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Submitted via email

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RE: COMMENTS ON DRAFT CAFO NPDES GENERAL PERMIT #01-202X

Dear Ms. Landry and Ms. Moore:

The undersigned organizations (Commenters) submit these comments on Oregon’s Draft Confined Animal Feeding Operation National Pollutant Discharge Elimination System General Permit #01-202X (“Draft Permit”).¹ The Draft Permit is too weak to protect Oregon’s water resources from confined animal feeding operation (CAFO) pollution, as required under federal and state law. The Oregon Department of Environmental Quality (DEQ) and Department of Agriculture (ODA) (collectively, “the Agencies”) must strengthen the Draft Permit as set forth below. If DEQ and ODA fail to do so, they will be acting outside their statutory authority and condemning communities, ecosystems, and family farms to continue suffering the consequences of CAFO water pollution.

I. Commenters

The Animal Legal Defense Fund (ALDF) is a national nonprofit organization founded in 1979 to protect the lives and advance the interests of animals through the legal system. ALDF has more than 300,000 members and supporters nationwide. One of ALDF’s central goals is advocating for effective oversight and regulation of industrial animal agriculture. ALDF achieves this goal by, among

¹ Or. Dep’t of Env’t Quality and Or. Dep’t of Agric., Oregon Confined Animal Feeding Operation National Pollutant Discharge Elimination System General Permit #1 (“Draft Permit”).

other things, filing lawsuits, administrative comments, and rulemaking petitions. Through these efforts, ALDF is deeply invested in reforming the agricultural system.

Center for Food Safety (CFS) is a nonprofit membership organization headquartered in San Francisco, CA and with offices in Portland, OR and Washington, D.C. For over twenty-five years, since its founding in 1997, CFS has worked to empower people, support farmers, and protect the environment from the harmful impacts of industrial agriculture. Among other programs, CFS has a flagship program on animal factories. As a membership organization, CFS represents nearly a million farmer and consumer members in every state throughout the country including thousands of farmers and community members in Oregon.

Columbia Riverkeeper is a nonprofit corporation whose mission is to protect and restore the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. Columbia Riverkeeper has over 25,000 members in both Oregon and Washington and regularly comments on decisions impacting water quality, climate, and salmon habitat in the Columbia River Basin. Columbia Riverkeeper is deeply committed to ensuring clean water, healthy communities, and protecting the Columbia from the impacts of toxic pollution.

Food & Water Watch (FWW) is a national, nonprofit membership organization that mobilizes regular people to build political power to move bold and uncompromised solutions to the most pressing food, water, and climate problems of our time. FWW uses grassroots organizing, media outreach, public education, research, policy analysis, and litigation to protect people's health, communities, and democracy from the growing destructive power of the most powerful economic interests. Factory farm water pollution, in Oregon and nationally, is a priority issue for FWW.

Friends of Family Farmers is a grassroots, statewide organization representing 1,600 small and midsize, highly diversified, local market farmers. We work to develop programs and policies that push agriculture forward at the direction of our farmers, with a triple bottom line of environmental stewardship, community support, and small business viability.

Oregon Rural Action (ORA) is a grassroots, community-led nonprofit organization that has worked for years with the communities directly affected by the ongoing nitrate contamination crisis in the Lower Umatilla Basin. We work directly with those impacted by polluted drinking water—of which there are thousands in the Basin—to elevate their voices and their needs to advance meaningful policy changes in rural Oregon

Willamette Riverkeeper (WRK) is a 501(c)(3) nonprofit based in Oregon with offices in Eugene, OR and Portland, OR. WRK was founded in 1996, becoming the 12th organization to join the international Waterkeeper Alliance. WRK’s mission is to protect and restore the Willamette River and its tributaries through habitat restoration, river cleanups, litigation, policy advocacy, education, and outreach. WRK has worked on factory farm issues throughout the Willamette Basin, including enforcing the Clean Water Act against a leaking lagoon and fighting the permitting for an industrial poultry farm along the North Santiam.

