



August 21, 2023

DEQ Water Quality Division
Water Protection Bureau
P.O. Box 200901
Helena, MT 59620

Submitted via email to DEQWPBPublicComments@mt.gov

Re: Draft NPDES Permit Number MT010000: Authorization to Discharge under the National Pollutant Discharge Elimination System for Concentrated Animal Feeding Operations

Dear DEQ:

Upper Missouri Waterkeeper, Center for Food Safety, Food & Water Watch, and Socially Responsible Agriculture Project (collectively, “Commenters”) respectfully provide the following comments on the draft Montana Pollutant Discharge Elimination System (“MPDES”) general permit for concentrated animal feeding operations (“CAFOs”), MTG010000 (“CAFO Permit” or “the Permit”). We provide the following comments and requests so that the Montana Department of Environmental Quality (“DEQ”) issues a legally compliant Permit and enables the State and impacted Montanans to hold polluting CAFOs accountable.

Commenters focus here on the CAFO Permit’s lack of representative monitoring, which is required by federal law and necessary to effectuate Montana’s water quality standards and Montanans’ fundamental right to a clean and healthful environment. Monitoring is a cornerstone of effective MPDES permitting; without it the Permit is largely unenforceable and state waters are left vulnerable to a host of CAFO pollutants. The Permit contains effluent limitations to minimize pollution discharges, facilitate compliance with Montana’s nondegradation policy, and meet the assumptions and requirements of existing or future total maximum daily loads for impaired waters. But without representative monitoring, DEQ and the public are unable to

ascertain whether any specific permitted CAFO authorized under the Permit has complied with those effluent limitations or is contributing to water quality violations. As explained below, issuing the Permit without representative monitoring that assures compliance with each effluent limitation in the Permit would be unlawful, arbitrary, and capricious.

I. CAFOs Are a Threat to Montana Waters

CAFOs are known threats to Montana’s environment and public health.¹ CAFOs generate and handle a variety of pollutants, and their practice of concentrating thousands of animals in confinement buildings and feedlots creates serious waste management challenges.² Regulators have long recognized CAFOs’ potential to discharge these pollutants, and the unique risks that CAFOs pose to water quality.³ Congress also recognized CAFOs’ unique potential to impair waters and specifically identified this industry in the Clean Water Act’s (“CWA”) definition of “point source.”⁴

The most prevalent and potentially harmful sources of pollution from CAFOs are animal manure, litter, and process wastewater.⁵ CAFOs also deal with a variety of other materials that have the potential to discharge into waters as pollutants, such as animal feed and feed additives, animal byproducts such as hair or feathers, bedding materials, sediments, mortalities, and contaminated run on water.⁶ CAFO wastewater can contain a plethora of pollutants, including nutrients commonly associated with animal manure, such as nitrogen and phosphorus, but also pathogens, sediments, antibiotics, harmful metals, chemicals, hormones, and endocrine

¹ USDA, Gallatin Surface Water Quality CAFO TIP at 3, <https://nrsc.prod.usda.gov/sites/default/files/2022-09/Montana-TIP-Gallatin-Surface-Water-CAFO.pdf> (“CAFOs can negatively impact surface water quality by loading streams with excessive nutrients and pathogens and potentially harming aquatic environments and drinking water quality.”); Carrie Hribar, National Assn. of Local Boards of Health, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities* (2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf; JoAnn Burkholder et al., *Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality*, 115(2) ENV’T HEALTH PERSPS. 308 (Feb. 2007), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1817674/>; Doug Gurian-Sherman, Union of Concerned Scientists, *CAFOs Uncovered: The Untold Cost of Confined Animal Feeding Operations* at 42, 51–56 (Apr. 2008), <https://www.ucsusa.org/sites/default/files/2019-10/cafos-uncovered-full-report.pdf>.

² U.S. Environmental Protection Agency, *Risk Assessment Evaluation for Concentrated Animal Feeding Operations*, EPA/600/R-04/042, at 1 (hereinafter, “EPA CAFO Risk Assessment”), https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=NRMRL&dirEntryId=85107.

³ See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7,176 (Feb. 12, 2003); Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the *Waterkeeper* Decision, 73 Fed. Reg. 70,418, 70,423, 70,469 (Nov. 20, 2008).

⁴ 33 U.S.C. § 1362(14).

⁵ EPA CAFO Risk Assessment at 24, 36–43; 68 Fed. Reg. at 7,180 (improperly handled CAFO waste “can contribute pollutants to the environment and pose a risk to human and ecological health”).

