

**General Permit**  
**for**  
**Concentrated Animal Feeding Operations (CAFOs)**  
**MPDES Permit Number MTG010000**  
**Response to Public Comment**

The Montana Department of Environmental Quality (DEQ) issued Public Notice MT-18-13 on July 16, 2018. The Public Notice provided the tentative determination to issue a statewide wastewater discharge permit renewal for the General Permit for CAFOs under the Montana Pollutant Discharge Elimination System (MPDES) permit MTG010000. The notice included the draft Permit, Fact Sheet, draft Environmental Assessment (EA), and associated draft Permit forms.

The public notice required that all written comments be received or postmarked by August 24, 2018, in order to be considered in formulation of the final determination and issuance of the permit. DEQ held a public hearing on August 20, 2018 at the Metcalf Building in Helena, Montana. DEQ received the following sets of comments:

Name	Comment Source(s)
Upper Missouri Waterkeeper (Guy Altsentzer, Executive Director)	Verbal and Letter
Missoula Public Health (Todd Seib)	Email
NRCS – Bozeman (Steve Becker)	Email
NRCS – State Conservationist (Tom Watson)	Email
JS Livestock (Jeff Solomon & Candi Zion)	Email
North Central Montana Conservation Coalition (Elsie Tuss)	Email
Comments from individuals	Verbal, Email and Letter

Comments from individuals were very similar to one another. DEQ summarized and grouped comments from individuals for responses instead of answering each letter, email or verbal testimony individually.

DEQ has considered these comments in preparation of the final permit and decision. A copy of the unabridged comments is available from DEQ upon request. A synopsis of the significant comments and DEQ's responses are included below. This Response to Comments is an addendum to and supersedes the Fact Sheet to the extent specific changes or clarifications are discussed herein.

### **Upper Missouri Waterkeeper.**

**Comment #1:** As an administrative note we are concerned that the 2018 CAFO GP does not include citations to federal requirements, state law requirements and guidance for CAFOs, even though such references and citations were present in previous GP iterations. Why were these references removed from the draft 2018 CAFO GP? The lack of citations in the CAFO GP to federal CAFO regulations, or discussion of Circular DEQ-9 – which contains technical guidance for CAFO operators – lacks transparency and undermines accountability and consistency for both the public and regulated community.

**Response #1:** DEQ strives to write documents that are intended for the public, such as permits and fact sheets, in clear and concise language. DEQ disagrees that legal citation makes the information more transparent, accountable and consistent. During the lengthy stakeholder process for developing the CAFO GP, participants criticized DEQ for its intimidating fact sheets that require an attorney to translate, which defeats the purpose of a transparent and understandable document for the public. In response to these comments, DEQ shifted to a plain language approach. However, the governing federal and state statutes, rules, and regulations are still cited in the permit. DEQ has made no changes in response to this comment.

**Comment #2:** “We also take this opportunity to bring DEQ’s attention to the lingering Madison Food Park proposal outside Great Falls, which if implemented would represent the largest multi-species slaughterhouse in the United States, and is unprecedented in agricultural history of our nation. Economic and sociological research across the nation shows a direct correlation between the creation of industrial-scale slaughterhouses and a growth-inducing effect on nearby CAFO presence. The Madison Food Park proposal is not only extreme and significant in its scope and potential cumulative impacts, but also in its very real potential to incentivize a wave of new CAFO operations in Montana.”

**Response #2:** Slaughterhouses do not qualify for the CAFO GP. DEQ acknowledges that CAFOs have an economic incentive to locate near a slaughterhouse, but there are other multiple variables in deciding where to locate a CAFO, including the price of land, water availability and sufficient acreage to beneficially utilize nutrients. A proposed slaughterhouse is not a direct, secondary or cumulative impact of a CAFO discharge. Currently, no applications for the proposed Madison Food Park are under consideration by DEQ. If the Madison Food Park does apply for discharge permits from DEQ, a MEPA analysis and public notice would occur prior to issuing a permit. No change was made to the permit in response to this comment.

**Comment #3:** “Ban manure application on frozen and snow-covered ground to eliminate unnecessary risk of discharges.”

**Response #3:** A complete ban on winter application is not supported by the Water Quality Act or ARM 17.30.1334(7), which requires manure application “at times and under conditions that will hold the nutrients in place for crop growth and protect surface and ground water using best management practices described in the nutrient management plan.” No change was made to the permit in response to this comment.

**Comment #4:** “the draft CAFO GP allows an exception to swallow the rule when it authorizes winter spreading based on an arbitrary watercourse setback, an arbitrary vegetative crop cover standard, and an arbitrary slope calculation. These exceptions to what would otherwise be a straightforward and scientifically defensible ban on winter spreading – are fundamentally inconsistent with available pollution control science and therefore arbitrary and capricious.”

**Response #4:** See Response to Comment #3. The exceptions in the permit allowing manure application to frozen and snow covered fields in certain situations are supported by ARM 17.30.1334(7). Any field suitable for winter application must be identified in the CAFO’s NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. No change was made to the permit in response to this comment.

**Comment #5:** “The Permit’s Winter Application Exceptions Do Not Prevent Unlawful Discharges of Pollutants”. The commenter presents various reasons why the exceptions that allow for winter application in the CAFO GP is inadequate, which in summary holds that manure application onto snow-covered and frozen fields has a high risk of runoff and loss before soil and plants are capable of uptake.

**Response #5:** See Responses to Comments #3 and #4. The exceptions in the permit allowing winter manure application are supported by ARM 17.30.1334(7). No change was made to the permit in response to this comment.

**Comment #6:** “The draft CAFO GP must incorporate by reference the current version of Standard 590 rather than rely upon the outdated version in Circular DE-9.”

**Response #6:** The 2006 version of NRCS Standard Code 590 is incorporated by reference in ARM 17.30.1334 and is referenced in Section 4.1.4 of the Permit for purposes developing manure application rates. ARM 17.30.1334(11) provides a CAFO may develop manure application rates based on NRCS Standard Code 590 as an alternative for manure application procedures in ARM 17.30.1334(3). DEQ did not use Circular DEQ-9 for developing the CAFO GP. Circular DEQ-9 entitled *Technical Standards for Concentrated Animal Feeding Operations* was superseded by ARM 17.30.1334 and by ARM 17.30.1343(1)(c), which provides any permit issued to a CAFO must include the requirements in 40 CFR 122.42(e). No change was made to the permit in response to this comment.

**Comment #7:** “as a matter of administrative procedures DEQ should not attempt to codify new rules for CAFOs under this GP when the proper vehicle for addressing old rules, whether in the ARMs or Circulars, is through a rulemaking process. We strongly encourage DEQ to do so and update its rules for CAFOs including in particular Circular DEQ-9 and not attempt to implement new CAFO rules through this GP.”

**Response #7:** See response to comment 6. No change was made to the permit in response to this comment.

**Comment #8:** “The CAFO GP Should Expressly Address and Prohibit Land Application During All Wet-Weather Precipitation.” “Further, DEQ should restrict wet-weather land application of manure as on (sic) BMP under its GP that demonstrates pollution controls that ensure

no violations of water quality standards will occur from CAFO land application sites.”

**Response #8:** The CAFO GP incorporates 17.30.1334(7), which says manure cannot be land applied on flooded or saturated soil. An outright prohibition on any wet weather land application is not supported by the Water Quality Act or applicable administrative rules. Precipitation events vary in intensity leading to situations where soils are not saturated so crop uptake of nutrients could occur even though there has been precipitation. Also, CAFOs avoid land application in wet weather because expensive equipment can get stuck or broken, and farmers view manure and wastewater as precious resources in the dry environment and soils commonly found in Montana, not a waste to be disposed whenever possible. The CAFO GP requires livestock waste control facilities to have at least 180-day storage capacity to allow CAFOs to store waste and not land apply when conditions are not conducive for plant uptake. Land application practices and BMPs must be noted in the CAFO’s NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. Section 2.2.4 of the CAFO GP requires the CAFO operator to record all weather conditions before, after and during land application for DEQ inspectors to determine if land application was appropriate. The CAFO GP also requires CAFOs notify DEQ of any discharge, including from land application sites. No change was made to the permit in response to this comment.

