.

One commenter stated that the MPCA should work with Minnesota Department of Agriculture (MDA) to increase awareness and assist farmers in utilizing the MDA's weather network and other tools that promote best management practices.

4. How should the MPCA address existing animal manure storage areas that have been used for a long period of time to determine structural integrity (part 7020.2100)?

Several commenters stated that permittees should have to demonstrate that their structures meet design requirements with soil samples.

Several commenters stated that all animal feedlots should have modern liner systems, in some cases double liners (i.e. both concrete and synthetic liners for LMSAs or double liners for manure stockpiles in use for 120 days or more) and leak detection, and the rules should not assume that concrete or compacted soils containing manure will prevent seepage or discharge.

One commenter stated that the standards for new manure storage areas are inadequate as current engineering design standards allow manure storage pits and lagoons to leak at up to 500 gal/acre/day.

Another commenter similarly stated that the rules permit pollutants to seep from lagoons at a rate of 1/56 (0.018) inches per day.

One commenter stated that the MPCA should require all existing LMSAs in vulnerable groundwater areas to install composite double synthetic liners with leak detection.

One commenter suggested that the MPCA develop practical inspection standards to determine the structural integrity of aging manure storage areas.

Several commenters expressed concerns over the cost to upgrade an aging manure storage area in order to maintain compliance with new regulations.

Several commenters recommended that feedlots looking to upgrade their aging manure storage areas should be given priority for cost share funding.

Several commenters provided a variety of comments on the longevity of manure storage areas, many cautioning what constitutes "a long period of time" and suggesting that structural integrity is often based on the operation and maintenance of storage structures; one commenter stated that they recently cleaned out a 38-year-old manure pit that showed no signs of cracking, and another commenter stated that they were informed by their CFO that manure pits are designed to last at least 2 barn cycles, and assuming barns are good for 40 years, wouldn't be suspect until 80 years of use.

One commenter stated that Minnesota is already more restrictive than national baselines by imposing seepage rates, liner thickness, engineer-stamped design plans, construction notifications, in-process inspections, and engineered certification reports.

One commenter stated that inspecting aging manure pits would be infeasible as they are never truly empty, whereas another commenter stated that LMSAs for feedlots over 300 AUs are already being inspected for compliance and if no violations are reported then that is evidence that they are functioning.

One commenter also cited a potential for a bottleneck with an increase in demand for engineers, contractors, and inspectors that could survey, design, construct, install, and certify new manure storage areas.

One commenter stated that any changes to regulations regarding the structural integrity of aging manure storage areas should be applied statewide to city and rural septic systems as well.

One commenter stated that the MPCA should, "remove or streamline provisions that presuppose large engineered systems for all facilities; clarify that site design elements built to prior code remain grandfathered unless a demonstrated discharge risk exists". The commenter also recommended that the MPCA use a risk-screen matrix to make such determinations by considering the age of the structure, design, proximity to water, liner type, any documented leakage, and storage duration.

5. Currently, feedlots with 1,000 AUs or more are required to have 9 months manure storage capacity (part 7020.2100). Should smaller sites be required to have a similar requirement? If so, at what size (in AU)?

The proposed size (in AU) for which this regulation should apply varied. One commenter stated that this regulation should apply to all feedlots with 100 or more AUs. Another commenter stated that new or expanding feedlots between 300 and 1,000 AUs located within a vulnerable DWSMA, vulnerable groundwater area, or surface water DWSMA should be required to have nine months of manure storage capacity.

Several commenters stated that LMSAs should be made up of cells not to exceed 250,000 gallons, and the placement of such structures should consider joints and fractures in karst features, not just sinkholes themselves.

Several commenters stated that all manure storage areas should have secondary containment and covers to prevent overflows.

One commenter suggested that storage should be sufficient to ensure that capacity is not exceeded when manure cannot be applied due to frozen or saturated soil conditions.

Several commenters cited concerns regarding the cost of manure storage and the debt that would be incurred, stating that feedlots under 1,000 AUs will not receive a return on investment, and such requirements will contribute to feedlot consolidation and the increase in feedlots over 1,000 AUs.

Several commenters stated that a blanket requirement for nine months of manure storage may not align with how some feedlots choose to manage manure, and recommended instead that the MPCA allow options such as solid manure systems/short-term stockpiling, seasonal cleanouts, shared/co-op storages, incremental expansions supported by cost share, or daily hauling, "all of which can be low-risk if managed properly."

One commenter stated that funding must be made available for feedlots under 1,000 AUs to afford building manure storage areas.

One commenter cautioned that narrowed windows for land application of manure would contribute to the need for additional manure storage at feedlots.

One commenter stated that if LMSAs are required, there will be a bottleneck for labor and custom pumping.

One commenter stated that manure composted on the ground rather than an impervious surface works better, faster, and will result in less runoff. The commenter stated that research has shown that composting manure does not lead to contamination of the ground under the compost site or the ground where any rainwater flows.

6. The MPCA has developed Watershed Restoration and Protection Strategy (WRAPS) documents for every one of Minnesota's 80 major watersheds. These WRAPS document high nutrient and bacteria levels in streams and rivers. The reports attribute this to livestock access to streams in many cases. How should the rules be amended to address this documented issue (part 7020.2015)?

Several commenters stated that livestock access should be restricted by fencing out such features. The proposed size (in AU) for which this regulation should apply varied. Some commenters stated that livestock access to streams should be restricted for feedlots with 100 or more AU for designated trout streams or tributaries and 300 or more AUs for all other waters of the State.

Several comments stated that livestock access to streams should be restricted for all feedlots regardless of size (in AU). One such commenter stated that at a minimum, livestock from medium and large feedlots should be prohibited from entering waters of the State.