⁶ EPA CAFO Risk Assessment at 63, 72–73; EPA, *Managing Manure Nutrients at Concentrated Animal Feeding Operations* at 2-1–2-4 (Dec. 2004) (hereinafter, “EPA, Managing CAFO Manure”), https://www.epa.gov/sites/default/files/2015-08/documents/cafo_manure_guidance.pdf.

disrupting chemicals.⁷ This waste “is a primary source of nitrogen and phosphorus to surface and groundwater.”⁸

CAFOs discharge their waste to waters in a variety of ways.⁹ These include discharges from CAFO production areas, as well as from where a CAFO disposes of its waste by land application. These pollutants discharge to surface waters through a number of pathways, such as ditches; manure and wastewater handling infrastructure such as pipes, pumps, and storage facilities; leaking equipment; irrigation canals; ventilation systems; land application area conduits to surface waters such as tile drains and other drainage systems; surface runoff; and wastewater lagoons.¹⁰ Waste storage lagoons are known to leak and leach pollutants.¹¹ In fact, lagoons constructed pursuant to USDA’s Natural Resources Conservation Service (“NRCS”) standards “are designed to leak.”¹² The Montana Permit allows for a continuous discharge rate of pollutants from CAFO storage lagoons, similar to those NRCS standards.¹³ This pollution can then contaminate groundwater and subsequently discharge into hydrologically connected surface waters in violation of federal and Montana law.¹⁴

⁷ EPA CAFO Risk Assessment at 24.

⁸ U.S. EPA, *Estimated Animal Agriculture Nitrogen and Phosphorus from Manure*, <https://www.epa.gov/nutrient-policy-data/estimated-animal-agriculture-nitrogen-and-phosphorus-manure>.

⁹ See, e.g., EPA-833-R-10-006, Implementation Guidance on CAFO Regulations – CAFOs That Discharge or Are Proposing to Discharge (May 28, 2010), https://www3.epa.gov/npdes/pubs/cafo_implementation_guidance.pdf (describing factors that lead to CAFO discharges)

¹⁰ 68 Fed. Reg. at 7,181; EPA, Managing CAFO Manure at 2-25–2-26 (discussing voluntary controls to minimize spills and leaks from storage structures), 4-2 (noting that certain CAFOs must have “reception pits..., diversions, sediment basins, and underground outlets”); 4-15 (describing irrigation systems for applying CAFO waste), 7-2 (discussing “unplanned discharges” from pumps and pipes), O-10 (explaining that fields with subsurface (tile) drainage “creat[e] a surface water pollution hazard from direct tile discharge”); EPA CAFO Risk Assessment at 52, 72–73; *Nat’l Pork Producers Council v. U.S. E.P.A.*, 635 F.3d 738, 748 (5th Cir. 2011) (agreeing with EPA’s position that “litter discharged through confinement house ventilation fans” would be a Clean Water Act violation). Montana has approximately 4,900 acres of tile drained fields. Prasanth Valayamkunnath et al., *Mapping of 30-Meter Resolution Tile-Drained Croplands Using Geospatial Modeling Approach*, 7:257 SCI. DATA at 5 (2020), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7406500/pdf/41597_2020_Article_596.pdf.

¹¹ EPA CAFO Risk Assessment at 26–27 (“Leaky lagoons and below grade storage facilities are potential sources of [pollutants]”), 28 (“Leaking from lagoons is also a likely source”), 42 (hormone releases “may be associated with leakage from storage lagoons”), 58 (recognizing that leakage from storage facilities at best can be “minimized” and that “[c]lay-lined lagoons have the potential to leak”).

¹² *Food & Water Watch v. EPA*, 20 F.4th 506, 509 (9th Cir. 2021) (quoting *Cnty. Ass’n for Restoration of the Env’t, Inc. v. Cow Palace, LLC*, 80 F.Supp. 3d 1180, 1223 (E.D. Wash. 2015)).

¹³ The CAFO Permit’s allowance for a seepage rate of $k = 2.6 \times 10^{-9} \text{L}$ “corresponds to a percolation rate of pond water of less than 450 gallons per day per acre [4.22 m³/(ha/d)] at a water depth of 6 feet (1.8 m) and a line thickness of 1 foot (0.3 m), using Darcy’s law equation.” DEQ, Circular DEQ-2, Design Standards for Public Sewage Systems (2018). Many CAFOs have multiple process wastewater lagoons each of which can be well over an acre in size and often hold wastewater 9 feet deep or more; therefore, the CAFO Permit allows for potentially thousands of gallons of polluted wastewater seepage every day.

¹⁴ See *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1468 (2020) (finding that a discharge to hydrologically connected water that is the “functional equivalent” of a direct discharge violates the CWA); ARM 17.30.1001(15); ARM 17.30.705(1).