**Comment #9:** “We also note that DEQ’s CAFO GP does not contain a substantive nondegradation review pursuant to the MWQA and CWA, nor a reasonable potential analysis of the likelihood of CAFOs covered under the GP to cause or contribute to violations of water quality by virtue of the GP allowing wet weather applications. DEQ must conduct such an analysis as part of its legal duties pursuant to state and federal law.”

**Response #9:** See Part VI.C (analyzing the need for WQBELs) and Part IX (Nondegradation Review) of the Fact Sheet. Manure and process wastewater is never allowed to be discharged to Waters of the State except during a 25-year, 24-hour storm event where most of the CAFO runoff will be captured and any overflow is expected to be diluted further when entering waterbodies, which will likely be flooding in such a large rain event. Therefore, there is no reasonable potential to exceed water quality standards or degrade Waters of the State. Water quality standards are not expected to be exceeded if the CAFO meets the terms and conditions of the permit, and any discharge in compliance with the permit is expected to be nonsignificant. No change was made to the permit in response to this comment.

**Comment #10:** “EPA’s Consulting Firm Has Warned that Winter Spreading of Manure Lacks Agronomic Benefit, Will Likely Impact Water Quality, and Cannot Be Effectively Controlled with BMPs” “By allowing winter spreading in any winter condition so long as there exists an (1) arbitrary setback, (2) an unscientific-standard of 50% vegetation as a BMP, and (3) arbitrary slope limitations, DEQ disregards Tetra Tech’s strong findings and instead authorizes a practice that puts the waters of the state at risk. DEQ has not adequately explained in its permit how the exceptions to winter application will not result in and thus allow unpermitted discharges of pollutants.”

**Response #10:** See responses to comments 3-9. No change was made to the permit in response to this comment.

**Comment #11:** “Treat large and medium CAFOs, particularly mega facilities with several thousand animal units, with more stringent pollution controls, and require all CAFOs to possess substantive manure reporting and tracking requirements.” “The CAFO GP Should Increase Waste Storage Requirements for Large CAFOs and Operations Possessing Liquid Manure Systems.”

**Response #11:** The CAFO GP requires at least 180 days of storage to hold wastewater through the winter months plus rainfall volume equivalent to the 25-year, 24-hour storm event and emergency freeboard. DEQ finds the storage volumes in the permit adequate. Discharges reported to DEQ have not been due to lack of storage capacity, but accidents. The commenter provides no rationale for increasing storage capacity other than to convey a sense the prescribed capacity is not good enough. The lone reference to an example EPA CAFO GP does not specify storage periods, but only details the 25-year, 24-hour storm event and emergency freeboard requirement. No change was made to the permit in response to this comment.

**Comment #12:** “However, the larger discussion of effluent limits and waste management contemplates a broad exemption from the otherwise straightforward prohibition on discharges of pollutants from CAFO production areas by allowing manure discharges that satisfy Permit Section 2.1(a)-(g) criteria. These conditions represent a determination by the Department that the combination of a 25-year, 24-hour rain event, storage capacity for 180 days, and “minimization of adverse effects” transforms an otherwise unlawful discharge into a lawful discharge, *so long as the discharge will not cause or contribute to a violation of water quality standards.*”

**Response #12:** Discharges in compliance with the terms and conditions of the permit are consistent with state law and federal effluent limit guidelines at 40 CFR 412, which allow a CAFO to discharge during a storm that exceeds a 25-year, 24-hour storm event. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. DEQ expanded CAFO GP Section 2.1 in the proposed permit from the current permit to provide further detail to CAFO operators concerning their obligation to manage and control discharges. No change was made to the permit in response to this comment.

**Comment #13:** “Similarly, any new operations must comply with EPA’s 100-year, 24-hour standard found in Subpart D of the CAFO ELGs.<sup>22</sup>

<sup>22</sup> See “NPDES General Permit Example for CAFOs,” EPA, [https://www3.epa.gov/npdes/pugs/cafo\\_example\\_permit.pdf](https://www3.epa.gov/npdes/pugs/cafo_example_permit.pdf)”

**Response #13:** The example permit cited by the commenter predates the 2<sup>nd</sup> Circuit Court of Appeals decision and subsequent rule revisions that removed the 100-year standard. The commenter (Waterkeeper) was a petitioner in the case challenging the 100-year standard. Additionally, Subpart D does not apply to all CAFOs, but swine, chickens, turkeys and veal calves, and varies depending on when the operation commenced discharging. All operations within those categories in Montana house livestock indoors so are not in direct contact with precipitation and should not discharge due to precipitation. DEQ will add conditions in the permit to reflect Subpart D standard. Any information regarding adequate storage capacity must be noted in the CAFO’s NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit.

**Comment #14:** “Generally speaking a survey of recent precipitation and weather data indicates Montana contains different ecoregions and in turn differing rates of frozen soils, snow-covered ground, and days per annum of wet-weather. It appears DEQ has not undertaken such a review or incorporated references thereto as part of updating this GP; DEQ should do so before finalizing this GP. One generalization from recent NOAA data is that Montana should consider increasing its 180 day minimum storage requirement for Large CAFOs with liquid manure operations to address the factual reality of the state experiencing more precipitation/frozen soils/snow covered terrain than other states. And, as discussed below, the Permit should be amended to, at minimum, review and use best available scientific precipitation data in determining both effluent limits and manure storage requirements.”

**Response #14:** See responses to comments 11-13. 40 CFR 412 incorporates the National Weather Service’s Technical Paper 40 from 1961 and equivalent regional state rainfall information as the technical standard for CAFOs. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. Any data used to ensure adequate storage and for land application practices must be noted in the CAFO’s NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. No change was made to the permit in response to this comment.

**Comment #15:** “Precipitation Event Standards Are Arbitrary & Capricious. The outdated Rain Technical Paper # 40 that the Permit references dates from 1961. Permit at page 31. As an initial matter a precipitation report from 1961 is wholly inadequate to address the pollution potential of a CAFO from manure management practices. Further, the general clause "and subsequent amendments" does not excuse DEQ from its responsibility to identify appropriate and current precipitation data for Montana to be used in the permitting process.”

**Response #15:** The permit references National Weather Service Technical Paper No. 40 (1961) in its definition of a 25-year, 24-hour rainfall event. 40 CFR 412 also incorporates the National Weather Service’s Technical Paper 40 from 1961 in its definition of rainfall events at 40 CFR 412.2. No change was made to the permit in response to this comment.

**Comment #16:** “DEQ should address the lack of incorporation by reference of Circular DEQ-9 before the GP is finalized.”

**Response #16:** See response to comment 6. No change was made to the permit in response to this comment.

**Comment #17:** “We are aware of the potential for a CAFO operator to interpret the GP’s precipitation language to allow manure applications when there is a 100% chance of any quantity of rain within a 12-hour period, just so long as the 24-hour criteria are met. In other words, the provision can be interpreted as allowing manure application when a heavy rainfall is imminent within 12 hours, so long as the 24-hour prediction is less than 70% for whatever volume a 25-year storm event indicates. This approach circumvents the purpose of the prohibition to apply manure when agronomic uptake will not occur. The simplest way to remedy this loophole is to change the Permit language regarding application of waste to prohibit *per se* the application of wastes before any wet weather event as suggested *supra*.”

**Response #17:** See responses to comments 3-10. No change was made to the permit in response to this comment.

**Comment #18:** “To inform DEQ’s compliance mandate we urge DEQ to require groundwater monitoring via upgradient and downgradient monitoring wells for each CAFO, as well as regular reporting intervals on sampling results transmitted to DEQ, and thereafter made available to the public who depend on these waters for their drinking water. DEQ should in particular require groundwater monitoring under its GP to protect state waters from CAFO wastes containing nitrates.”

**Response #18:** CAFOs should not discharge to groundwater because of liners in their livestock waste control facilities and agronomic uptake in the land application sites. However, the CAFO GP Section 3.3 gives DEQ the ability to require groundwater monitoring. If a CAFO must submit a groundwater monitoring plan, which includes any wells, the plan is reviewed by DEQ. A blanket requirement for groundwater monitoring wells is not necessary. Not all CAFOs are located over permeable substrate or over shallow groundwater. Many are located over impermeable bedrock and very deep aquifers where the likelihood of groundwater contamination is minimal. The current rules do not differentiate well types; so, the same sizeable setbacks applicable to waste containment structures for drinking water well protection apply to ground water monitoring wells. These large setbacks present a challenge in placing monitoring wells where they can detect impacts of a leaking livestock waste control facility.