One commenter stated that livestock access to streams should be restricted for feedlots with 300 or more AUs if any of the waters are impaired due to excess nutrients or bacteria.

One commenter stated that the MPCA must make greater effort to determine the sources of pollution that are causing fish kills.

Several commenters stated that feedlots are not the source of fish kills, and many fish kills result from large rain events which are unpredictable and cannot be regulated.

Several commenters stated that the WRAPS are misleading as they do not explicitly mention feedlot runoff, but rather livestock access via pastureland while noting that pastures are exempt from Minn. R. Ch. 7020.

Several commenters asked that the MPCA maintain its exemptions for pastures in the rules.

Several commenters recommended that rather than imposing additional regulations, the MPCA should encourage site-specific exclusions, managed access systems, the use of voluntary programs, and best management practices for fencing and watering livestock on pasture.

One commenter expressed concern that regulations would prohibit their livestock on pasture from accessing an unnamed stream. The commenter stated that the stream in their pasture stretches for several miles so it would be expensive to fence out, and their livestock depend on access to the stream for a source of water.

Another commenter similarly stated that without access to streams, a large cost in new fencing and drilling a well would be incurred.

One commenter stated that flocks of geese and other fowl may contribute to high nutrients and bacteria in streams and rivers.

One commenter asked how the MPCA can justify fish kills as an impetus for rule changes if the 2024 "Preventing fish kills in Minnesota's driftless region" only cites 4 fish kill events related to agriculture since 2015.

One commenter stated that the WRAPS should be used to guide each region and their local ordinances rather than a statewide rule. The commenter also stated that this would allow flexibility for each region to implement regulations specific to their region.

7. How should the MPCA address feedlots under the same ownership in close proximity to each other? How far apart must each feedlot be located in order to be considered a separate facility for the purposes of permitting and/or registration (parts 7020.0405 and 7020.0350)?

Several commenters expressed concern that feedlots were avoiding permit requirements by splitting feedlots that functionally operated as one site. Some also cited concerns over the cumulative effect of these feedlots. The recommended distance at which feedlots under common ownership would need to be in order to be considered separate facilities varied.

One commenter recommended that all feedlots within a 3-mile radius should be treated as a single operation for the purposes of permitting and environmental review thresholds.

Another commenter similarly stated that multiple feedlots should be considered a single feedlot for the purpose of permitting when they have common ownership, including ownership by entities that share some common owners, and are located withing three miles of each other or share a common manure storage area.

One commenter recommended that all feedlots under common ownership within the same county be considered a single operation, or within 25 miles but an adjacent county.

One commenter suggested that the MPCA, "create a calculation tool that utilizes a facility's proposed animal unit size to calculate a radial distance for how far away it must be from another barn under the same ownership structure... Our suggestion would be to make the distance per animal unit in this calculation five feet and three inches for every animal unit."

One commenter noted that "separate facilities" should be based on operational and physical separation rather than only a distance threshold that the commenter stated was not consistently applied.

One commenter also stated that the definition of an "owner" should be expanded to include owners of an anaerobic digester if the digester is not located on the same site to ensure that all feedlot and/or digester owners are responsible for compliance.

One commenter stated that they should be considered separate facilities at any distance greater than 300 ft.

Several commenters stated that it should not matter who owns the feedlots as long as the sites are operated in compliance.

Several commenters expressed concern over complex family ownership structures and the possibility that feedlots in close proximity that are owned by the same families may be required to apply for operating permits if a distance threshold was imposed.

Several commenters stated that if the feedlots are located on parcels with different property tax identification numbers or different addresses, then they should be treated as separate feedlots.

Several commenters also stated that the financial stressors of having to apply for an operating permit to bring multiple sites under one permit and/or the cost to comply with permit conditions may cause feedlot owners/operators to quit.

Several commenters also pointed out the benefits of farmers owning multiple feedlot sites as it may result in a reduction of the concentration of manure and allow them to spread their manure over more acres.

One commenter recommended that the MPCA use the existing federal standard under 40 CFR 122.23 (b)(2) which states, "Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes."

One commenter stated that instead of imposing a "mileage test", the MPCA should consider operational conditions such as, "Are manure systems integrated? Are animals managed as a single herd? Is storage shared?"

One commenter proposed that the MPCA leave this decision up to each county.

8. State agencies are required to, whenever feasible, develop rules that are not overly prescriptive and inflexible, and rules that emphasize achievement of the MPCA's regulatory objectives while allowing maximum flexibility to regulated parties and to the MPCA in meeting those objectives (Minn. Stat. § 14.002). How might the MPCA balance this need for flexibility for regulated parties while also addressing the issues of nitrate contamination and fish kills?

Several commenters were in support of regulatory flexibility in the enforcement of the feedlot rules by providing multiple compliance options or regulations dependent on landscape, topography, soils, ground cover, or the State's surface and groundwater vulnerabilities.

One commenter stated that no flexibility to the rules should be allowed.

One commenter noted that different soil types and underlying geological formations have different capacities to retain or leach nutrients and a single agronomic rate does not account for this vast variability.

One commenter similarly stated that manure and fertilizer applications need to be customized to reduce nutrient loss given the soil and geological context for a specific feedlot.

One commenter stated that in addition to regulation the agency should be providing incentives for feedlot owners/operators to find region-specific alternatives.

One commenter stated that permitted livestock and poultry operations should be required by rule to, "submit site-specific designs that take into account the unique natural or humanely altered features of a proposed feedlots and accompanying manure application locations."