Many CAFO pollutants can threaten public health when discharged into state waters. Nitrate in drinking water poses serious public health threats including cancer, thyroid disease, premature births, and “blue baby syndrome,” among others.¹⁵ Excess nutrients like nitrogen and phosphorus can lead to eutrophication and harmful algal blooms that threaten public health; these pollution events are increasingly common and are well-documented by DEQ.¹⁶ And pathogens like fecal coliform and *E. coli* cause serious gastrointestinal symptoms when consumed by humans in drinking water or through contact with impaired waters.¹⁷

Montana’s 2020 Integrated Report provides strong evidence that CAFO pollution is resulting in water quality impairments in Montana and threatening public health. Montana has approximately 4,693 miles of rivers and streams that cannot support primary contact recreation and approximately 16,633 miles that cannot support aquatic life.¹⁸ DEQ has identified many rivers and streams impaired by pollutants commonly associated with CAFOs, especially nutrients like nitrogen and ammonia.¹⁹ These include waterways running through regions with a CAFO presence.

For example, there are clusters of permitted CAFOs along the Yellowstone River in the vicinities of Billings and Kinsey.²⁰ Numerous stretches of the Yellowstone River at or downstream of these clusters are impaired for nutrients, eutrophication, or other pollutants commonly associated with CAFOs, and DEQ acknowledges that agriculture is a contributing source.²¹ Similarly, the Big Hole, Beaverhead, and Jefferson Rivers have long-standing impairments for nutrients, sediment, and/or temperature, and several CAFOs operate within these watersheds.²² In fact, DEQ and the U.S. Department of Agriculture recently recognized that water quality in Montana’s leading dairy producing county, Gallatin County, is a concern

¹⁵ JoAnn Burkholder et al., *Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality*, 115 ENVTL. HEALTH PERSPECTIVE 308, 310 (2008); Roberto Picetti et al., *Nitrate and Nitrite Contamination in Drinking Water and Cancer Risk: A Systematic Review with Meta-Analysis*, 210 ENVTL RES. 112988 (July 2022), <https://www.sciencedirect.com/science/article/pii/S0013935122003152>.

¹⁶ See <https://deq.mt.gov/water/Programs/habs> (harmful algal blooms webpage of DEQ, HAB mapper of known incidences)

¹⁷ Centers for Disease Control and Prevention, *E. coli Infection*, <https://www.cdc.gov/healthypets/diseases/ecoli.html>.

¹⁸ <https://mywaterway.epa.gov/state/MT/water-quality-overview>.

¹⁹ Montana DEQ, Final Water Quality Integrated Report (Feb. 2021), <https://discover-mtdeq.hub.arcgis.com/maps/montana-impaired-waters-2020/about>.

²⁰ Montana FACTS GIS Spatial Data Viewer, <https://gis.mtdeq.us/portal/apps/webappviewer/index.html?id=8fcbb1f7a6f84296b10fb0aab50aba99> (filter by Permit Type: Concentrated Animal Feeding Operations).

²¹ Stretches identified by their ID305B identifier: MT43F001_010 (dissolved oxygen, sediment, eutrophication), MT43F001_011 (sediment, TDS, ammonia), MT42K001_010 (copper, nitrate/nitrite, sediment, TDS). Muster Creek, which feeds into the Yellowstone River near Kinsey, is flanked by CAFOs and is impaired for nitrate/nitrite, sediment and total phosphorus. MT42K002_040 (DEQ has identified irrigated crop production as a source).

²² Montana 303(d) List; Montana FACTS GIS Spatial Viewer.

because of livestock operations.²³ These are not the only examples of CAFOs sited in Montana’s impaired watersheds.²⁴

This evidence of ongoing CAFO pollution of Montana’s waterways underscores the need for a stronger MPDES permitting program for CAFOs to control CAFOs pollutants that are or may be violating Montana water quality standards. The CAFO Permit is intended (and assumed) to avoid these impacts. But without monitoring that would enable citizens and regulators to determine which CAFOs are causing or contributing to these impairments, as well as generating data to inform what management practices are necessary to comply with established TMDLs, Montana WQS, or the Montana Constitution, the Permit is legally deficient and incapable of ensuring compliance with water quality standards.