All monitoring data is publicly available in DEQ records or online at EPA’s ECHO website. No change was made to the permit in response to this comment.

**Comment #19:** “Without any references to special soils or geology considerations that may be present in Montana, or how any site-specific soils or geology considerations are to be addressed, the draft GP does not protect groundwater or drinking water resources in these sensitive geologic areas.”

**Response #19:** See response to comment 18. General Permits are authorized under § 75-5-401(9), MCA. A General Permit set the effluent limitations, recordkeeping and monitoring requirements for a category of a dischargers. A General Permit does not go into the fine details of soils and geology because there are many ways an engineer can design a livestock waste control facility and land apply waste to achieve the limitations and conditions in the General Permit.

Site-specific information is noted in a CAFO’s NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. Pursuant to § 75-5-802(3), MCA, if DEQ discovers site specific information that indicates a CAFO General Permit authorization will not protect water quality, the department will require an individual permit. No change was made to the permit in response to this comment.

**Comment #20:** “no special considerations for winter application on these sensitive geologies”  
“DEQ Should More Stringently Regulate Manure Applications on Soil in Sensitive Areas Such as Montana’s Alluvial Floodplains & Karst Geologies”

**Response #20:** See response to comments 3-10, 16-17, and 19. DEQ agrees operating a CAFO on karst or alluvial formations may require additional engineering and agronomic considerations to meet the requirements of the CAFO GP. However, a blanket ban on karst or alluvium ignores

Montana's complicated geology where the formations may be thousands of feet underground below impervious shales and igneous formations.

The storage and use of manure and process wastewater, including the sampling of soils to test for the rapid movement of nutrients are contained in the NMP, which is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. If an operator cannot protect water quality, they cannot obtain authorization under the CAFO GP and must seek an individual permit. No change was made to the permit in response to this comment.

**Comment #21:** "setbacks in sensitive areas are also inadequate." "In accord with known available and reasonable best practices from other states, the CAFO GP should:

- prohibit manure application at greater than 50% of the agronomic nitrogen rate when there is either less than 60 inches of unconsolidated material over the bedrock, sand, or gravel
- prohibit manure application at greater than 50% of the agronomic nitrogen rate when the minimum soil depth to seasonal high water table is less than or equal to two feet."

**Response #21:** The commenter does not provide a scientific or regulatory basis for these proposed requirements. Montana's technical requirements in the CAFO GP for land application are at ARM 17.30.1334. If, based on site specific conditions a permittee cannot protect water quality, DEQ will require an individual permit. No change was made to the permit in response to this comment.

**Comment #22:** "DEQ Should Adopt More Stringent Requirements to Protect Against Leakage from Waste Storage Structures – Both Generally and Also in Sensitive Geologies." "As noted *supra* other states possess a far more extensive set of rules, and even statutes, addressing CAFO pollution and safeguarding their water resources. Indeed, many states mandate that all newly constructed waste lagoons in all soil types be built with a liner, while others require liners and groundwater monitoring when constructed in karst terrain."

**Response #22:** See responses to comments 19 & 20. The CAFO GP requires livestock waste control facilities to have a sealed liner. See Section 2.2.1 of the permit. No change was made to the permit in response to this comment.

**Comment #23:** "DEQ Should Adopt More Stringent Requirements to Protect Against Leakage from Waste Storage Structures – Both Generally and Also in Sensitive Geologies". "requirements regarding waste storage lagoons are unreasonable given more stringent, best available industry practices and the known risks of lagoon leakage". "Below we provide several state law examples of how other jurisdictions are addressing direct, indirect, and cumulative impacts of CAFOs and strongly urge DEQ to consider adopting similar provisions (to the extent of its authority under the CWA and MWQA) and, otherwise, at minimum to consider initiating rulemaking to revise the outdated and inadequate pollution control standards found in Circular DEQ-9."

**Response #23:** See response to comments 6, 19, and 20. Under most circumstances in Montana, compliance with the terms and conditions of the CAFO GP is protective of water quality. If an operator cannot protect State Waters under the CAFO General Permit, DEQ will require an individual permit. No change was made to the permit in response to this comment.

**Comment #24:** "DEQ Should Adopt More Stringent Requirements to Protect Against Leakage



from Animal Mortality Treatment and Disposal.”

**Response #24:** The CAFO GP allows many different options to disposing of mortalities, including burial, composting, incineration and third-party renderers so long as discharges to waters of the State are prevented. The CAFO GP requires that animal mortalities be disposed of in facilities designed to treat animal mortalities. DEQ reviews and public notices each CAFO’s nutrient management plan (NMP), including its mortality management plan. The NMP is made available for public review and comment pursuant to Section 1.6 of the permit. If an operator cannot comply with the CAFO GP, they must seek an individual permit. No change was made to the permit in response to this comment.

**Comment #25:** “The Permit Must Be Modified to Reflect State and Federal Law Limits on Pollutant Discharges to Groundwater.” “Neither the GP or supporting documents provides a reasonable basis for allowing groundwater discharges that are “impracticable” to address, nor does the Permit explain what “anticipated conditions” represents or can reasonably be expected to represent in terms of a liner standard, nor does the Permit provide scientific or other support for its arbitrary waste storage separation numbers. These terms are vague and arbitrary.” The commenter expresses concerns that liner seepage and setback requirements do not protect groundwater.

**Response #25:** The commenter is confusing seepage with leakage. Seepage refers to loss through a liner or leachate in amounts that are minimal and would not pollute groundwater. All liners seep to some extent. The seepage requirements in the CAFO GP are more stringent than regulations for lagoons for municipal wastewater. The allowable seepage is so little that it would mix with groundwater at such a slow rate that anything in the seepage would be essentially undetectable in the groundwater. The terminology “anticipated conditions” requires the design engineer to account for the climatological, geological and soil considerations that may damage the liner.

The ten-foot separation is a common requirement found in DEQ engineering regulations. Ten feet is the depth needed to test soil and build a foundation suitable for holding a waste storage structure. Any protruding bedrock into that ten feet could render the foundation unstable.

The four-foot separation is a common requirement found in DEQ engineering regulations. Four feet allows for the placement of the liner and establishment of beneficial bacteria, but enough room for groundwater table to rise for unforeseen reasons and not exert hydrostatic pressure on the liner. DEQ notes that the CAFO GP’s separation requirement is more protective than the 2-ft. requirement in NRCS Code 313, which the commenter suggests DEQ incorporates into the permit.

No change was made to the permit in response to this comment.

**Comment #26:** “The section of the permit that provides calculations for permeability is incomplete and does not accurately reflect the entirety of the calculation as presented in NRCS-MT Conservation Practice Standard 313 Waste Facilities. The draft permit must be updated to not only incorporate by reference this standard but to also correctly portray its mathematical presentation of how to determine appropriate liner permeability and acceptable seepage rates for Montana.”

**Response #26:** See response to comments 16-23. The equation is correct, but the language will be clarified that k is based on a water depth of 6 ft.

**Comment #27:** “In addition, we support testing for more than simply nutrients. Arsenic and iron levels are also high in some CAFO areas in Montana. Veterinary pharmaceuticals in soils and waters are of concern for public health, and can appear in soils and groundwater.”

**Response #27:** Arsenic and iron are not expected to be pollutants of concern at typical CAFO operations. Additionally, arsenic and iron tend to be immobile in the oxic environment of the topsoil where manure is incorporated. The only specific pharmaceuticals cited by the commenter are 17 $\beta$ -estradiol and monesin, neither of which have water quality standards. DEQ updates its standards on a triennial basis and is always willing to incorporate new standards if the appropriate science is available. No change was made to the permit in response to this comment.

**Comment #28:** “Other factors are very important to determining soil health and agronomic application rates to obtain ideal crop yield and also to protect surface and groundwaters. These include constituents such as ammonia, nitrate, and nitrite levels, and soil moisture content.”

**Response #28:** Ammonia, nitrate and nitrite are all inorganic forms of total nitrogen that rapidly change depending on soil chemistry, bacterial activity and plant uptake rendering these factors less useful than total nitrogen as indicators of soil health. DEQ finds total nitrogen more informative for purposes of preventing overapplication of nutrients because it includes the organic nitrogen found in soils, detritus, manure and process wastewater. Maintaining soil moisture is important for optimal crop yield. See response to comments 3-10 on wet weather. No changes were made in response to this comment.