Several commenters generally agreed that a "one-size-fits-all" approach to the rules would not provide the necessary flexibility to regulated parties and stated that the rules should be specific to different geographical areas depending on soils, topography, land uses, areas of sensitivity, watersheds, or climate.

Several commenters stated that any changes to the rule should be based on sound science and the experiences of industry experts. These commenters also asked that the rules be easy to understand and follow and provide options for compliance.

Several commenters also asked the agency to incentivize voluntary and best management practices and support cost-share opportunities.

One commenter stated that the rules should not require the need to hire outside consultants.

One commenter stated that this approach to regionalize the rules would also support regionalization and local control through counties and SWCD offices that have specific knowledge of their area of the State.

One specific comment recommended that the agency consider waiving permit application fees for compliant operators, crediting advanced technologies, and providing options for producers to choose from based on soils, crop rotations, and weather.

One commenter requested that the proposed changes allow for phased implementation and flexible timelines for feedlot owners/operators to adapt to the new requirements.

Several commenters requested flexibility in specific applications including:

- Several commenters stated that turkey manure is dry and does not pose the same risk as liquid manure, so different manure types should not be regulated in a "one-size-fits-all" approach.
- One commenter stated that manure types, whether liquid, bedded pack, or compost are treated the same in the current rules, but there are differences in nutrient availability to plants and the potential for nutrient loss through runoff or leaching.
- One commenter stated that flexibility in the reporting format is essential because some producers do not have access to broadband internet, or the technical skills needed to complete digital submissions.
- One commenter suggested that the MPCA use the Minnesota Department of Transportation's, "Seasonal Load Limit Zone Boundary Descriptions" to determine regional or zoned areas for land application of manure regulations. These boundaries consider frost and thaw dates as well as soil profiles across the state of Minnesota.
- One commenter asked that the MPCA review surrounding states' regulations for setbacks and application rates that represent realistic yield goals for different areas of the State.
- One commenter stated that they would like to maintain the flexibility that is currently in rule for when, where, and how to apply manure in an environmentally sensitive and economically feasible way.

9. Other questions or comments relating to the existing animal feedlot rules or this proposal to amend the rules.

A. Comments regarding the delegated county feedlot program.

Several commenters requested review of the MPCA delegated county program. One commenter similarly stated that there are reports of political influence in delegated counties leading to lack of enforcement and oversight.

Several commenters stated that the MPCA should revoke or rescind the delegated authority where a county regularly fails to perform its duties or does so poorly.

Several commenters requested additional funding, training, technology, and other resources to support the delegated feedlot counties.

One commenter stated that the MPCA should eliminate the option to delegate county level permit oversight and should return that oversight to the MPCA.

One commenter stated that the MPCA should prohibit local County and township officials from signing or allowing manure easements for factory farm operators.

One commenter stated that the MPCA should require annual reporting be submitted by delegated counties, and the MPCA should review/audit these.

B. Comments regarding citizen complaints, MPCA inspections, and enforcement.

One commenter stated that the MPCA needs to “bump up” enforcement that includes spot checks in addition to quick response to complaints.

One commenter stated that the MPCA should increase inspections of feedlots over 500 AUs.

One commenter stated that the MPCA should implement regulations that are outcome-oriented to reduce the need for exemptions from specific practices.

One commenter stated that, “Citizens with complaints of fields that look like lakes after manure has been applied should not just be dismissed when they call the hotline. They should be listened too and action taken by the MPCA.”

One commenter stated that the MPCA should already be inspecting facilities; not only when they are sold.

One commenter stated that MPCA onsite visits should be limited to emergencies for bio-security reasons, and having MPCA staff and vehicles on site is a liability for both partes. The commenter suggested that visits could be completed with the producer and any MPCA-approved technology.

C. Comments regarding the prohibition of feedlots.

Several commenters stated that the MPCA should establish maximum limits on the size of any single feedlot and a maximum limit on the number of animal units in any local area or watershed to control the density of feedlots. Some of these commenters also stated that the MPCA should use a cumulative spatial approach to determine cumulative effects/impacts of feedlots by watershed.

Several commenters stated that the MPCA should restrict feedlot construction and/or manure application in DWSMAs and other vulnerable groundwater areas.

Several commenters stated that the MPCA should prohibit all new or expanded feedlots in karst or central sands regions.

One commenter stated that a moratorium on permitting new feedlots should be instituted for HUC 12 watersheds that are already saturated with feedlots. This commenter also stated that feedlot expansion or construction should be prohibited in sensitive groundwater areas near trout streams without stringent environmental review.

One commenter stated that the MPCA should cap AU size at a feedlot to 600 AUs or less.

One commenter stated that there should be a statewide cap of 1,000 AUs per feedlot. Another commenter stated that the cap should be set at 1,500 AUs.

One commenter stated that the MPCA should not permit any manure storage pits or holdings tanks that would not be located on the same site where the manure is produced. The commenter also stated that the MPCA should not permit manure storage near a quarry that is or may be actively dynamiting.

Another commenter similarly stated that manure should be stored near the manure source so that neighbors are not subject to lowered property values, reduction of quality of life, and polluted wells and surface water.

One commenter suggested a moratorium on permitting for all large feedlots until the State can find a way to support smaller farms.

Another commenter similarly stated that a moratorium could incentivize research and investment in manure processing technologies to convert waste into valuable products that reduce land application and mitigate pollution risks.

One commenter stated that current rules do not restrict the location of feedlots except prohibiting them in shoreland. The commenter stated that the rules regulating feedlot location need to be site-specific

rather than “cookie-cutter” and should take into account hydrology, slope, depth to bedrock/impervious surface, soil composition, or inter-connectivity to waterways.