II. DEQ and ODA must end the historical and ongoing CAFO pollution of Oregon’s water resources.

The goal of the Draft Permit is “to prevent pollution of waters of the state from CAFO activities.”² But unless DEQ and ODA depart from their historically lax approach to regulating CAFOs, the Draft Permit cannot and will not achieve this goal. Oregon’s increasingly consolidated animal agriculture industry will continue polluting Oregon’s water resources so long as DEQ and ODA permit it.

A. Surface Waters

Oregon has 122,800 miles of impaired rivers and streams—the highest in the country.³ In the northwestern region of the state, the North Coast Basins are under a Total Maximum Daily Load (TMDL) to address stream segments and lakes impaired by *E.coli* bacteria from dairy CAFO manure runoff.⁴ The nearby Tillamook Bay Watershed is also under a TMDL⁵ because it is contaminated with fecal

² State of Oregon, Renewal of CAFO NPDES General Permit #01-202X Fact Sheet 1 (“Fact Sheet”).

³ ENVTL. INTEGRITY PROJECT, THE CLEAN WATER ACT AT 50: PROMISES HALF KEPT AT THE HALF-CENTURY MARK 18 (Mar. 17, 2022), <https://environmentalintegrity.org/wp-content/uploads/2022/03/CWA-report-UPDATED-8.9.23.pdf>; <https://perma.cc/39YH-Z2GQ> (analyzing OR. DEP’T OF ENVTL. QUALITY, INTEGRATED REPORT (2022)).

⁴ OR. DEP’T OF ENVTL. QUALITY, NORTH COAST SUBBASINS TOTAL MAXIMUM DAILY LOAD (TMDL) 1–3 (June 2003), https://www.oregon.gov/deq/FilterDocs/NCS_tmdl.pdf; see OR. DEP’T OF AGRIC., NORTH COAST BASIN AGRICULTURAL WATER QUALITY MANAGEMENT AREA PLAN 18 (June 2018), <https://www.oregon.gov/oda/Documents/Publications/NaturalResources/NorthCoastAWQMAreaPlan.pdf>; <https://perma.cc/D5Y8-CS3P>.

⁵ OR. DEP’T OF ENVTL. QUALITY, TILLAMOOK BAY TOTAL MAXIMUM DAILY LOAD (TMDL) (June 2001), <https://www.oregon.gov/deq/FilterDocs/NCtilltmdl.pdf>; <https://perma.cc/6ZD4-V2JN>.

bacteria⁶ originating from the legion dairy CAFOs in the region.⁷ Each of the five major rivers and many of the streams in in this watershed are also contaminated by fecal bacteria.⁸ CAFOs and land application of CAFO manure are “[m]ajor sources” of this contamination.⁹ In the past, Tillamook Bay has supported shellfish harvesting, and the rivers in the area supported recreational swimming and wading.¹⁰ But today, “[c]oncentrations of bacteria in the waters of the rivers and the Bay are commonly too high to allow safe use for either of these activities.”¹¹

Tillamook County represents the densest concentration of CAFOs in Oregon. A total of 83 CAFOs there were registered to the General Permit in 2024, including twelve large CAFOs.¹² The General Permit presents an opportunity for ODA to improve impaired surface waters in this area and to proactively prevent the need for additional TMDLs here and across the state.

B. Groundwater

CAFOs have created widespread and dangerous nitrate contamination in at least three areas of the state, necessitating the creation of three groundwater management areas (GWMAs).¹³ Testing conducted in the Lower Umatilla Basin Groundwater Management Area (LUBGWMA) in the 1990s found nearly a third (30%) of groundwater samples from this area exceeded the state trigger level.¹⁴ Samples from areas dominated by CAFOs and agricultural fields where CAFO

⁶ *Id.* at 1.

⁷ *Id.* at 15.

⁸ *Id.* at 1.

⁹ *Id.* at 173.

¹⁰ *Id.* at 7.

¹¹ *Id.*; see Karina Brown, *Oregon Oyster Farmer Fights Flood of Cow Poop*, COURTHOUSE NEWS SERVICE (Apr. 3, 2017), <https://www.courthousenews.com/oregon-oyster-farmer-fights-flood-cow-poop/>.