II. DEQ Has an Affirmative Duty to Protect Montanans’ Fundamental Right to a Clean and Healthful Environment

DEQ must issue a CAFO Permit that satisfies its affirmative duty under the Montana Constitution, Article II, Section 3, to guarantee citizens their inalienable right to a “clean and healthful environment.” The Montana Environmental Protection Act (“MEPA”) effectuates this constitutional mandate, which is further informed by the Montana Water Quality Act and its MPDES program.²⁵

DEQ’s CAFO pollution permit actions must be guided by Article II, Section 3 and Article IX, Section 1 of the Montana Constitution. Article IX, Section 1 provides that “[t]he State and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations.” These constitutional provisions are intended to not “merely prohibit that degree of environmental degradation which can be conclusively linked to ill health or physical endangerment.”²⁶ Rather, read together, they provide environmental “protections which are both anticipatory and preventative.”²⁷

DEQ created Circular DEQ-9 specifically to address the pollution impacts of CAFOs and is part of DEQ’s efforts to meet its obligations to Montanans. But any permitting regime capable of satisfying DEQ’s duty or truly implementing Circular DEQ-9 must include accountability and enforceability. Without representative monitoring, the CAFO Permit falls flat because the MPDES program “fundamentally relies” on monitoring and public reporting of monitoring results.²⁸

DEQ must analyze how the CAFO General Permit will affect Montana’s environment and public health under MEPA. MEPA requires DEQ to carefully scrutinize the potential

²³ See *supra* note 1, Gallatin Surface Water Quality CAFO TIP at 3; Montana DEQ, Final Water Quality Integrated Report at 24 (Feb. 2021), <https://discover-mtdeq.hub.arcgis.com/maps/montana-impaired-waters-2020/about>.

²⁴ *E.g.*, MT400001_010 (flowing through the Glasgow area and multiple CAFOs, impaired by *E. coli*).

²⁵ See MCA 75-5-101, 102 *et seq.*, ARM §§ 17.30.1201, 17.30.1301.

²⁶ *MEIC.*, 1999 MT at ¶ 77, 296 Mont. at 230, 988 P.2d at 1249.

²⁷ *Id.*

²⁸ *Food & Water Watch*, 20 F.4th at 516.

environmental consequences of its actions.²⁹ Agencies are prohibited from “reach[ing] a decision without first engaging in the requisite significant impacts analysis.”³⁰ Without representative monitoring requirements, DEQ cannot reasonably predict what pollution impacts will flow from allowing approximately 116 CAFOs to operate under a permit that lacks essential accountability and enforcement mechanisms. DEQ certainly may not assume perfect compliance across the industry in light of documented instances of CAFO-based water pollution nationally. Further, because DEQ has never collected representative monitoring data from Montana’s CAFOs, the agency cannot provide substantial evidence in the record to support conclusions about the Permit’s prospective pollution impacts. This quandary – that DEQ cannot comply with its MEPA obligations because of this Permit’s failure to contain representative monitoring – underscores the essential nature of the CWA’s monitoring mandate both for holding individual permittees accountable and for informing DEQ’s ongoing pollution control efforts.

Documents supporting the draft CAFO Permit are devoid of a reasoned explanation of how the permit can assure compliance or adequately provide remedies to protect the “environmental life support system.” Nor can they when the Permit does not require representative monitoring capable of identifying CAFOs that are unlawfully discharging pollutants to waters of the state and causing degradation.

We respectfully remind DEQ that the First Judicial District Court just reaffirmed the State’s affirmative duties under the Montana Constitution. In *Rikki Held et al. v. State of Montana*, the court reiterated the right to a clean and healthful environment in the Montana Constitution.³¹ The Court also examined the history of the 1972 Constitution, emphasizing that “adequate remedies” to prevent ongoing “environmental degradation that causes ill health or physical endangerment and unreasonable depletion or degradation of Montana’[s] natural resources for this and future generations” were central to this right.³²

Here, DEQ must meaningfully respond to these comments and empirical data demonstrating the likelihood of CAFO discharges that will degrade state waters. DEQ cannot meet its obligation to carefully scrutinize the potential environmental consequences of issuing the CAFO Permit when it can do little more than hope and pray that permittees will comply with the Permit’s effluent limitations. Because representative monitoring is a legal mandate and a practical necessity to an effective MPDES permit, the draft permit’s failure to contain any representative monitoring requirements or rationally explain how a General Permit that fails to contain such provisions can adequately protect citizens’ right to a clean and healthful environment renders the it unlawful, arbitrary and capricious.

²⁹ MCA § 75-1-102, ARM 36.2.524(1).

³⁰ *Ravalli County Fish & game Ass’n. Inc.*, 273 Mont. at 385, 903 P.2d at 1371.

³¹ Cause No. CDV-2020-307, Findings of Fact, Conclusions of Law, and Order (Aug. 14, 2023) (included here as Attachment A).

³² *Id.* ¶ 48.