D. Comments regarding new information, research, and understanding of agriculture and the environment.

Several commenters requested that the MPCA create a manure mapping tool that includes information about anaerobic digesters and land application plans and is available to the public to increase understanding of where manure application is happening throughout the State. One commenter noted that if this has already been done with crop acres, it can be done with manure application acres as well.

One commenter stated that there is some research hinting that lower levels of nitrate below 10 mg/L should be implemented, as prostate cancer risks increase with minimally elevated nitrates in drinking water. The commenter also stated that instances of prostate and other cancers in southwest Minnesota are elevated.

One commenter stated that elevated nitrogen levels have been shown to cause cancer and neurological defects in infants. The commenter also stated that 25% of the Gulf’s dead zone is estimated to come from manure.

One commenter provided references to research on manure application and water quality, including the health effects of high nitrate levels in surface and groundwaters.

One commenter requested that the MPCA perform health risk assessments and drinking water safety plans with a focus on each township, DWSMA, and watershed.

Several commenters stated that the MPCA should put more resources into research and determining the source of nitrate pollution before introducing additional restrictions.

Several commenters stated that technology advancements are helping Minnesota farmers be more efficient with variable rate applications, nitrogen stabilizers, and others.

Several commenters requested more research and data on water issues and fish kills and how they have been linked to feedlots if the source of nitrates is not identifiable. One of these commenters noted that research has not identified if municipalities are to blame and stated that to suggest a rule change is premature.

Several commenters stated that if the MPCA has clear data and research showing that feedlot-related pollution is on the rise, it should be shared publicly, because from what they have seen and according to the newest University research, water quality has improved. One commenter noted that if the agency provided this research, it would allow feedlot operators to review it for applicability and give the agency relevant feedback.

One commenter noted that the MPCA refers to the Nutrient Reduction Strategy in the RFC but questioned whether this was the 2014 version or the proposed update to be released sometime in 2025. The commenter recommended that the MPCA use the 2025 update to the Nutrient Reduction Strategy if the MPCA intends to use it as a guiding document during the rule development process.

One commenter stated that the U of M should be researching availability of nitrogen from manure applications rather than cover crops.

E. Comments regarding environmental assessments and risk assessments.

Several commenters stated that new or expanding feedlots in karst sensitive regions should have to undergo a Karst Vulnerability Assessment use techniques such as advanced remote sensing, geophysical surveys, detailed drilling, and dye tracing to map the actual pathways of water flow to the aquifer.

One commenter noted that Environmental Assessment Worksheets (EAWs) are currently required for feedlots proposed over 1,000 AUs outside of sensitive areas, or over 500 AUs in sensitive areas. The

commenter stated that they recommend requiring EAWs for feedlots over 500 AUs outside of sensitive areas and over 250 AUs in sensitive areas so that moderate-size operations in sensitive areas are thoroughly assessed for risks.

Another commenter similarly stated that environmental assessments should be required for new or expanding feedlots with 500 AUs or more, but stated that all new or expanding feedlots in sensitive areas such as shorelands, floodplains, karst regions, central sand plains, and shallow overutilized aquifers in northwestern Minnesota should be required to complete an environmental assessment.

One commenter stated that permitted feedlots should be required to create a risk-assessment plan for manure storage areas and land application sites to monitor for above-ground discharges, and that such plans should incorporate climate risk including extreme weather events.

One commenter noted that the Environmental Quality Board (EQB) recently amended the EAW form for feedlots, and it requires GHG emissions to be quantified and disclosed. The commenter stated that the MPCA should incorporate similar requirements to ensure consistency and allow the MPCA to apply the same standards to ongoing sources of pollution.

One commenter stated that "mega feedlots" should trigger a more rigorous permitting process including cumulative impact assessments and an Environmental Impact Statement (EIS) rather than an EAW.

Another commenter similarly stated that an EIS should be required for any feedlot application for 1,500 AUs or more. The commenter also stated that environmental assessments should have more emphasis and be required before the permitting process to allow adequate public input.

F. Comments regarding costs.

Several commenters introduced a "polluter pays" principle that if a private business causes harm to public resources or private property such as odor, nuisance, or land values, the polluter should bear the cost of remediation and compensation.

One commenter stated that although rule changes may cost feedlot operators, the public should demand this as water significantly affects the health of those who come into contact with it.

Another commenter similarly stated that consideration should be given to the cost of health care if groundwater is not regulated.

One commenter stated that a cost-benefit analysis is essential to assess the financial impact on producers and the availability of cost-share support.

One commenter stated that the true cost of adopting a weak rule that does not proactively prevent nitrate pollution will be remediating polluted aquifers and restoring degraded surface waters.

One commenter stated that the MPCA should increase funding for manure storage and management grants to animal feedlots with less than 600 AUs along with increasing funding to the MPCA to add staff to manage and enforce permits for feedlots with more than 600 AUs.

One commenter stated that feedlots are disproportionately located in low-income rural communities leading to environmental justice concerns. The commenter went on to state that externalized costs of current practices must be recognized, including environmental degradation, public health crisis, and the need for water treatment systems in affected communities.

Another commenter similarly stated that, "Research has shown that many of these communities located near large animal feedlots bear the undue burdens of poor environmental quality, poor health and poor economic conditions and that this is experienced disproportionately more by communities of color, low socioeconomic status and vulnerable populations. We highlight this point as the MPCA has highlighted its commitment to environmental justice in decision-making. We urge the agency to consider this lens

and the disproportionate impacts that revisions to the animal feedlot rules may have on already burdened communities in Minnesota."