¹² OR. DEP’T OF AGRIC., *CONFINED ANIMAL FEEDING OPERATION (CAFO) PROGRAM 2024 ANNUAL REPORT 7 (2024)*, <https://www.oregon.gov/oda/Documents/Publications/NaturalResources/CAFO-Annual-Report-2024.pdf>; <https://perma.cc/EH9B-24Z7>.

¹³ *Groundwater Management Areas*, DEP’T OF ENVTL. QUALITY, <https://www.oregon.gov/deq/wq/programs/Pages/GWP-Management-Areas.aspx>; <https://perma.cc/6EA3-SCVL> (last visited Jan. 12, 2026) (noting that manure is a cause of the nitrate contamination).

¹⁴ GERALD H. GRONDIN ET AL., *HYDROGEOLOGY, GROUNDWATER CHEMISTRY AND LAND USES IN THE LOWER UMATILLA BASIN GROUNDWATER MANAGEMENT AREA, NORTHERN MORROW AND UMATILLA COUNTIES, OREGON, FINAL REVIEW DRAFT, ES-1 & ES-5*, (1995). At the time of these initial tests, the Oregon trigger level was set equal to EPA’s MCL of 10 mg/L but has since been adjusted to the more protective standard of 7 mg/L. *Id.* at ES-2.

waste is applied revealed nitrate levels that reached and exceeded 70 mg/L¹⁵—seven times the 10 mg/L MCL for nitrate.¹⁶ A 1996 study showed that 23% of the population in this area was drinking private well water with nitrate concentrations over the 10 mg/L MCL.¹⁷ Of the households with nitrate levels over the MCL, 72% were not taking measures to effectively remove the nitrates before human consumption.¹⁸

More recent data indicate that nitrate contamination has only gotten worse in this area and that CAFOs remain a primary cause.¹⁹ In fact, “[t]he single largest [nitrate] increase was at a CAFO monitoring well.”²⁰ Groundwater monitoring well data from manure application sites show continuing nitrate elevations, with 48% exceeding the 10 mg/L MCL and 60% exceeding the GWMA trigger level of 7 mg/L.²¹ This well data confirms that nitrate elevations still exceed 70 mg/L in certain areas dominated by CAFOs and agricultural fields where CAFO manure is applied.²²

Likewise, high levels of nitrate contamination in Northern Malheur County led Oregon to designate the Northern Malheur County Groundwater Management

¹⁵ *Id.* at ES-6–ES-7.

¹⁶ *See* 40 C.F.R. § 141.11(d).

¹⁷ Thomas Mitchell & Anna Harding, *Who Is Drinking Nitrate in their Well Water? A Study Conducted in Rural Northeastern Oregon*, J. ENVTL. HEALTH 14, 14 (1996).

¹⁸ *Id.* at 18.

¹⁹ As detailed in an emergency petition submitted to the Environmental Protection Agency under the federal Safe Drinking Water Act, CAFOs caused and are continuing to worsen nitrate pollution in the LUBGWMA. Petition for Emergency Action Pursuant to the Safe Drinking Water Act § 1431, 42 U.S.C. § 300i, to Protect Citizens of the Lower Umatilla Basin in Oregon from Imminent and Substantial Endangerment to Public Health Caused by Nitrate Contamination of Public Water Systems and Underground Sources of Drinking Water 15 (Jan. 16, 2020), <https://www.epa.gov/system/files/documents/2022-12/Lower-Umatilla-Groundwater-SWDA-Petition-2020.pdf>; <https://perma.cc/S6BM-Q9Q8> (asking EPA to take emergency action to address the dangerous, ongoing nitrate pollution in the LUBGWMA).