III. Representative Monitoring Is Legally Required and Necessary to Protect Montana Waters

State law requires the CAFO Permit to include monitoring requirements so that DEQ can assess impacts to state waters.³³ Federal law further requires MPDES CAFO permits to contain representative monitoring that can assure compliance with effluent limitations contained in the Permit.³⁴ “One of the major strategies of the Clean Water Act . . . is to require effluent limitations based on the capabilities of the technologies available to control those discharges,” and “[m]onitoring is performed to determine compliance with effluent limitations established in [National Pollutant Discharge Elimination System (“NPDES”)] permits.”³⁵ Further, representative monitoring is necessary to make the CAFO Permit enforceable and to ensure that permitted CAFOs comply with the nondegradation and water quality assumptions underlying the Permit.³⁶

Representative monitoring under the CWA typically measures effluent and constituent pollutants in effluent to document whether a discharger is meeting its permitted limits. Monitoring must include “[t]he mass (or other measurement specified in the permit) for each pollutant limited in the permit; [t]he volume of effluent discharged from each outfall; or [o]ther measurements as appropriate,” and the results shall be reported on “a frequency dependent on the nature and effect of the discharge, but in no case less than once a year.”³⁷ Federal regulations also require that MPDES permits specify the “type, intervals, and frequency [of monitoring] sufficient to yield data which are representative of the monitored activity.”³⁸ Monitoring can take different forms so long as it is appropriately tailored to the monitored activity and generates publicly reported data that assures compliance.³⁹ Under no circumstances may a MPDES permit simply forego monitoring that assures compliance.

As recently made clear by the federal Ninth Circuit Court of Appeals, NPDES permits, and therefore MPDES permits, “fundamentally rel[y] on self-monitoring” because “[e]ffective self-monitoring reveals permit violations, thereby promoting enforcement of the [law].”⁴⁰

³³ See MCA 75-5-303(1)-(2); ARM 17.30.705(1)-(2); ARM 17.30.637(1); ARM 17.30.637(2).

³⁴ *Food & Water Watch*, 20 F.4th at 515 (“Our case law confirms that NPDES permits must contain monitoring provisions sufficient to ensure compliance with the terms of a permit.”); *Nat. Res. Def. Council v. EPA*, 808 F.3d 556, 565, 583 (2d Cir. 2015) (“Generally, an NPDES permit is unlawful if a permittee is not required to effectively monitor its permit compliance.” (quoting *Nat. Res. Def. Council v. County of L.A.*, 725 F.3d 1194, 1207 (9th Cir. 2013))).

³⁵ NPDES Permit Writers’ Manual (Sept. 2010), at 5-1, 8-2, https://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf.

³⁶ See CAFO Permit Fact Sheet at 7.

³⁷ 40 C.F.R. § 122.44(i)(1)(i)-(iii) & 2.

³⁸ 40 C.F.R. § 122.48(b).

³⁹ See *Food & Water Watch*, 20 F.4th at 516–17 (finding that daily and weekly inspections of CAFO production area discharge control infrastructure can be “in effect, monitoring requirements”); *NRDC v. EPA*, 863 F.2d 1420, 1434 (9th Cir. 1988) (upholding a “visual sheen test as a method for monitoring compliance of the no discharge of oil limitation”).

⁴⁰ *Food & Water Watch*, 20 F.4th at 516 (citing *Sierra Club v. Union Oil Co. of Cal.*, 813 F.2d 1480, 1491 (9th Cir. 1987), vacated and remanded on other grounds, 485 U.S. 931, 108 S. Ct. 1102, 99 L. Ed. 2d 264 (1988), and reinstated and amended by 853 F.2d 667 (9th Cir. 1988)).

Without representative monitoring, the state and the public are left in the dark as to whether permitted CAFOs are actually complying with the Permit or Montana water quality protections.

Further, mere assumptions of permit compliance are impermissible. In *Natural Resources Defense Council v. EPA*, the Second Circuit Court of Appeals struck down a NPDES permit for ballast water from vessels because compliance with that permit's water quality-based effluent limitations was merely assumed from compliance with other permit terms.⁴¹ In other words, the CAFO Permit must contain monitoring sufficient to assure compliance with the terms of the Permit, but also to ensure that CAFOs are not violating applicable water quality standards such as nondegradation or undermining remediation efforts for impaired watersheds.

DEQ has express authority under Montana law to require monitoring in the CAFO Permit. MCA section 75-5-602 gives DEQ the "Power to Require Monitoring," stating:

In order to carry out the objectives of this chapter and to effectively monitor the discharge of sewage, industrial wastes, and other wastes into state waters, the department may require the owner or operator of any point source ... to:

- (1) establish and maintain records;
- (2) make reports;
- (3) install, use, and maintain monitoring equipment or methods, including biological monitoring techniques;
- (4) sample effluents using specified monitoring methods at designated locations and intervals;
- (5) provide other information as may be reasonably required by the department.