One commenter noted that precise nutrient management may be perceived as a burden, but it can reduce costs over time by preventing the waste of expensive fertilizers.

One commenter stated that fishing, which can be impacted by feedlots, brings in an estimated 2.4 billion dollars a year to State coffers.

One commenter stated that CAFOs should pay for the enforcement of the standards set for storage and disposal of manure.

Several commenters stated that they have made upgrades and capital investments in their farms to become compliant with the feedlot rules. One commenter stated that every change in regulation that comes with a financial burden impacts their ability to stay viable.

Several commenters similarly stated that the capital cost of additional manure storage is burdensome on the farmer and the industry, potentially leading to feedlot closures that will affect the State's economy.

Several commenters stated that if the State creates too many barriers to their livestock operations, they will be forced to convert highly erodible pasture and hay ground into row crop production.

One commenter requested more information from the MPCA on the probable costs of complying with any new rules.

One commenter noted that the increase in costs may not only include equipment and infrastructure updates, but also increase time and resources needed to manage and document compliance.

One commenter stated that not only will new rules increase costs for small operations, especially in the northwest region, but there will also be an increase in costs for the agency to administer the feedlot program.

One commenter stated that although cost sharing is available for manure storage structure, the cost of a project doubles when it is a government cost share project due to the extra documentation and time required.

One commenter stated that the economic viability of farms must be considered for any changes to chapter 7020 because poorly though-out rules could incur burdensome expenses on farms while favoring the use of chemical fertilizers over manure.

One commenter stated that the increase in size of livestock operations is due to the economy of scale and size needed to make them competitive as costs increase.

One commenter stated that as rules drive up the cost of compliance, farms may close, and counties face unfunded mandates and declining tax bases. The commenter asked that the MPCA include fiscal notes that reflect community impacts.

One commenter stated that revisions that may increase costs with little environmental benefit should be avoided, and all proposed rule changes should be subject to financial analysis.

One commenter requested that the current 500 AU cap be adjusted to allow affected producers to access financial assistance for feedlots regardless of size.

One commenter stated that manure pads and LMSAs will cost 2 – 4 million dollars per dairy farm. The commenter also stated that they priced and LMSA for their farm in 2007 for 555 cows with 7 months of storage at $800,000. The commenter also stated that in 2017, each dairy cow returned $7,000 to the local economy and the loss of dairy farms affects the economic health of communities.

One commenter stated that the University of Wisconsin Madison has done studies that show the annual economic impact of one dairy cow on the local community is more than $30,000 per cow due to feed

mills, repair shops, tractor dealerships, veterinary clinics, banks, schools, milk truck drivers, custom harvest crews, etc. The commenter also stated that the regulatory environment in Minnesota does not allow farms to grow in size, but Minnesota's dairy farms must compete with Kansas and Texas dairy farms that house 20,000+ cows.

One commenter stated that increased regulations will increase the costs for the agency to implement additional outreach, assistance, education, inspections, and likely enforcement. The commenter stated that the MPCA will need to identify additional funding for both the State and county staff, and counties that are minimally funded barely receive enough to currently administer the program.

One commenter stated that the MPCA should increase funding to SWCDs, Natural Resources Conservation Service (NRCS), and Technical Service Providers (TSPs).

G. Comments regarding cover crops and BMPs.

One commenter stated that BMPs should be made more stringent, documented, mandatory, and site-specific. The commenter went on to state that the factors to be considered should include climate conditions, soil type, and drainage system design.

One commenter stated that fields should keep a continuous cover to promote soil health.

One commenter stated that the MPCA should require the use of cover crops but also should perform on-site assessments to consult with farmers and feedlot owners/operators about their use of BMPs and provide recommendations on improvements and changes that will prevent water quality impacts.

One commenter stated that the MPCA should promote cover crops, pastureland and hay fields, and more livestock onto the land.

One commenter stated that certification in the Minnesota Agricultural Water Quality Certification Program (MAWQCP) should be mandatory along with documentation of BMPs for runoff and infiltration.

One commenter stated that the MPCA should consider additional protections in vulnerable groundwater areas, the southeastern kart region, the central sands region, and DWSMAs, and these protections could include cover crops, diversified crop rotations, and strict limits on manure and fertilizer applications.

Several commenters stated that cover crops are not the right solution for everyone, and they often come with a large expense and limited return on investment in addition to decreased yields.

Several commenters similarly stated that they apply manure in the fall, so cover crops seeded in late fall will probably not establish.

Several commenters identified that flexibility and a variety of BMP options should be offered. Some stated that these should be promoted and encouraged but not required. One commenter noted that it will take time to see changes in water quality because of the time it takes water to move through soil and also noted that not all of these BMP options will work every year.

Several commenters cited specific BMPs that are already being implemented including cover crops, vertical tillage, crop rotation, nitrogen stabilizers, nitrification inhibitors, apply to soils below 50 degrees, buffers, minimum-till, no-till, strip tilling and incorporating manure into strips, flow meters, scales, the use of GPS on application equipment, and composting manure.

One commenter noted that a neighbor seeded a cover crop last year but it never germinated due to lack of moisture in the fall.

One commenter stated that they have been doing cover crops for a few years, but it requires more nitrogen early in the year, and the non-cover crop field has a higher yield than the cover crop field. The commenter also noted that it costs $40 to $50 an acre to plant and later kill the cover crop when it's time for spring planting.

One commenter stated that they use cover crops when it makes sense, but don't believe that they should be required to plant them if there isn't going to be sufficient time for them to grow just so they can maintain compliance.

One commenter stated that they use reduced tillage methods but are not yet interested in no till methods.