²⁰ LOWER UMATILLA BASIN GROUNDWATER MANAGEMENT COMMITTEE, OR. DEP’T OF ENVTL. QUALITY, SECOND LOWER UMATILLA BASIN GROUNDWATER MANAGEMENT AREA LOCAL ACTION PLAN 27–28, 31, 34 (Oct. 28, 2020), https://lubgwma.org/wp-content/uploads/2024/11/6de06-second-lubgwma-action-plan_final.pdf; <https://perma.cc/7U54-HSZS>.

²¹ *Id.* at 35.

²² *Id.*

Area (NMCGWMA) in 1991.²³ Thirty-two percent of groundwater wells tested in the area contained nitrates at levels above the 10 mg/L MCL, with some levels reaching 52 mg/L.²⁴ Though recent studies show some improvement in nitrate levels in the NMCGWMA, with 51% of wells decreasing in nitrates, 20% of wells reflect nitrate levels that have stayed the same since the early 1990s and 29% of wells reflect that nitrate levels are increasing.²⁵

High levels of nitrate contamination in the Southern Willamette Valley led Oregon to designate the Southern Willamette Valley Groundwater Management Area (SWVGWMA) in 2004.²⁶ The declaration specifies “animal waste management practices” as one of the causes of the nitrate pollution.²⁷ More than twenty percent of the 476 groundwater wells initially sampled in 2000 and 2001 contained nitrate at concentrations greater than 7 mg/L.²⁸ Later sampling showed that concentrations exceeded 10 mg/L in many locations and exceeded 30 mg/L in several locations.²⁹ The nitrate crisis persists in this area; DEQ recently recommended that “ODA and the [Soil and Water Conservation Districts] include a task in the area plan to coordinate with ongoing GWMA efforts and further evaluate agricultural land uses in and around the GWMA as there are recent elevated levels of nitrate in public drinking water in the GWMA area.”³⁰

²³ OR. DEP’T OF ENVTL. QUALITY, NORTHERN MALHEUR COUNTY GROUNDWATER MANAGEMENT ACTION PLAN 16–17 (DEC. 1991), <https://www.oregon.gov/deq/FilterDocs/gw-nmcgwma-actionplan.pdf>; <https://perma.cc/LF2K-6JJF>.

²⁴ *Id.* at 22.

²⁵ OR. DEP’T OF ENVTL. QUALITY, MEMO FROM PHIL RICHARDSON TO DAVID ANDERSON & CHARLES KENNEDY, NORTHERN MALHEUR COUNTY GROUNDWATER MANAGEMENT AREA AREA-WIDE TREND ANALYSIS 2 (Feb. 6, 2020), <https://www.oregon.gov/deq/wq/Documents/nmalheurtrend2020.pdf>; <https://perma.cc/P5JC-BPDK>.

²⁶ OR. DEP’T OF ENVTL. QUALITY, DECLARATION OF A GROUNDWATER MANAGEMENT AREA IN THE SOUTHERN WILLAMETTE VALLEY (MAY 10, 2024), <https://www.oregon.gov/deq/FilterDocs/gw-swvgwma-declaration.pdf>; <https://perma.cc/P3EP-JBBZ>.

²⁷ *Id.*

²⁸ OR. DEP’T OF ENVTL. QUALITY, SOUTHERN WILLAMETTE VALLEY GROUNDWATER ASSESSMENT 2000–2001 NITRATE STUDY, FINAL REPORT 35 (Feb. 2003), <https://www.oregon.gov/deq/FilterDocs/gw-swvgwma-nitrates.pdf>; <https://perma.cc/X9CV-HNRK>.

²⁹ *Well Water Program, Southern Willamette Valley Groundwater Management Area*, OR. STATE U., <https://wellwater.oregonstate.edu/swvgwma>; <https://perma.cc/9ASW-82DP> (last visited Jan. 12, 2026).