Here, DEQ must propose a system of representative monitoring for CAFOs, grounded in substantial evidence, to demonstrate how the Permit will comply with the unambiguous mandates of MCA 75-5-303 and ARM 17.30.637(1)-(2). DEQ's duty to examine and develop representative monitoring under the CAFO General Permit is particularly important given the fact that many existing CAFO are sited within waterway segments already impaired for pollutants of concern associated with CAFOs, and that DEQ has no way of ensuring – either at the time of Permit issuance, or when individual operators submit a notice of intent for coverage – that such operations will not cause or contribute to violations of standards.

In addition to state law, federal law requires public reporting of monitoring results to ensure accountability and encourage citizen enforcement of permits.⁴² In *Waterkeeper Alliance v. EPA*, the Second Circuit vacated a portion of U.S. EPA's CAFO rule because it "impermissibly compromise[d] the public's ability to bring citizen suits."⁴³ Failing to collect and make public the

⁴¹ 808 F.3d 556, 565, 583 (2d Cir. 2015) (rejecting U.S. EPA's argument that if a vessel was in compliance with the permit's other effluent limitations, the permittee was "generally expected to already be controlling [its] vessel discharges to a degree that is protective of water quality.").

⁴² 33 U.S.C. §§ 1251(e), 1318(b) ("Public participation in the ... enforcement of any ... effluent limitation ... shall be provided for, encouraged, and assisted by the Administrator and the States.").

⁴³ 399 F.3d 486, 503–04 (2d Cir. 2005).

results of monitoring to assure compliance similarly runs afoul of this basic tenet of CWA accountability. These federal cases are binding on DEQ's CAFO General Permit as the Montana Water Quality Act requires strict conformance with requirements of the CWA.⁴⁴

IV. The CAFO Permit as Proposed Violates the Clean Water Act and Requirements of the Montana Water Quality Act

The CAFO Permit as proposed does not contain representative monitoring for subsurface discharges from production areas, discharges from other areas of the production area such as silage storage and composting areas, or for any land application activities. The Permit is largely the same as the Idaho CAFO Permit issued by U.S. EPA that the Ninth Circuit struck down in *Food & Water Watch* for failing to include monitoring that assures compliance.

A. The CAFO Permit Lacks Production Area Monitoring

With respect to CAFO production areas, the Permit contains a zero-discharge effluent limit except when an overflow discharge is “the result of [a] 25-year, 24-hour rainfall event.”⁴⁵ Yet, the Permit contains “no way to ensure that production areas comply with the Permit’s zero-discharge requirement” because its only monitoring requirements relate to above ground discharges at limited portions of CAFO production areas.⁴⁶ Moreover, because the CAFO Permit here covers *state* waters that include groundwater, it is additionally deficient for failing to monitor for pollution discharges to groundwater that may not qualify as a discharge to waters of the *United States* (“WOTUS”) but nonetheless endanger public health, the environment, and the irreplaceable natural resource that is Montana’s aquifers. Without monitoring, there is no way to know whether a CAFO is complying with the Permit’s requirement to reduce production area discharges to groundwater to a rate “as low as practicably possible.”⁴⁷ We support DEQ requiring a testing program to substantiate the adequacy of a lagoon liner, but this requirement only applies to the time of construction. After this initial testing, the Permit merely assumes long-term maintenance of the required seepage limits. DEQ must require representative, ongoing monitoring of lagoon liners to ensure compliance with other effluent limitations of the Permit.

Notably, visual inspection requirements of lagoons are ineffective in lieu of monitoring because an inspector cannot visually see a leak below the manure-laden process wastewater. The liquid is opaque and the leak rate would have to be catastrophic to be visible. As a result, these inspections are not effective in determining if a lagoon is leaking or seeping to a degree that exceeds the Permit’s effluent limits. Moreover, the routine cleaning of manure solids results in excavation, erosion, and liner damage over the life of the lagoon. As a result, a lagoon that meets the Permit requirement when constructed may fail the requirements after the first cleaning.

⁴⁴ See *N. Cheyenne Tribe v. Mont. Dep’t of Envtl. Quality*, 2010 MT 111, ¶ 39, 356 Mont. 296, 234 P.3d 51; see also 40 C.F.R. § 123.25(a).

⁴⁵ Permit at II.A. Commenters note that when such a precipitation-related discharge occurs, the Permit requires representative monitoring of the type we would expect to be required throughout the Permit for each effluent limitation.

⁴⁶ See *Food & Water Watch*, 20 F.4 at 517.

⁴⁷ See Permit at II.C.

Erosion of earthen liners at the inlet is well documented by experts in the field and causes a liner breach, resulting in a much higher leak rate than allowed by the Permit.