One commenter stated that mandating cover crops could result in a reduction of manure transferred and asked the MPCA not to mandate cover crops.

One commenter stated that the current rule requiring cover crops following manure applications in June, July, and August for feedlots required to have a MMP is adequate. The commenter also stated that, "The MPCA should support an exemption to current requirements for pesticide applicator training for nitrification inhibitors applied with manure in order to increase adoption of this recommended practice".

One commenter located in east central Minnesota stated that their climate is much cooler as it is influenced by Lake Superior, so the success of cover crops varies from year to year depending on the window for planting in the fall and difficulties of spring forage removal.

One commenter stated that many BMPs are already being implemented in southeast Minnesota because of its abundant Highly Erodible Land (HEL), and noted that heavy rainfall events require contour stripping, grass waterways, cover crops, conservation tillage, and crop rotations that include alfalfa and perennial forages.

Another commenter similarly stated that the MPCA should prioritize support for producers in SE Minnesota that utilize contour strips and perennial vegetation in their crop rotations because rule changes could unintentionally encourage the consolidation of small contour strip fields in larger row cropped parcels.

One commenter stated that the local CFOs should be allowed to determine the BMP for their regions based on State guidelines including nutrient applications and timing of application.

One commenter stated that the MPCA should offer incentives for operators that use crop rotations and nitrogen stabilizers by allowing flexibility in application timing and rates to reward innovative producers.

One commenter stated that the MPCA should incentivize impervious pads for calf hutches and expanded field inspection mandates as best management practices. The commenter stated that these should not be required in rule.

H. Comments regarding education and outreach.

Several commenters stated that the MPCA should encourage the transition to organic farming or other regenerative agricultural practices.

Several commenters stated that education and outreach have not proven to be successful making additional regulations necessary.

One commenter stated that the MPCA should help farmers learn about composting.

One commenter stated that the MPCA should be in service to Minnesota farmers, not rule changers and enforcers.

One commenter stated that lack of education regarding current rules is one of the biggest issues they see, and funding, staffing, and time to carry out that education and outreach would be a better use of tax dollars rather than more regulations.

One commenter stated that the education and outreach that the MPCA offers should also be extended to manure applicators.

I. Comments regarding odors from feedlots and agricultural activities.

Several commenters stated that, "MPCA rules should require feedlots to demonstrate that they comply with air quality rules at least 344 days a year (Minnesota statutes only exempt feedlots from compliance when removing manure and for 21 or less cumulative days per year). Exposure to noxious air emissions, like hydrogen sulfide has adverse health effects, including respiratory and neurological harm."

Several commenters similarly stated, "Clarify burden of proof for exemption of permitted feedlots from ambient air quality standards so that MPCA on its own or on receipt of a complaint can enforce air emissions and odor violations if a livestock facility does not demonstrate that it has complied with odor and hydrogen sulfide standards a minimum of 344 days per year and has only exceeded standards when removing manure. See Minn. Stat. § 116.0713."

One commenter generally stated that, "Air quality needs to be monitored on a constant basis, the monitoring equipment owned and maintained by the State. Procedures for violations of air quality be taken seriously, and be taken care of as soon as possible. Violators need a reasonable and fair amount of time to remedy the problem, but should not be allowed to have continued offenses of clean air."

One commenter stated that there needs to be a way to control odor through air quality monitoring so that people can live, work, and thrive near feedlots, and stated that local zoning is not enough.

One commenter stated that the MPCA should reverse the fall pump-out exemption for feedlots and require feedlots to give neighbors ample notice prior to land applying manure.

One commenter stated that the MPCA should require ventilation outlet filters and have feedlot demonstrate compliance with ammonia emission standards.

One commenter stated that there are odors associated with land application of manure that is not knifed in or otherwise incorporated.

One commenter stated that, "If someone from St. Paul were to come and smell the odor from any of these facilities, they would understand that no facility should be allowed within 5 miles of any neighboring property and this requirement should be implemented as it will direct healthy free range type raising of animals."

J. Comments regarding air emissions from feedlots and agricultural activities.

Several commenters recommended that in addition to hydrogen sulfide, the MPCA should monitor ammonia (a significant contributor to particulate matter (PM) 2.5), PM, VOCs, and GHGs at large feedlots to better understand the impact of large feedlots on climate change and human health. One commenter stated that the instruments should be provided by the MPCA and the public should have access to the data obtained from them.

One commenter stated that the rules should align with EQB's EAW and should include, "monitoring and reporting provisions specific to GHG emissions; mitigation strategies to reduce emissions from manure management and livestock operations; and enforcement measures to ensure compliance with existing air emission plan requirements."

One commenter called for additional GHG monitoring and mitigation at feedlots and stated that instead of creating an air emission plan as required by Minn. R. 7020.0505 subp. 4(B), MPCA only requires applicants to check a box to indicate their agreement to a standards air emission plan created by the MPCA. The commenter stated that the MPCA has existing regulatory framework under part 7020.0505, and the MPCA should start enforce the rule as currently in effect in addition to expanding upon those requirements.

K. Comments introducing other proposals for amendments to feedlot rules.

One commenter stated that the agency should prohibit pivots, guns, or other high-pressure broadcast irrigation technologies and mandate manure be incorporated within 24 hours of application.

One commenter stated that CAFOs should need to be recertified every 5 years, and depending on the size, there should be proportional fees. The commenter also stated that fees should be charged in response to environmental pollution and increase with each incident.

One commenter stated that drag lines used to transfer manure should be inspected prior to and emptied after each use.

One commenter stated that commercial manure applicators should be required to attend training and be licensed.