³⁰ OR. DEP’T OF ENVTL. QUALITY, DRINKING WATER ASSESSMENT FOR THE UPPER WILLAMETTE AND SIUSLAW WATER QUALITY MANAGEMENT AREA 2 (Jan. 2023),

Of the 485 permitted CAFOs in Oregon, 340 CAFOs were registered to the General Permit in 2024.³¹ Of those, 51 were in Area 5, which includes the LUBGWMA, and 30 of those 51 were large CAFOs.³² Area 5 also includes four large CAFOs with individual NPDES permits.³³ In Area 6, which includes the NMCGWMA, there were 68 CAFOs registered to the General Permit in 2024, and 22 were large CAFOs.³⁴ In Areas 2 and 4, which each include portions of the SWVGWMA, there were a total of 83 CAFOs registered to the General Permit in 2024, and 27 were large CAFOs.³⁵ Area 4 also includes one large CAFO with an individual NPDES permit.³⁶ The Draft Permit presents an opportunity for ODA to improve conditions in existing GWMA and proactively prevent the need for additional ones across the state.

C. Endangered and Threatened Wildlife

Eighty-one percent of Oregon rivers and streams—112,976 miles—are already too impaired for aquatic life.³⁷ CAFO water pollution exacerbates this existential threat for Oregon wildlife and aquatic animals, including those who are members of endangered and threatened species. Such pollution harms aquatic biodiversity by degrading habitat, reducing species fertility, causing species mutation, increasing mortality, changing natural food resources, and generating expansion of nonnative species, often at the expense of native populations.³⁸ Oregon is home to many endangered and threatened species, including several species of salmon.³⁹ The Draft Permit must prevent CAFO pollution from pushing these species closer to extinction.

<https://www.oregon.gov/deq/wq/Documents/WQMA-UpperWillamette-Siuslaw.pdf>;
<https://perma.cc/G775-BNL9>.

³¹ Confined Animal Feeding Operation (CAFO) Program 2024 Annual Report, *supra* note 12, at 6.

³² *Id.* at 8.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at 7–8.

³⁶ *Id.* at 8.

³⁷ Env'tl. Integrity Project, *supra*, note 3, at 18.

³⁸ CTR. FOR BIOLOGICAL DIVERSITY ET AL., FACTORY FARMS AND IMPACTS TO THREATENED AND ENDANGERED SPECIES,

<https://olis.oregonlegislature.gov/liz/2023R1/Downloads/PublicTestimonyDocument/97061>; <https://perma.cc/D865-GL6N> (last visited Jan. 12, 2026).

³⁹ See, e.g., *Threatened, Endangered, and Candidate Fish and Wildlife Species*, OR. DEPT OF FISH AND WILDLIFE, https://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp; <https://perma.cc/B37F-D4YJ> (last visited Jan. 12, 2026).

III. Necessary Revisions to the Draft Permit

A. The Draft Permit lacks required representative monitoring.

Despite recent comments to the agencies highlighting the importance of pollution monitoring in CAFO permits, as well as the clear language of the Clean Water Act (CWA), EPA's implementing regulations, and several federal and state court decisions, the Draft Permit lacks anything close to representative effluent monitoring. The Final Permit must correct course.

1. All NPDES permits must contain representative monitoring to assure compliance with all effluent limitations.

Permitted CAFOs must monitor their facilities' discharge points to ensure compliance with the Draft Permit's effluent limitations.⁴⁰ This foundational principle of the NPDES program has been reaffirmed numerous times now by Commenters and multiple Federal and State courts.⁴¹ Yet, after years of delay, presumably to consider how to comply with these precedents, the Agencies have proposed to renew the Permit *without mandating sufficient monitoring yet again*. As a result, the Draft Permit is arbitrary, capricious, and contrary to law.

The CWA demands that all NPDES permits, including CAFO permits, require representative monitoring and reporting capable of assuring compliance with all effluent limitations contained in the permit.⁴² Nothing in the CWA, EPA's regulations, or case law provides a special exemption for CAFOs. To the contrary, permitting agencies "shall require" permitted point sources to "install, use, and maintain such monitoring equipment or methods" requisite to "determin[e] whether [they] are in violation" of an applicable effluent limitation or other effluent standard.⁴³ EPA's regulations, in turn, state that all permits "shall include

⁴⁰ 33 U.S.C. § 1318(a)(2)(A)(iii).