**Comment #29:** “Strengthen manure and soil testing requirements to obtain meaningful, representative samples for agronomic rate determinations, crop yields, and assessment of the potential for CAFO waste pollution to waters of the state.” “We strongly urge DEQ to modify the draft CAFO GP to require CAFOs to conduct regular sampling of soil so that DEQ and the public can confirm that waste is being applied agronomically, and that water quality is not impacted by CAFO operations.”

**Response #29:** The permit requires BMPs and an NMP that includes requirements for regular soil and manure monitoring addressing either the linear or narrative nutrient application rate approach. The requirements for sampling and agronomic uptake are incorporated into the CAFO GP from 40 CFR 412 and ARM 17.30.1334. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. A CAFO’s NMP is reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. If a CAFO cannot meet the requirements of the CAFO GP, it must obtain an individual permit. No changes were made in response to this comment.

**Comment #30:** “We urge DEQ to clarify in the Permit, Section 4.1.2, that any transfer of wastes must be accompanied by a representative sample of the wastes per standards contained in the Permit. Further, DEQ must require tracking and control of waste use and disposal for transferred waste as part of the Permit. The first step in this direction would be to enforce the requirement that manifest forms be filed with DEQ upon transfer.”

**Response #30:** CAFOs are regulated point sources under the Montana Water Quality Act. Other farmers, who are not CAFOs, are considered nonpoint sources even if they obtain fertilizer from a regulated entity. DEQ cannot extend its regulatory reach into an unregulated business or individual because the unregulated one does business with a regulated one. The manure sampling frequencies are incorporated into the CAFO GP from 40 CFR 412 and ARM 17.30.1334. The CAFO transferring manure must maintain records of the transfer for five years. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made in response to this comment.

**Comment #31:** “We strongly urge DEQ to require increased monitoring of surface water quality. Monitoring points are necessary to identify discharges and to monitor the efficacy of CAFOs’ manure management systems. Presently, the draft GP does not address any of these practices.”

**Response #31:** Surface water monitoring is generally ineffective in determining compliance of point sources. Presence of pollutants in a waterbody only indicates there is a source of a pollutant, not whether the source is a CAFO, another point source, nonpoint source or natural source. Also, absence of a pollutant does not mean the permittee is in compliance, only that nothing was detected at the time of sampling. These problems hold particularly true in the rural areas containing CAFOs where the CAFO’s activity may be masked by the plethora of other agricultural activities in a watershed. If a waterbody is impaired, DEQ develops TMDLs to identify all of the sources and seek reductions. No changes were made in response to this comment.

**Comment #32:** “While Montana’s draft 2018 GP purports to regulate CAFO waste both at production areas and land application areas, available EPA ECHO database compliance data indicates there are 61 facilities with current violations, and 94 facilities with violations within the past 3 years, indicating a serious enforcement backlog and lending impetus to the need for better, representative, water quality monitoring data from CAFOs in Montana.”

**Response #32:** The majority of violations noted in the EPA ECHO database are not related to water quality, but are due to late filings of a report. DEQ’s handling of violations is not within the scope of the CAFO GP renewal. The permit requires BMPs and a NMP that includes requirements for regular soil and manure monitoring. No changes were made in response to this comment.

**Comment #33:** “Current CAFO requirements under the GP are not designed to monitor and catch discharges.”

**Response #33:** The CAFO GP contains monitoring, sampling and recordkeeping requirements for the entire CAFO operation including the feeding area, the livestock waste control facilities, and the land application area. These monitoring requirements include leak detection and pond levels. Some of the required monitoring is daily, which is more frequent than the typical MPDES permit. Combined, these monitoring, sampling, and recordkeeping requirements will reveal discharges. Also, DEQ performs site inspections, during which it can see the evidence of a discharge, such as dead vegetation and erosional patterns. The monitoring, recordkeeping and sampling requirements are incorporated into the CAFO GP from 40 CFR 412 and ARM 17.30.1334. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made in response to this comment.

**Comment #34:** “The 2018 draft GP must also account for the fact that the Clean Water Act is a technology-forcing statute. *See e.g.* 33 U.S.C. §§ 1316(a)(1), 1317(a)(2) (CWA’s best available demonstrated control technology and best available technology economically achievable). The idea of technology-forcing statutes is that by law, Congress and agencies charged with implementing the law “can order into being technological achievements not now enjoyed by a particular industry.” The reason for technology- forcing statutes is an assumption that “existing market forces fail to produce an appropriate level of pollution control, either because of explicit collusion among manufacturers or because of the inability of spillover victims to communicate and enforce their needs within the market.”

“The 2018 Draft Permit needs to account for changes in technology”

**Response #34:** The technology requirements are incorporated into the CAFO GP from 40 CFR 412. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. If a CAFO cannot meet those requirements, the operation must seek an individual permit. No changes were made in response to this comment.

**Comment #35:** “The draft CAFO GP provides that only a “substantial change” in the NMP or permit terms triggers the duty to make those changes public and offer opportunities for comment. As written it is left to DEQ’s discretion to determine what constitutes a “significant change” necessitating further public review. DEQ must define what constitutes “significant,” otherwise this language is unenforceably vague, arbitrary, capricious and unlawful.

Comprehensive nutrient management plans are effluent limitations, the terms of which must be included in a CAFO’s permit. Under the CWA, this is clear from the Second Circuit’s ruling in *Waterkeeper Alliance, Inc. v. EPA*, 399 F. 3d at 502. The manner in which a permitted facility develops and implements required pollutant discharge control measures, essentially the NMP, constitutes the functional equivalent of permit terms. *See also* *EDC v EPA*, 344 F.3d 832, 854 (9th Cir. 2003).”

“Simply because a CAFO has succeeded in getting a permit for its initial operation does not give it carte blanche to continue to expand or increase potential impacts on surrounding landscapes and communities.”

The commenter included suggestions of “significant changes”.

**Response #35:** Substantial changes are defined by the EPA CAFO rule in 40 CFR 122(e)(6), which incorporates the court decisions mentioned by the commenter. Substantial changes include items that could increase manure and process wastewater production or reduce the operations ability to dispose of it properly thereby increasing risk of a discharge to state waters. DEQ believes public notice of substantial changes and accompanying environmental assessment would notify the public of any alterations to the facility that could result in potential impacts to the environment. DEQ does not see a need for a second category of changes called “significant changes”. Additionally, DEQ defines what it considers minor permit modifications at ARM 17.30.1362. No changes were made in response to this comment.

**Comment #36:** “The rationale for a land application setback adjustment (see Permit at pp. 14-15) from 100’ to 35’ vegetated buffer is vague and uninformative.” “In other words, the NRCS Standard indicates that risks are higher at the established distances than what was once understood. The proposed GP does not reflect this most current understanding of surface water protection.”

**Response #36:** The setback requirements are incorporated into the CAFO GP from 40 CFR 412. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. If a CAFO cannot meet those requirements, the operation must seek and individual permit. No changes were made in response to this comment.

**Comment #37:** “Further, the proposed GP does not adequately identify how the operator will establish or measure the ‘pollution reduction equivalent’ that would demonstrate that a setback or buffer is not necessary. The GP should provide some minimum number of measurements of concentration of nutrients, sediment, and biochemical oxygen demand in contaminated stormwater runoff at the ‘field-specific conditions’ in such frequency and specificity as to allow a scientific proof that the removal of pollutants in the runoff is of equal or better protection levels than can be achieved with a 100 foot setback.”

**Response #37:** See Response to Comment 36. The alternative requirements are incorporated into the CAFO GP from 40 CFR 412. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. DEQ will employ its agency expertise, consisting of engineers, agronomists, hydrologists and other scientists to review any alternative buffers. Any alternative buffer requirement or conservation practice that is incorporated in a NMP under the CAFO GP will be made available for public review and comment pursuant to Section 1.6 of the permit. Monitoring dispersed runoff along a creek in a storm event could put human life at risk, and is unlikely to provide proof of pollutant removal or of compliance with permit requirements, especially since there is no 100-foot setback to serve as a control for comparison. See response to comment 31. No changes were made in response to this comment.