The Permit also fails to require monitoring for other common sources of CAFO pollution discharges. This includes silage storage areas, dry-lot runoff, and composting areas. DEQ must propose a representative monitoring program inclusive of these other areas that could produce an unlawful CAFO discharge.

B. The CAFO Permit Lacks Land Application Area Monitoring

As for land application areas, the Permit contains no representative monitoring requirement at all. The Permit mandates there “be no discharge from the land application area during dry weather,”⁴⁸ but there is no meaningful mechanism to police this effluent limitation. Instead, it appears that DEQ assumes that compliance with a site-specific nutrient management plan (as minimally documented in the Annual Report) inexorably results in compliance with the zero-discharge limitation. DEQ lacks substantial evidence to support this assumption, just as U.S. EPA did when issuing the unlawful Idaho CAFO permit.⁴⁹ Moreover, here DEQ could not present such evidence because it has never required or undertaken representative monitoring of Montana’s CAFO operations that could possibly support the conclusory statements applied to any and all CAFOs covered by the Permit. Indeed, what data are available indicate that any such conclusion runs counter to best available science and case studies of CAFO operations. In other words, DEQ’s reliance on NMP compliance and a “seasonal” manure application equipment inspection are akin to what the Second Circuit found unlawful with respect to ballast water discharges from vessels: compliance with one permit section or provision cannot obviate the need to monitor for compliance with each of the permit’s effluent limitations.⁵⁰

The Fact Sheet’s assertion that the Permit contains monitoring sufficient to assure “water quality standards can be maintained” through the Permit is incorrect as a matter of law.⁵¹ Nothing in the Permit directs a permittee to actually look for unauthorized discharges from land application areas, much less to assess potential receiving waters to determine compliance with water quality standards. And the Permit’s requirement to provide notice to DEQ of discharges⁵² is hopelessly circular when the Permit fails to require a CAFO *to monitor for and thus discover unauthorized discharges*.⁵³ The consequence is that the draft Permit relies almost entirely on the

⁴⁸ Permit at II.D.1.

⁴⁹ See *Food & Water Watch*, 20 F.4 at 518 (“There is little in the record to support [the] assumption [that applying at agronomic rates]” precludes violations of the no dry weather discharge requirement.)

⁵⁰ See *Nat. Res. Def. Council v. EPA*, 808 F.3d 556. See also *Save Our Bays & Beaches v. City & County of Honolulu*, 904 F. Supp. 1098, 1139 (D. Haw. 1994) (recognizing that “[operational] requirements (and reporting thereof) are wholly independent of the monitoring requirement; compliance with one neither excuses nor voids compliance with the other.”).

⁵¹ Fact Sheet at 6.

⁵² Permit at III.A.

⁵³ For example, pressurized irrigation systems are a known source of potential contamination of surface water and groundwater, and the permit’s vague “seasonal” inspection requirement is insufficient to monitor for this type of discharge. See Utah State University, *Manure Application Through Pressurized Irrigation Systems*, <https://extension.usu.edu/crops/research/manure-application-through-pressurized-irrigation-systems> (listing disadvantages of applying manure via pressurized irrigation systems).

good will of CAFO permittees to actively monitor their operations in ways not required by the Permit, and then report any discovered violations. But the CWA is a strict liability statute and requires much more than an honor system approach to compliance with effluent limitations and water quality standards.

To be explicit, representative monitoring to assure permit compliance is not optional. Therefore, the CAFO Permit's provision allowing DEQ to require prospective monitoring on a case-by-case basis and at its discretion is legally deficient.⁵⁴ Put simply, the provision does not satisfy requirements of the CWA or Montana Water Quality Act ("MWQA"). First, ascertaining with any confidence whether a CAFO "constitutes a potential source of pollution to state groundwater,"⁵⁵ or more accurately that a CAFO does not discharge to state waters as a matter of fact over the life of the Permit, is impossible without representative monitoring. Second, CAFOs can and do discharge pollutants due to operational malfunctions, human error or negligence, or pathways not sufficiently considered by DEQ like ventilation fan discharges. So, while patently unacceptable under the law, this approach is also illogical in that DEQ cannot possibly identify the CAFOs with the potential to discharge.

C. Monitoring results must be publicly reported

Finally, DEQ must require public reporting of any existing or added monitoring provisions, including all inspections or visual monitoring that DEQ intends to satisfy the monitoring mandate. The Permit already requires this in a circumstance where DEQ has opted to require monitoring on a case-by-case basis,⁵⁶ but this must be extended to all monitoring provisions that are designed to assure compliance. For example, because the Ninth Circuit has held that daily visual inspections of production area water lines are "in effect, monitoring,"⁵⁷ the results and details of those inspections must be publicly reported in discharge monitoring reports or a similar mechanism. Accountability and the "public's ability to bring citizen suits"⁵⁸ depend on compliance data being available.