⁴¹ *FWW v. EPA*, 20 F.4th 506 (2021); *Washington State Dairy Federation v. Washington Department of Ecology*, 18 Wn. App. 2d 259 (Wash. Ct. App. 2021). See also *Nat. Res. Def. Council v. EPA*, 808 F.3d 556 (2d Cir. 2015); *NRDC v. Cnty. of Los Angeles*, 725 F.3d 1194 (9th Cir. 2013).

⁴² 33 U.S.C. §§ 1318(a), 1342(a)(2); *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))).

⁴³ 33 U.S.C. § 1318(a)(2)(A)(iii).

conditions” requiring representative monitoring “[t]o assure compliance with permit limitations.”⁴⁴ Further, permits “shall specify” the “type, intervals, and frequency [of monitoring] sufficient to yield data which are representative of the monitored activity.”⁴⁵ Such monitoring conditions are necessary to verify compliance with effluent limits and to facilitate permit enforcement.⁴⁶ Monitoring requirements are in addition to, and separate from, permit conditions establishing the best management practices and technologies used to achieve compliance with permit limits.⁴⁷

EPA’s NPDES permit writers’ manual makes this all quite clear: “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 NPDES permits.”⁴⁸ Thus, representative monitoring is necessary not only to comply with applicable regulations but also to make the pollution limits in the Permit enforceable.

As recently reiterated by the Ninth Circuit Court of Appeals in *FWW v. EPA*, CAFO NPDES permits “fundamentally rel[y] on self-monitoring” because “[e]ffective self-monitoring reveals permit violations, thereby promoting enforcement of the [law].”⁴⁹ Without representative monitoring, regulators and the public are left in the dark as to whether permitted CAFOs are actually complying with the Permit or whether particular CAFOs are causing or contributing to violations of Oregon water quality standards.

Under the CWA, mere assumptions that implementing technologies and practices will result in 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 not verified with monitoring, but rather was

⁴⁴ 40 C.F.R. §§ 122.44(i)(1), 122.41(j)(1).

⁴⁵ *Id.* § 122.48(b).

⁴⁶ *NRDC v. Cnty. of Los Angeles*, 725 F.3d 1194, 1208 (9th Cir. 2013).

⁴⁷ *See* 40 C.F.R. § 122.41(e).

⁴⁸ U.S. EPA, NPDES PERMIT WRITERS’ MANUAL (Sept. 2010), at 5-1, 8-2, https://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf; <https://perma.cc/E3BL-YSH8>.

⁴⁹ *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)).

merely assumed from compliance with other permit terms.⁵⁰ In other words, the Draft Permit must contain monitoring sufficient to assure compliance with the terms of the Permit, including water quality-based effluent limitations. A CAFO NPDES permit that leaves any effluent limitation unmonitored is unlawful.

Monitoring can take different forms so long as it is appropriately tailored to the monitored activity and generates representative, publicly reported data that assures compliance.⁵¹ Under no circumstances may the Permit simply forego monitoring that satisfies these requirements, even if ODA hopes and believes that certain best management practices are effective in preventing discharges.

2. The Draft Permit unlawfully lacks representative monitoring.

The Draft Permit does not contain representative monitoring “to assure compliance” despite these clearly established requirements. It instead continues the status quo of only requiring limited, non-representative discharge monitoring *after* a documented instance of *non-compliance* and soil and manure sampling that is part of the NMP best management practice requirement and is not discharge monitoring at all.⁵²

Only requiring a grab sample after a blatant violation is noticed is obviously too little, too late to “determin[e] whether [a CAFO is] in violation” of an applicable effluent limitation or other effluent standard.⁵³ Monitoring must be designed to detect unlawful discharges; the Draft Permit skips over the identification of the discharge entirely, only imposing a reporting and grab sample requirement once “a discharge to waters of the state occurs.”⁵⁴ Moreover, even if the permit required visual monitoring of land application fields (which it does not), not all CAFO discharges are discrete and obvious events that can be visually observed and estimated in real time or monitored through the method provided in the Permit. This provision was clearly written with over-application or wet weather-related

⁵⁰ 808 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.”).