**Comment #38:** “The proposed GP does not adequately define when and how ground water monitoring would be required at regulated facilities. It claims the Department may require monitoring if “any component of the production area constitutes a potential source of pollution to state groundwater”. The fact is all liquid manure systems constitute a potential source of pollution to groundwater and thus all CAFOs that have liquid manure systems should have a minimum ground water monitoring program. The proposed GP should have requirements for ground water monitoring for all CAFOs that utilize a liquid manure system. The Department must acknowledge that liquid manure systems represent the greatest and most immediate risk to ground water. Solid manure systems that are uncovered pose a threat to ground water quality during rain and snow melt events. It is our contention that a minimum ground water monitoring program includes establishing a baseline concentration of the pollutants of concern (prior to onset of operation) in the ground water directly below all liquid manure waste containment systems and the use of a minimum of three ground water wells (one upgradient and two downgradient) to track pollutant concentrations during the operation of the facility.”

**Response #38:** See response to comment 18. No changes were made in response to this comment.

**Comment #39:** “In addition, the proposed GP must incorporate by reference the most current version of NRCS Conservation Practice Standard 590 Nutrient Management for Montana rather than rely upon the outdated version in Circular DEQ-9.” “The field-specific assessment language on page 21 of the proposed GP provides Olsen P phosphorus numbers that are inconsistent with the range expected from the Olsen P test and are more indicative of the Bray1 phosphorus test. This needs to be corrected so that the values correlate with those provided in the NRCS Conservation Practice Standard 590 Nutrient Management for Montana.”

**Response #39:** The language being referenced, on page 21 of the draft CAFO GP, is consistent with ARM 17.30.1334, which incorporates NRCS Conservation Practice Standard 590. See also Response to Comment No. 6. No changes were made in response to this comment.

**Comment #40:** “The proposed GP is inconsistent with its references to the name used to identify regulated structures that contain manure or other livestock wastes and wastewaters. The GP uses different terms that in most cases are identifying the same thing, such as

- ‘wastewater or manure storage structures’ (page 6)
- ‘livestock waste control facilities’ (pages 7-8, 10),
- ‘waste containment structures’ (page 9-11),
- ‘liquid manure or process wastewater system’ (page 12),
- ‘manure and wastewater facilities’ (page 13),
- ‘wastewater and manure storage and containment structure(s)’ (page 14)
- ‘component of the production area’ (page 16)
- ‘process wastewater storage or treatment system’ (page 17)
- ‘manure, litter, process wastewater, or storm water storage or treatment system’ (pdf page 17)
- ‘liquid manure handling system’ (page 32)
- ‘manure storage area’ (page 33)
- ‘waste containment area’ (pdf page 33)

None of these terms are defined in the definition section of the proposed General Permit. The broad range of terms used to identify what might be the same structure makes the permit less understandable and more difficult to enforce if the permittee and agency are not in full agreement as to definition and use of these terms.”

**Response #40:** Most of the word choice is incorporated out of 40 CFR 412 & 122 and ARM 17.30.1330 & 1334. Regardless of the varying language chosen by the rules and draft CAFO GP to describe livestock waste control facilities, the words have commonly understood meaning in the industry and the general purpose is the same. All livestock waste and process wastewater must be captured and agronomically utilized unless certain exclusions apply. DEQ has not experienced any difficulty enforcing the permit over terminology. No changes were made in response to this comment.

**Comment #41:** “The Facility Closure requirements fail to protect waters of the state because they do not include specific requirements for ground water monitoring under those structures that could have leaked and/or seeped manure wastewater into the subsurface and ultimately the ground water. At a minimum, closure must include a ground water monitoring and sampling plan that is approved by the Department and presented to the public via public notice and comment opportunity. The ground water monitoring plan shall include the installation of temporary piezometers and/or permanent monitoring wells in order to obtain ground water samples to determine if ground

water pollution has occurred and whether or not ground water quality standards have been violated. If the standards have been violated, the facility closure process must include a ground water remediation plan that will restore the ground water to applicable standards.”

**Response #41:** All active livestock waste control facilities must meet the permit requirements to protect groundwater. See response to comments 18-23. The closure requirements include the removal of all waste so that the livestock waste control facility could no longer be a potential discharger of pollutants. A closed operation does not meet the definition of a CAFO, so it is not considered a point source. No changes were made in response to this comment.

**Comment #42:** “Conduct a Nondegradation Review on CAFOs sited within impaired or 303(d) waters and apply assumptions underlying any applicable TMDL WLA, items notably absent in the GP and Fact Sheet.” “the GP and supporting materials do not contain any type of nondegradation analysis, do not discuss impaired waterways or the nexus between CAFOs and surface water impairments, and do not discuss TMDLs and/or any applicable WLAs. As DEQ knows MPDES permits must include, at minimum, permit limitations consistent with any applicable WLA (*see* 40 CFR 122.44(d)(1)(vii)(B)), and likewise DEQ should address the reasonably foreseeable potential of CAFOs to cause or contribute to ongoing impairment or new impairment via thorough review and any necessary WQBELs under the GP”

**Response #42:** See response to comment 9. The permit contains specific requirements for CAFOs located near impaired waterbodies in section 4.1.4 and appendix D. The CAFO GP fact sheet Part X discusses TMDLs. All applicable TMDLs assume all process wastewater and manure is captured and utilized except for the 25-year, 24-hour storm event. The CAFO GP meets these assumptions so is consistent with all applicable WLAs. DEQ has not been notified of any new potential CAFOs in Montana. The requirements of the CAFO GP are for protecting water quality standards so would prevent new impaired waters. Additionally, the draft CAFO GP contains a reopener provision at 5.32, which allows permit modification if necessary to incorporate waste load allocations to implement a TMDL. No changes were made in response to this comment.

#### **Missoula Public Health – Todd Seib**

**Comment #43:** The commenter wants to ensure groundwater protections are not being removed through this general permit and was wondering about the lack of specific wording on what is to be sampled in groundwater.

**Response #43:** See responses to comments 18-23. The citation in the comment refers to the 2013 CAFO General Permit. Not all sampling parameters are informative in all settings. DEQ will review any groundwater monitoring plan, including the monitoring parameters, to ensure specific parameters of concern are addressed at the CAFO. Groundwater protections are being maintained through this general permit. If an operator cannot protect groundwater, they cannot obtain CAFO GP and must seek an individual permit. No changes were made to the permit in response to the comment.

#### **NRCS – Steve Becker**

**Comment #44:** “Ensure that future language in 4.3(c) references the new rule for lagoon setbacks (currently being worked on by Eric Urban).

*4.3.(c) New wastewater containment structures or the manure and wastewater disposal sites must not be constructed within 500 feet of existing water well(s) per 75-5-605(c) MCA.”*

**Response #44:** The citation in the comment refers to the 2013 CAFO General Permit. The lagoon-well setback language has already been changed in the draft 2018 CAFO General Permit that was public noticed by DEQ. The language allows for consideration of site-specific criteria as contemplated by the draft proposed rulemaking. No changes were made to the permit in response to the comment.

**Comment #45:** “Ensure that future language in 4.3 excludes setback distances from reception tanks (i.e. sumps, manholes, batching/agitation tanks). We can assume these tanks are basically liquid tight compared to lagoons.”

**Response #45:** The lagoon-well setback language in the draft permit allows for the permittee to demonstrate that a livestock waste control facility is not a source of pollutants to groundwater and not subject to setback requirements. No changes were made to the permit in response to the comment.

**Comment #46:** “What does DEQ propose for concrete/steel storage tanks, since the well setback rule clearly detaches tanks from lagoons. Will the general permit eliminate setback requirements for concrete/steel storage tanks, or continue to treat them like a pond/lagoon?”

**Response #46:** See Response to Comment 45. DEQ has not found any consistent use of the terms pond, lagoon, tank or any other type of livestock waste control facility. No matter the terminology, permittees can utilize the provisions of the permit to demonstrate that a livestock waste control facility is not a source of pollutants to groundwater for purposes of well setbacks. No changes were made to the permit in response to the comment.

**Comment #47:** “Take this opportunity to verify if language in 2.3.1(e) applies to Vegetated Treatment Areas (Code 635).

*2.3.1(e) Manure, litter, and process wastewater must not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sink holes, agricultural well heads, or any other conduits to surface waters unless the permittee demonstrates in the site-specific NMP that the following compliance alternatives are protective of water quality:”*

**Response #47:** 2.3.1(e) applies to Vegetated Treatment Areas (VTAs), but please note that the exception in 2.3.1(e)(ii) allowing for smaller setbacks also applies to VTAs because VTAs are designed to recirculate effluent and have no runoff. No changes were made to the permit in response to the comment.