Commenters recognize that the Permit requires recordkeeping and that those records may be requested by DEQ and then the public, but this places an unreasonable burden on citizen enforcers to divine when violations occur or, alternately, to consistently and endlessly submit records requests to DEQ.⁵⁹ Commenters request that DEQ require permitted CAFOs to publicly

Discharges can occur from other methods of land application as well. See North Dakota State University, *Manure Spills: What You Need to Know and Environmental Consequences* (rev. Jan. 2020), <https://www.ag.ndsu.edu/publications/environment-natural-resources/manure-spills-what-you-need-to-know-and-environmental-consequences#section-3>.

⁵⁴ See Permit at III.C., V.K.1.

⁵⁵ Permit at III.C.

⁵⁶ Permit at V.K.1.

⁵⁷ *Food & Water Watch*, 20 F.4 at 516.

⁵⁸ *Waterkeeper Alliance*, 399 F.3d 486, 503–04 (2d Cir. 2005).

⁵⁹ Some subset of Montana CAFOs are reporting their "compliance" to the U.S. EPA's ECHO database, but because many entries are based on no actual representative monitoring this reporting is not only useless but misleading. These reports do not show actual impacts to state waters or demonstrate compliance.

report the results of all monitoring, including the details of any inspections serving as monitoring.

D. These shortcomings violate the Montana Water Quality Act

“Montanans’ right to a clean and healthful environment is complemented by an affirmative duty upon their government to take active steps to realize this right.”⁶⁰ As noted above, “MEPA is an essential aspect of the State’s efforts to meet its constitutional obligations.”⁶¹ And “adequate remedies to prevent unreasonable depletion and degradation of natural resources” is central to exercising this right.⁶² The MWQA and DEQ’s MPDES permitting program are meant to implement these imperatives.

DEQ is proposing to issue a general CAFO Permit, covering approximately 116 facilities throughout the state, without monitoring requirements capable of tracking compliance, enforcing violations, or protecting already impaired state waters with better management practices as necessary under its Nondegradation Policy. Monitoring, however, is fundamental to how the MPDES program is supposed to work.⁶³ The program relies on setting effluent limitations, requiring practices and technologies designed to enable permittees to meet those effluent limitations, and monitoring to assure that at the end of the day facilities in fact comply. Monitoring is both an essential accountability tool (by, in part, imposing separate liability if a CAFO fails to perform its monitoring obligations appropriately⁶⁴) and the foundation for enforcement efforts, especially by citizen enforcers. The draft permit materials do not provide an evidentiary basis for concluding that terms will not result in discharges of pollutants that violate ARM 17.30.637’s prohibitions, or violate numeric nutrient criteria of Circular 12-A that remains applicable per EPA’s partial disapproval letter of Senate Bill 358.

Because of representative monitoring’s central role in an effective CAFO Permit, failing to require it renders key provisions of the Permit little more than letters on a page. The failure to include representative monitoring requirements also violates Montanans’ fundamental right to a clean and healthful environment by virtue of leaving CAFO operations with no monitoring or enforcement program absent an operator reporting a discharge, an inspection activity operators are not required to regularly perform in any manner supported by evidence to be capable of enforcing permit terms. The lack of representative monitoring also calls into question how DEQ can lawfully ensure compliance with MCA 75-5-303 as regards protection of high-quality waters and uses of those waterways. DEQ may not merely rely on assumptions about the efficacy of certain management practices when, as shown above, CAFO are a serious threat to water quality and public health in Montana. Nor does the CWA allow such assumptions.

DEQ must revise the Permit to include representative monitoring for production areas and land application areas that assure compliance with Permit limits and water quality standards,

⁶⁰ *Park Cnty. Env’tl Council v. Mont. DEQ*, 2020 MT 303, ¶ 63, 477 P.3d 288.

⁶¹ *Id.* ¶ 89.

⁶² *Id.*; Mont. Const. Art. IX, Sec. 1(3).

⁶³ *Food & Water Watch*, 20 F.4th at 516.

⁶⁴ Permit at V.K.7; MCA § 75-5-633.

and as necessary to initiate enforcement actions against CAFOs that violate requirements of the Permit.

V. CONCLUSION

Based on the foregoing, Commenters request that DEQ revise the draft CAFO Permit to include representative monitoring that will ensure compliance with the Permit's effluent limitation or enable enforcement against CAFOs that fail to comply. Representative monitoring is a legal requirement of the CWA and a practical necessity for an effective Permit and DEQ's obligations to Montanans and Montana's waters.

Respectfully,

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