⁵¹ 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”).

⁵² Draft Permit S4.A.1.-2.

⁵³ 33 U.S.C. § 1318(a)(2)(A)(iii).

⁵⁴ Draft Permit S4.A.1.

runoff or waste impoundment overflows or breaches in mind. But CAFOs also discharge during dry weather land application and irrigation and via tile lines, aerial deposition, leaching through waste impoundments into surface waters, and other hydrologic discharges. The permit lacks any monitoring for the effluent limits that prohibit such discharges.

The optional Additional Monitoring Requirements provided for in the Draft Permit do not cure these deficiencies. Draft Permit S4.E.1 is entirely discretionary, provides no detail to demonstrate that such monitoring would be “representative,” and contemplates the Agencies only imposing monitoring requirements on a case-by-case basis. Draft Permit section S4.E.2 applies only to repeat violators, provides the Agencies with discretion to waive monitoring even for those violators, and again lacks any detail.

Similarly, merely testing manure and soil for nutrients untethered to actual land application activities is not *effluent* monitoring and cannot detect when unlawful discharges occur, nor confirm when production and land application activities are compliant with the permit.⁵⁵ Rather than monitoring to determine compliance with permit effluent limits, this is just part of the implementation of the NMP to determine agronomic rates—the best management practices (i.e., the ‘technology’) intended to achieve compliance with those limits.

As discussed above, the permit must contain representative monitoring for every effluent limitation. This in turn requires monitoring for every discharge pathway. The Ninth Circuit’s opinion in *FWW v. EPA* makes plain certain specific flaws in the Draft Permit that were analogous to flaws in Idaho’s permit: (1) “[w]ithout a requirement that CAFOs monitor waste containment structures for underground discharges, there is no way to ensure that production areas comply with the Permit’s zero-discharge requirements;” and (2) “[t]he Permit has no monitoring provisions for dry weather discharges from land-application areas.”⁵⁶ The fundamental idea underpinning the Court’s legal holdings and the cases the Court relied upon is that “NPDES permits must contain monitoring provisions sufficient to ensure compliance with the terms of a permit.”⁵⁷ Thus, although the Court’s Idaho permit-focused opinion did not discuss every conceivable production area or land application discharge activity, it provides instructive guidance as to how ODA must revise the CAFO Permit to comply with the CWA and federal

⁵⁵ See *FWW v. EPA*, 20 F.4th at 516 (finding the Idaho permit’s “various measures to prevent discharges” are not “monitoring that would ensure detection of unpermitted discharges”).

⁵⁶ *Id.* at 517, 518.

⁵⁷ *Id.* at 515 (citing *NRDC v. County of L.A.*, 725 F.3d 1194, 1207 (9th Cir. 2013)).

regulations.

B. The Draft Permit must clarify the meaning of “potential to discharge.”

Commenters strongly support the Agencies’ decision to adopt a “potential to discharge” standard for CAFOs’ duty to apply for a NPDES permit. Moving from the hard to enforce “discharge” standard to potential to discharge should mean more CAFOs are regulated under the NPDES permit and fewer under WPCF permits, and significant resulting improvements for water quality and transparency across the state. However, the Draft Permit leaves “potential to discharge” undefined. Without defining this term and clarifying how the standard will be implemented, the Agencies risk maintaining the status quo, which leaves too much discretion to CAFO operators to determine what kind of permit to seek and does not require ODA to do a robust analysis of whether or how a facility will discharge.

The Agencies should adopt the “duty to apply” approach EPA sought to adopt in its 2003 CAFO rule, which established a rebuttable presumption of discharge. Specifically, EPA’s rule required “all CAFOs have a mandatory duty to apply for an NPDES permit Only CAFOs that have successfully demonstrated no potential to discharge may avoid a permit.”⁵⁸ EPA’s rationale in support of the duty to apply included CAFOs’ history of regulatory avoidance (noting it is “much easier for CAFOs to avoid permitting by not reporting their discharges” than it is for other industries) and the “numerous” unpermitted discharges that had been documented.⁵⁹ EPA has more recently estimated that 75% of CAFOs actually discharge based on their design, construction, operation, and/or maintenance.⁶⁰ But since EPA’s initial duty to apply was vacated in 2005, challenges in identifying actual dischargers and compelling NPDES permit coverage as required have led to under-permitting and unregulated water pollution from the industry nationally. Oregon can and must address this in the state.