**NRCS – Tom Watson**

**Comment #48:** “Section 1.8 Terminating Permit Coverage



- Suggest rewording to “A written Notice of Termination must cite one of the conditions below and include a signature by the owner or operator of the CAFO.””

**Response #48:** The notice of termination form (NOT) is a standard DEQ form permittees must sign and state reasons they no longer need coverage. No changes were made to the permit in response to the comment.

**Comment #49:** “Section 2.1 Effluent Limitations and Standards – Production Area

- Suggest rewording to “(b) such discharge was the result of the 25-year, 24-hour rainfall event or larger;””

**Response #49:** DEQ agrees to add “or larger”. The intent of the rule is to allow discharges that are the result of a rainfall event that meets or exceeds the 25-year, 24-hour storm event.

**Comment #50:** “Section 2.2 Production Area and Livestock Waste Control Facility

- Suggest rewording heading to “2.2 Production Area and Livestock Waste Storage Structures” and the first sentence to read “The following requirements apply to the production area and livestock waste storage structures.””

**Response #50:** See response to comments 40 & 46. “Facility” and “structure” are used interchangeable in CAFO regulations. DEQ prefers to use “facility”. No changes were made to the permit in response to the comment.

**Comment #51:** “Section 2.2 Production Area and Livestock Waste Control Facility

- Suggest rewording heading to “2.2 Production Area and Livestock Waste Storage Structures” and the first sentence to read “The following requirements apply to the production area and livestock waste storage structures.””

“Suggest rewording header to “2.2.1 Livestock Waste Storage Structure” with the following wording updated to read “The livestock waste storage structure must be designed, operated and maintained as follows:””

**Response #51:** See response to comments 40, 46, and 50. “Facility” and “structure” are used interchangeable in CAFO regulations. DEQ prefers to use “facility”. No changes were made to the permit in response to the comment.

**Comment #52:** 2.2.1 reworded to “(e) to contain at least 6 inches of residual solids after liquid has been removed; and, All livestock waste storage structures must have a depth marker...””

**Response #52:** See response to comments 40, 46 and 51. The amount of remaining residual solids may vary depending on the treatment goals of the CAFO’s engineer and layer needed to protect a liner. 40 CFR 412 contains no requirements for residual solids. 75-5-802 MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made to the permit in response to the comment.

**Comment #53:** “Suggest adding a holding tank option to Figure 1 as illustrated below (marked in red):

- Suggest formatting Figure 3 as illustrated below (marked in red):”

**Response #53:** See response to comments 40, 46 and 51. DEQ will update figure 3 to include both pit and tank because the markings are identical. DEQ will add some of the suggested wording to the figures, except for the suggestion of “storage pond” in figure 3 because it may cause confusion with holding pond in figure 1.

**Comment #54:** “Suggest eliminating Figure 2, as treatment lagoons are not appropriate in the cold climate of Montana.”

**Response #54:** Treatment lagoons are a common and effective means for treatment in Montana. No changes were made to the permit in response to the comment.

**Comment #55:** “Facility Operation

- Suggest rewording the sentence to read “The structure shall be dewatered prior to the winter months to provide capacity indicated by the 180-day, or “Winter Pump Down” level.”
- Note to DEQ: Evaporative basins are designed to passively dewater holding ponds such that pond capacity for required storage is available going into the next winter. If this does not occur, O&M plans call for pumping..”

**Response #55:** See response to comments 40, 46 and 51. DEQ acknowledges that both evaporation or pumping may be used to create capacity for wintertime storage. No changes were made to the permit in response to the comment.

**Comment #56:** “Suggest rewording paragraph one to read “Livestock waste storage structures must be sealed. A seal consisting of steel, concrete, compacted clay, soil-bentonite, geomembrane, or geosynthetic clay material may be considered provided the permeability, durability, and integrity of the proposed material is satisfactorily demonstrated for the anticipated conditions.”

**Response #56:** See response to comments 40, 46 and 51. DEQ will add steel and concrete to the list of liners. Other types of materials mentioned in the comment would be considered synthetic liners. The list of liner materials is not meant to be an exhaustive list. Other materials that can meet the seepage requirements may also be used as a liner.

**Comment #57:** “Suggest adding the following information “Water tight reinforced concrete storage structures and water tight slabs-on-soil must be designed in accordance with the applicable provisions of the current ACI 350 - Code Requirements for Environmental Engineering Concrete Structures.”

“Steel structures must be designed in accordance with the applicable provisions of the current American Institute of Steel Construction (AISC) Steel Construction Manual.

Geomembrane or geosynthetic clay liner material must meet the requirements in Table 1.

Materials and seams must be field tested in accordance with ASTM methods. Test results must be incorporated into the as-built plan drawings or report.”

The commenter included a table of liner requirements.

“• Suggest rewording the last sentence in the first paragraph to read “To achieve an adequate seal in systems using compacted clay and soil-bentonite liners...”

- In paragraph one, please define/describe “maximum operation depth.”
- Waste storage structures must also meet the following criteria;
  - (a) A minimum separation of 10 feet between the waste storage structure bottom and bedrock.
  - (b) A minimum separation of 4 feet between the waste storage structure bottom and seasonal high ground water; and
  - (c) Suggest removing item (c) and replace with “A minimum separation between a ponds and water well as specified in ARM ... This separation does not apply to concrete or steel tanks designed in accordance with the applicable provisions of ACI 350 or ASCI Manual.””

**Response #57:** See response to comments 25, 40, 46, 51 and 52. Operational depth refers to the floor of the livestock waste control facility. All technical regulations are established in 17.30.1334 and 40 CFR 412. 75-5-802 MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made to the permit in response to the comment.

**Comment #58: “Facility Closure**

- Suggest rewording sentence one in paragraph one to read “Livestock waste storage structures shall be maintained until closure.”
- Note: Item (a) is documented in the regulations.
- Suggest rewording sentence one in the last paragraph to read “Unless otherwise authorized by the Department, the completion of closure for livestock waste storage structures shall occur...””

**Response #58:** See response to comments 40, 46, 51, and 57. No changes were made to the permit in response to the comment.

**JS Livestock – Jeff Solomon and Candi Zion.**

**Comment #59:** “It is unnecessary to collect and store weather documentation as that information is archived on several different websites and readily available. The collection and retention of this information is a waste of paper and resources as well as redundant in this day and age with computer technology. It also seems especially unnecessary when discharges are not present. I ask that this requirement be modified to state: retention of weather documentation is suggested but not required unless there is a discharge or has been a history of discharge(s).”

**Response #59:** The requirement to keep weather data is from federal law on CAFOs. The purpose is that weather data is used to justify precipitation-related discharges and ensure the CAFO operator is following the NMP. The CAFO General Permit does already allow for the permittee to utilize electronic recordkeeping and offsite weather stations so DEQ agrees with the use of weather websites. However, CAFOs may find an onsite rain gage advantageous because it is more likely to capture isolated rainfall missed by an online weather station. No changes were made to the permit in response to the comment.

**Comment #60:** “Cost of permits are too high.”

**Response #60:** The permit fees are set by the Montana Legislature so DEQ cannot reduce them. The cost of implementing the permit by permittees is continually being reviewed by DEQ. The requirements of the permit are set by federal regulation, but DEQ is trying to develop ways to reduce

the burden of meeting those requirements, such as providing recordkeeping tools and electronic management of documents. No changes were made to the permit in response to the comment.

**Comment #61:** “Testing manure samples seems unnecessary when the manure is left on site in the pens rather than hauled away or applied to the land. It is also costly to have samples tested. I ask that this requirement be modified to state: taking and testing manure samples is applicable only when manure is hauled off site or applied to the land.”

**Response #61:** The manure sampling conditions are within the context of land application so the intent of the condition is to sample manure when it is land applied or transferred to another farmer, not sitting in the pens. No changes were made to the permit in response to the comment.

#### **North Central Montana Conservation Coalition – Elsie Tuss**

**Comment #62:** “I urge you to consider the following inclusions in the General Permit for the Madison Food Park CAFO Permit.”