One commenter stated that feedlots with an anaerobic digester should be required to submit a digestate application plan because of the higher concentrations of nitrogen and phosphorus, and the potential for PFAS or other contamination.

Another commenter similarly stated that anaerobic digesters today are trending towards "hubs" and "refineries" that are outside the realm of feedlot activities that Minn. R. Ch. 7020 was designed to address.

One commenter stated that the MPCA should offer free well testing for residents near feedlots and should support the repair or replacement of wells that have been impacted by feedlot runoff.

One commenter stated that the MPCA should promote the treatment of tile drainage through techniques such as saturated buffers, constructed wetlands, and bioreactors.

One commenter stated that the MPCA should require manure and liquid waste to be put through a treatment plant like we do with human waste; either on-site or trucking to a treatment plant.

One commenter stated, "MPCA should incorporate the Safe Drinking Water Act's, 42 U.S.C. §300f et seq., principles of coordination with other Minnesota regulatory agencies, communication, well testing, alternative water supplies, risk assessments, and long-range source water protection."

One commenter stated that a bioremediation plan for spills or contamination associated with a feedlot, or their land application should be established. The commenter also stated that a bond could be issued by feedlot owners to the State to aggregate funds for this.

One commenter stated that rather than receiving blanket exemptions, small feedlot sites should apply for site-specific exemptions/variances.

One commenter stated that there should be a "prove it first" policy to verify compliance before permitting any feedlot. The commenter stated that this would not be an unusual hardship on even the smallest operations because individual homeowners already have to do this by hiring licensed professionals to design and install septic systems. The commenter also stated that this would be equitable because municipalities and other industries must hire qualified and licensed engineers to prepare plans/specifications for wastewater treatment facilities.

One commenter stated that the MPCA should move forward with a rule establishing nitrate standards for all waters other than those used for drinking water.

Another commenter similarly stated that the MPCA should expedite the adoption of surface water quality standards for nitrates.

One commenter stated, "The Agency should also include sections that specify how existing or proposed changes are responsive to the 1999 Legislative Auditors report on Feedlots and the 1993 EPA/State Feedlot Workgroup Report."

Several commenters stated that in managing disease outbreaks like Highly Pathogenic Avian Influenza (HPAI) when they can't move manure or clean barns, the updated rules must allow for flexibility during disease outbreaks in coordination with the United Stated Department of Agriculture (USDA) and Board of Animal Health (BOAH).

L. Other comments that were received.

One commenter stated, "We strongly recommend the creation of a dedicated farmer and rancher advisory committee to review and provide oversight on all rule recommendations before they are finalized."

One commenter stated that they would like to better understand the MPCA's need to amend the feedlot rules.

M. Other comments not directly related to the scope for this proposed rulemaking.

- **Animal welfare.** The MPCA received a few comments regarding animal welfare and the ethicality of feedlots as an industry.
- **Land application of nitrogen fertilizer and other chemicals.** The MPCA received several comments regarding land application of nitrogen fertilizer as a potential source of nitrate contamination to ground and surface waters, and concern regarding the use of chemicals such as pesticides.
- **Neighboring property values.** The MPCA received a few comments regarding the effects of feedlots on neighboring property values, along with requests that feedlot owners/operators should be held financially responsible for such effects.
- **Other sources of nitrates.** The MPCA received several comments stating that more consideration should be given to other possible sources of nitrates, including municipalities, septic systems, wastewater treatment plants, old wells, old landfills, and lawn fertilizer.
- **Statutory authority.** The MPCA received several comments regarding the agency's statutory authority and the statutory authority of other state agencies and departments.
- **Use of antibiotics and pharmaceuticals.** The MPCA received several comments related to the use of antibiotics and other drugs in livestock, and concerns that those products may end up in ground and surface waters or contribute to antibiotic resistance.
- **Water appropriation permits.** The MPCA received several comments requesting that the agency monitor, regulate, and restrict water usage for feedlots and for the irrigation of crop fields.

10. Comments from Tribes

Three of Minnesota's eleven federally recognized tribes submitted comments regarding the Animal Feedlots Rule during this RFC period. The comments received by each tribe are summarized below.

A. Leech Lake Band of Ojibwe

- **Stricter Manure Application Limits in Vulnerable Areas.** "Application rates in karst and sandy-soil regions must not exceed agronomic needs. We strongly support banning liquid manure application on frozen or snow-covered ground and requiring cover crops or divers rotations in fall manure applications."
- **Water Quality Monitoring Requirements for Large Feedlots.** "We urge the MPCA to require monitoring of discharges to groundwater, drain tile effluent, and surface water. Compliance cannot be presumed without data. Effective enforcement depends on accurate, transparent, and regular environmental monitoring."
- **Lowering the Permit Threshold to 600 Animal Units (AU) or less**. "This change would increase permit coverage from 4% to 14% of feedlots in Minnesota which will address a larger portion of

the 49 million tons of manure generated annually in Minnesota. More feedlots under permit will mean more manure management planning and pollution prevention which benefits us all.

- **No Permit-by-Design for Large Feedlots.** "Feedlots should not be presumed in compliance based on planning documents alone. A "trust but verify" approach must be adopted. Regulatory enforcement should include frequent, unannounced inspections, a swift plan to come into compliance if noncompliance is found, and penalties for continued non-compliance."
- **Require Environmental Assessments for Medium and Large Feedlots**. "The current regulations require Environmental Assessment Worksheets (EAWs) for proposed feedlots over 1,000 AU or over 500 AU in a sensitive area. We recommend requiring EAWs for proposed feedlots over 500 AU and over 250 AU in sensitive areas. Requiring EAWs for feedlots over 250 Animal Units in these areas ensures that even moderate-sized operations are thoroughly assessed for risks."
- **Prohibition of New or Expanded Feedlots in Vulnerable Groundwater Regions.** "The MPCA rules should prohibit new or expanded animal feedlots where groundwater is most vulnerable to seepage pollution such as karst geology areas or the central sands region of the State. There are no remediation techniques available for contaminated groundwater. We cannot afford to contaminate our groundwater supplies and should be particularly careful in areas where the groundwater is vulnerable to seepage pollution. There are currently no limitations to the size of a feedlot or to the number of animal units."
- **Air Quality Monitoring Requirements for Large Feedlots**. "We recommend monitoring of additional air pollutants for large feedlots. While the MPCA has set hydrogen sulfide standards for feedlots and enforces these standards, we suggest requiring the monitoring of ammonia, a significant contributor to PM2.5, as well as PM, VOCs, and greenhouse gases at large feedlots. This data will inform Minnesota of the impact large feedlots may have on climate change and human health and could help in the potential future development of feedlot emissions standards for these harmful air pollutants."
- **Ensuring Compliance with Air Quality Rules.** "The MPCA rules should require feedlots to demonstrate that they comply with air quality rules at least 344 days a year (Minnesota statutes only exempt feedlots from compliance when removing manure and for 21 or less cumulative days per year). Exposure to noxious air emissions, like hydrogen sulfide has adverse health effects, including respiratory and neurological harm."

B. Lower Sioux Indian Community

- **The Location Restrictions Applicable to a DWSMA Approved by the Minnesota Department of Health Should Also Apply to Tribal Source Water Protection Area.** "Minnesota Rule 7020.2005 currently prohibits animal or manure feedlot storage areas from being located within 1,000 feet of a community water supply well or well serving a public school if it also would be located within a DWSMA.[3] The Minnesota Pollution Control Agency adopted location restrictions "to provide a minimum level of protection" that was "needed to protect human health and the environment."6 A tribal source water protection area is defined in the same way, and for the same purpose, as a DWSMA. In short, locating a feedlot within a tribal source protection area endangers human health and the environment in the same manner as locating a feedlot in a DWSMA." Proposed rule language can be viewed in the original comment letter.
- **The Processing Requirements Applicable to a DWSMA Approved by the Minnesota Department of Health Should Also Apply to Tribal Source Water Protection Area.** "The Minnesota Rules also require a county that is delegated feedlot permitting authority to forward certain permit feedlot applications for review by the MPCA. The rule should be amended to include the forwarding of applications that may affect a tribal source water protection area. To ensure effective implementation, a delegated county would first forward the permit application to Indian Tribes for a determination of whether the proposed permit would be within a tribally designated source water protection area. If an Indian Tribe confirms that, based on an existing

designation, the permit would be located within a tribally designated source water protection area, then the permit would be forwarded to the MPCA for processing." Proposed rule language can be viewed in the original comment letter.

- **The Recommended Definition of "Indian Tribe" Would Include the Federally Recognized Tribes Located Within the State of Minnesota.** "The community recommends adding the following definition to Minnesota Rule 7020.0300, to ensure clarity as to tribally designated source water protection areas must be considered:
    - **Indian Tribe**. "Indian Tribe" means the following federally recognized Tribes that are located within Minnesota: Boise Forte Band; Fond Du Lac Band; Grand Portage Band; Leech Lake Band; Mille Lacs Band; White Earth Band; Red Lake Nation; Lower Sioux Indian Community; Prairie Island Indian Community; Shakopee Mdewakanton Sioux Community; and Upper Sioux Community.

This definition is consistent with the definition of "Minnesota Tribal Government" that is used in Minnesota Statutes Section 10.65, which directs Minnesota state agencies to implement consultation duties with Tribes to address matters that have Tribal implications.10 It is an appropriate definition for these particular rules because these are the Tribes that may have water systems located within the borders of the State of Minnesota."

C. White Earth Nation

- **Operating Permit Threshold.** "Lower the threshold to require NPDES/SDS permits for large feedlots with 600 or more animal units."
- **Water Quality Monitoring.** "Water quality monitoring requirements for feedlots with 300 or more animal units. This monitoring should include groundwater and surface water at feedlots and manure storage sites."
- **Tribal Water Protection Area Setbacks.** "Include Tribal source/drinking water protection areas in setback requirements."
- **Manure Management Plans.** "Require manure management plans for feedlots with 300 or more animal units and online reporting of manure application amount, location, and date. Require soil and shallow groundwater nitrate tests prior to manure application in locations with known nutrient issues, such as the central sands region or the Karst region."
- **Transferred Manure.** "When manure is transferred, the owner of feedlot must report that transfer to MPCA or delegated county. Transferees must report to MPCA or delegated county the amount, location, and date of manure application."
- **Land Application to Frozen and Saturated Soils.** "Prohibit application of solid or liquid manure to frozen or saturated soils, or when rainfall is likely."
- **Manure Storage Capacity.** "Require sufficient storage of manure that capacity is not exceeded during the period when manure cannot be applied due to frozen or saturated soil conditions. A double liner system with groundwater monitoring should be required for liquid manure."
- **Animal Access to Waters of the State.** "Animals must be restricted from accessing and entering public waters or their tributaries and feedlots should be fenced to prevent such access."
- **Feedlot Size and Manure Application by Watershed.** "MPCA should establish a limit to maximum feedlot size and a limit to animal units and manure application within HUC-12 watersheds to limit cumulative effects."
- **Delegated County Program.** "Require delegated counties to submit annual reports to MPCA and explicitly authorize MPCA to revoke or rescind delegated authority if a county fails to perform its duties."