**Response #62:** See response to comment 2. No changes were made to the permit in response to the comment.

**Comment #63:** “Must include frequent surface water monitoring records and reporting (Only requires annual testing) zero discharge from mortality management areas”

**Response #63:** See response to comment 31. No changes were made to the permit in response to the comment.

**Comment #64:** “require at least 100 foot set-backs from waterways for manure application”

**Response #64:** See response to comment 36. The permit does require a 100-foot setback. No changes were made to the permit in response to the comment.

**Comment #65:** “Require use of Olson P test for water and manure application rates (for alkaline soils)”

**Response #65:** See response to comment 39. Testing methodology is set in ARM 17.30.1334. No changes were made to the permit in response to the comment.

**Comment #66:** “Require manure application restrictions in storms, on frozen, snow covered or saturated soils”

**Response #66:** See response to comment 3-5 & 8. No changes were made to the permit in response to the comment.

**Comment #67:** “Require use of most current science in applicable NRCS resources and Circular DEQ-9”

**Response #67:** See response to comments 6, 14, 25, 26, 36, 39 and 57. No changes were made to the permit in response to the comment.

**Comment #68:** “Conform to federal law for anti-degradation laws.”

**Response #68:** See response to comments 9 and 42. No changes were made to the permit in response to the comment.

**Comment #69:** “Do not use agronomic application rates.”

**Response #69:** The commenter presented no alternative to agronomic rates or what is wrong with agronomic rates. CAFOs are required to meet agronomic rates as established by 40 CFR 412 and ARM 17.30.1334. 75-5-802 MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made to the permit in response to the comment.

**Comment #70:** “Use DEQ reports of impaired waters, require testing and reports on local degrade waters previous to and after adjustedmanuure applications”

**Response #70:** See responses to comments 31 & 42. No changes were made to the permit in response to the comment.

**Comment #71:** “Require frequent testing and reports on air quality tests for 8 air pollutants and pathogens from CAFO ”

**Response #71:** The commenter did not specify what is being referred to by eight air pollutants and pathogens. See response to comments 87 & 90. No changes were made to the permit in response to the comment.

**Comment #72:** “Require complete and available records of use of all pharmaceuticals”

**Response #72:** See response to comments 27 & 81. No changes were made to the permit in response to the comment.

### **Comments from individuals – grouped and summarized**

**Comment #73:** Commenters suggested that CAFOs or the provisions of the permit violate the Montana State Constitution’s provisions on the right to a clean and healthful environment.

**Response #73:** The Montana Legislature recognized its constitutional obligations under Mont. Const. art. II, § 3, and art IX, by adopting the Montana Water Quality Act, which provides: “the requirements of this chapter provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources. A purpose of this chapter is to provide additional and cumulative remedies to prevent, abate, and control the pollution of state waters.” See § 75-5-102, MCA. DEQ is the state agency responsible for administration of the Montana Water Quality Act including regulation of point source dischargers of pollutants to state waters. See § 75-5-211, MCA. The conditions of the CAFO GP comply with the federal Clean Water Act and regulations adopted

under that Act at 40 CFR 122 & 412 and the Montana Water Quality Act and administrative rules adopted thereunder at ARM 17.30.1330 & 1334, as well as other environmental regulation including the state nondegradation policy. Compliance with the CAFO GP will protect the quality of state waters from CAFO point source discharges. No changes were made to the permit in response to the comment.

**Comment #74:** Commenters focused their comments on slaughterhouses, with most specifically referencing the Madison Food Park.

**Response #74:** See response to comment #2. No changes were made to the permit in response to the comment.

**Comment #75:** Commenters suggested the growth of slaughterhouses in Montana would encourage the growth of CAFOs.

**Response #75:** See response to comment #2. Montana's agricultural community may decide to expand or start CAFOs if there were a nearby market for the animals. However, a slaughterhouse is not a direct, secondary or cumulative impact of a CAFO discharge itself. No changes were made to the permit in response to the comment.

**Comment #76:** Commenters suggested more frequent monitoring in the various monitoring requirements of the CAFO GP.

**Response #76:** See response to comment 33. No changes were made to the permit in response to the comment.

**Comment #77:** Commenters suggested mandatory groundwater monitoring and additional measures for groundwater protection.

**Response #77:** See responses to comments 18-27. No changes were made to the permit in response to the comment.

**Comment #78:** Commenters suggested mandatory monitoring of drainage tiles.

**Response #78:** See responses to comments 18-27. The water from drainage tiles is groundwater, which is protected by the requirements of the CAFO GP. No changes were made to the permit in response to the comment.

**Comment #79:** Commenters suggested more stringent mortality management requirements, including citing concerns over mass mortality events.

**Response #79:** See response to comment 24. Mortality management to prevent discharges is required regardless of the number or cause of mortalities. No changes were made to the permit in response to the comment.

**Comment #80:** Commenters suggested specific requirements related to the geography of the CAFO and its land application sites, including sinkholes and ravines.

**Response #80:** See responses to comments 19 and 20. 40 CFR 412 contains requirements for setback from sinkholes and anything that might be a conduit to surface water. These requirements were incorporated into the CAFO GP and must be clear in the CAFO's NMP, which will be reviewed by DEQ and made available for public review and comment pursuant to Section 1.6 of the permit. Section 75-5-802, MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. No changes were made to the permit in response to the comment.

**Comment #81:** Commenters suggested monitoring and limits on pharmaceuticals. Commenters also suggested a ban or requiring public disclosure of pharmaceuticals.

**Response #81:** See response to comment 27. The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide water quality standards for pharmaceuticals and does not provide DEQ with authority to regulate animal medicine or husbandry. No changes were made to the permit in response to the comment.

**Comment #82:** Commenters had various suggestions on DEQ's enforcement of violations, such as steeper financial penalties.

**Response #82:** See response to comment 32. No changes were made to the permit in response to the comment.

**Comment #83:** Commenters suggested mandatory surface water monitoring for compliance.

**Response #83:** See response to comment 31. No changes were made to the permit in response to the comment.

**Comment #84:** Commenters suggested different setbacks from wells, groundwater and surface water.

**Response #84:** See responses to comments 25, 36, 37 and 44. No changes were made to the permit in response to the comment.

**Comment #85:** Commenters suggested the storm event threshold for discharges be raised from a 25-year, 24-hour storm event to 100 or 1,000-year storm event.

**Response #85:** See response to comment 13. The minimum storm event threshold for discharges is established by 40 CFR 412. 75-5-802 MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412.

**Comment #86:** Commenters suggested DEQ update the underlying rules and pressure the EPA, State or the commenter's county to update its rules on animal feeding operations. Examples provided included passing or updating zoning and nuisance regulations.

**Response #86:** See response to comment 7. DEQ issues the CAFO GP based on the effective regulations at the time of issuance. Montana's Board of Environmental Review and Montana Legislature establishes statutes and regulations that govern DEQ's CAFO GP. These regulations do

not preclude other levels of government from establishing and enforcing their own regulations on CAFOs. No changes were made to the permit in response to the comment.

**Comment #87:** Commenters suggested CAFO GP conditions on odor or air quality. Commenters also identified specific air quality chemicals, such as ammonia.

**Response #87:** The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide DEQ with authority to regulate air quality. Issuance of the CAFO GP does not preclude CAFO operators from having to obtain additional permit coverage for air quality concerns. The CAFO GP's environmental assessment will be updated to acknowledge CAFOs may be a source of objectional odors and air pollutants, which may be a secondary impact of the land application of manure required by the permit. As noted in the environmental assessment, the CAFO GP's requirements can minimize objectional odors and air pollutants by properly storing and utilizing animal wastes and mortalities. Individual nutrient management plans will be reviewed by DEQ and opened for public comment before authorization of the CAFO.

**Comment #88:** Commenters raised concerns that CAFOs could increase traffic, which would result in additional road maintenance, noise, and lights.

**Response #88:** The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide DEQ with authority over traffic. Traffic increases would predominantly due to feed and livestock trucks, but may also be due to the hauling of manure to land application areas. Issuance of the CAFO GP does not preclude CAFO operators from having to obtain additional permit coverage for traffic concerns. The CAFO GP's environmental assessment will be updated to acknowledge CAFOs may be a source of additional traffic and the hauling of manure could be a secondary impact. Individual nutrient management plans will be reviewed by DEQ and opened for public comment before authorization of the CAFO.

**Comment #89:** Commenters raised concerns that CAFOs employ predominantly low wage workers and workers from different cultural backgrounds than the local populace.

**Response #89:** The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide DEQ with authority over wages or social structure of an area. Wages and social structure is not a direct, secondary or cumulative impact of a CAFO discharge itself. Some CAFOs may choose to offer minimum wage and be unable to find employees from the local labor market. The CAFO GP's environmental assessment will be updated to acknowledge CAFOs may offer low wages and hire outside of the local labor market.

**Comment #90:** Commenters raised concerns about the presence of pathogens at CAFOs and their ability to develop antibiotic resistance and enter the food/drinking water supply.

**Response #90:** The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide DEQ with authority to regulate animal medicine or husbandry. Also, the CAFO GP does not have the authority to regulate the type of crop, such as crops grown for direct human consumption. Pathogens in manure and process wastewater will be captured and land applied where the chemical and biological characteristics of the soil treats pathogens. Montana has a water quality standard for *E. coli*. Discharges are not allowed outside of the prescribed storm events,



when the highly diluted excess water can be discharged where it will be diluted further by flooding to meet the *E. coli* water quality standard. The CAFO GP's environmental assessment will be updated to acknowledge livestock waste may carry pathogens.

**Comment #91:** Commenters raised concerns that the additional workers and their socioeconomic status may strain local services.

**Response #91:** The CAFO GP is written to the requirements of the Montana Water Quality Act, which does not provide DEQ with authority over local populations, or local services. Strains on local services due to increased local populations are not a direct, secondary or cumulative impact of a CAFO discharge itself. The CAFO GP's environmental assessment will be updated to acknowledge local service providers may face challenges fulfilling the increased needs of new workers.

**Comment #92:** Commenters suggested the CAFO GP be more prescriptive in its closure requirements.

**Response #92:** See response to comment 41. No changes were made to the permit in response to the comment.

**Comment #93:** Commenters suggested the CAFO GP would allow for water contamination.

**Response #93:** The CAFO GP requires the capture and land application of manure and process waste water in a manner that will ensure the protection of surface and groundwater. Compliance with the CAFO GP will protect the quality of state waters from CAFO point source discharges. No changes were made to the permit in response to the comment.

**Comment #94:** Commenters had various concerns related to the quantity of water used by CAFOs.

**Response #94:** The CAFO GP is written under the authority of the Montana Water Quality Act, which addresses manners of water quality. The CAFO GP does not preclude CAFOs from having to obtain water rights from the Montana Department of Natural Resources and Conservation to address quantity. The CAFO GP's environmental assessment will be updated to acknowledge CAFOs may need to obtain a water right.

**Comment #95:** Commenters were concerned the presence of a neighboring CAFO may affect property values and rights.

**Response #95:** The CAFO GP is written under the authority of the Montana Water Quality Act, which does not provide DEQ with any authority to address zoning or private property issues. The CAFOs that follow the CAFO GP will not have any adverse effects on water quality that would affect the neighboring properties. Individual nutrient management plans will be reviewed by DEQ made available for public review and comment pursuant to Section 1.6 of the permit. No changes were made to the permit in response to the comment.

**Comment #96:** Commenters had concerns about overapplication of manure.

**Response #96:** The CAFO GP requires a nutrient management plan to account for all sources of nutrients to farmland, including manure, to prevent overapplication. The nutrient management plan also requires soil and manure sampling so that manure application rates can be adjusted over time to prevent excess nutrients from being applied to the soil. Individual nutrient management plans will be reviewed by DEQ and opened for public comment before authorization of the CAFO. No changes were made to the permit in response to the comment.

**Comment #97:** Commenters had concerns that there are no standards or rules that apply to CAFO design and operation.

**Response #97:** Rules addressing CAFO design and operation can be found at 40 CFR 412 & 122 and at ARM 17.30.1330 & 1334. Montana water quality standards can be found in ARM 17.30 subchapters 6 & 7, and Circular DEQ-7. No changes were made to the permit in response to the comment.

**Comment #98:** Commenters had concerns that there are no requirements specifically addressing impaired streams or TMDLs.

**Response #98:** See response to comment 42. No changes were made to the permit in response to the comment.

**Comment #99:** Commenters had concerns over animal cruelty at CAFOs.

**Response #99:** The CAFO GP is written under the authority of the Montana Water Quality Act, which does not provide DEQ with any authority to address animal cruelty. The CAFO GP does not preclude CAFOs from having to comply with state and federal laws addressing animal cruelty and obtain additional permits or inspections, such as by the Montana Department of Livestock. No changes were made to the permit in response to the comment.

**Comment #100:** Commenters suggested the CAFO GP does not abide by Montana's nondegradation requirements.

**Response #100:** See responses to comments 9 & 42. No changes were made to the permit in response to the comment.

**Comment #101:** Commenters requested an extension to the public comment period.

**Response #101:** The public comment period was extended beyond the 30-day period required by rule and a public hearing was held on the general permit. The CAFO GP includes provisions for public comment of the terms of the nutrient management plan, which would afford the public an additional chance to provide input on each CAFO before it is granted an authorization under the CAFO GP. No changes were made to the permit in response to the comment.

**Comment #102:** Commenters requested a cap on CAFO size or a change in the thresholds for determining a small, medium and large AFO.

**Response #102:** Regulatory thresholds for animal numbers are set by the legislature in 75-5-801, MCA. DEQ cannot change statute through a permit. No changes were made to the permit in response to the comment.

**Comment #103:** Commenters requested all CAFOs be required to obtain individual permits.

**Response #103:** Section 75-5-802, MCA requires DEQ to authorize a general permit to any CAFO that meets the requirements of 40 CFR 412. The CAFO GP includes provisions for public comment of the terms of the nutrient management plan, which would afford the public an additional chance to provide input on each CAFO, much like is provided for individual permits. No changes were made to the permit in response to the comment.

**Comment #104:** Commenters requested a ban on CAFOs, or the CAFO GP. Commenters also asked for a delay on issuance of the CAFO renewal.

**Response #104:** 75-5-802 MCA requires DEQ to authorize a permit to any CAFO that meets the requirements of 40 CFR 412. The CAFO GP meets those requirements so a delay is not necessary. No changes were made to the permit in response to the comment.

**Comment #105:** Commenters were concerned that livestock waste control facilities may leak.

**Response #105:** See responses to comments 18-19 & 23-24. No changes were made to the permit in response to the comment.

**Comment #106:** Commenters were concerned that wells were insufficiently protected by the CAFO GP.

**Response #106:** See responses to comments 44 & 46. No changes were made to the permit in response to the comment.

**Comment #107:** Commenters were concerned that the Olsen soil test was being used, not being used, or used improperly by CAFOs.

**Response #107:** The requirements for the Olsen soil tests are set in ARM 17.30.1334. No changes were made to the permit in response to the comment.

**Comment #108:** Commenters requested that DEQ-9 and NRCS circulars become incorporated into the CAFO GP.

**Response #108:** See response to comments 6, 14, 15, 25, 26, 36, 39, 57 and 67. No changes were made to the permit in response to the comment.

**Comment #109:** Commenters requested that the CAFO GP addresses sediment.

**Response #109:** CAFOs are required to collect all manure and process wastewater so there should not be a discharge of sediment outside of extreme storm events. During those storm events, the extra water would still pass through large livestock waste control facilities where much of the sediment

would settle before being released into waterbodies where it would be diluted further by the large amount of precipitation entering the waterbody. Cultivation of farmland may result in some erosion. Surface water setbacks in rule and incorporated into the permit are designed to limit the impact of sediment from land application sites. If DEQ finds that a CAFO cannot protect surface water standards under the CAFO GP, the CAFO would be required to obtain an individual permit. No changes were made to the permit in response to the comment.

**Comment #110:** Commenters requested that the CAFO GP does not allow land application on frozen or snow-covered ground.

**Response #110:** See responses to comments 3 & 5. No changes were made to the permit in response to the comment.

**Comment #111:** Commenters requested an increase in CAFO fees.

**Response #111:** Section 75-5-803, MCA establishes CAFO fees. DEQ cannot change statute through a permit. No changes were made to the permit in response to the comment.

**Comment #112:** Commenters were concerned that DEQ will rubber-stamp approvals.

**Response #112:** DEQ reviews all CAFO applications and all nutrient management plans. Nutrient management plans will also be available for public review and comment pursuant to Section 1.6 of the permit. After reviewing public comments, DEQ may require additional information, which may prompt another DEQ review and public comment period. No changes were made to the permit in response to the comment.