The potential to discharge standard in the Draft Permit is a critical step towards adequate regulation, but it will only protect Oregon’s waters if clearly defined and fully implemented. The recent Columbia River Ranch and Symons Livestock examples underscore Commenters’ concerns that if the final Permit lacks this clarity, the Agencies will continue to let facilities with the potential to discharge off the hook for NPDES permits. Certain Commenters commented extensively on these facilities’ discharge risks, but ODA’s final actions did not even indicate that the most basic assessment of this risk had taken place. A universal

⁵⁸ 68 Fed. Reg. 7176, 7181-82 (Feb. 12, 2003).

⁵⁹ *Id.* at 7201.

⁶⁰ U.S. EPA, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) INFORMATION COLLECTION RULEMAKING AND CAFOs 1 (Sept. 2010).

duty to apply, with a clear process by which a CAFO can attempt to rebut a presumption of discharge by demonstrating it has zero potential to discharge to surface waters, is the only way to make the potential to discharge standard fair, transparent, and effective.

C. The Draft Permit must require nutrient management based on water quality, not crop yield.

Nutrient management plans—the primary pollution control best management practice required by the draft permit—are not sufficiently protective of water quality for the simple reason that they are not actually designed to minimize nutrient runoff to waterways. Rather, the primary goal of nutrient management planning is to maximize crop yields. Following EPA’s lead, the Agencies have long relied on the faulty assumption that applying manure at recommended application rates will prevent excessive pollution runoff from CAFO land application fields,⁶¹ even while EPA acknowledges that these rates are “agronomic rather than water-quality based.”⁶² Yet EPA has recently found that agronomic rates are in fact *not* achieving effluent limitations that require CAFOs minimize transport of nutrients to surface waters.⁶³ In 2021, EPA conceded that “[e]ven if CAFOs were to comply with their NMPs, *their standards are insufficient*. NMP standards are set by each state, and states typically rely on USDA standards, which focus on maximizing crop growth, *rather than on preventing excess nutrient runoff*.”⁶⁴ In other words, the dual goals, expressed in EPA’s regulations and state technical standards, of maximizing production and minimizing pollution are simply incompatible.⁶⁵

State regulators have made similar findings. For instance, in reviewing its waste discharge requirements for Dairy CAFOs, the California State Water Resource Control Board recently concluded that land application at agronomic rates “is responsible for the vast majority of dairies’ nitrogen impacts to groundwater”—

⁶¹ 86 Fed. Reg. 7,176, 7,197 (Feb. 12, 2003) (finding that land application “in accordance with practices designed to ensure appropriate agricultural utilization of nutrients” will “minimize[] the potential for subsequent discharge of pollutants to waters of the United States”).

⁶² U.S. EPA, CONFINED ANIMAL FEEDING OPERATIONS: AN OVERVIEW OF THE NPDES CAFO PROGRAM MOSTLY BY THE NUMBERS 28 (June 2019).

⁶³ 40 C.F.R. 122.42(e)(1); 412.4(c)(1).

⁶⁴ U.S. EPA, CONFINED ANIMAL FEEDING OPERATIONS: A PRIMER ON THE FEDERAL PROGRAM 18 (Dec. 2021) (emphasis added).

⁶⁵ See also Andrew Sharpley, *Agricultural Phosphorous Water Quality and Poultry Production: Are They Compatible?*, 78 POULTRY SCI. 660, 668 (1999) (“It cannot be assumed that there is a direct relationship between soil test calibration for crop response to [nutrients] and surface runoff enrichment potential . . .”).

often a pollution pathway to hydrologically connected surface waters—“forc[ing] [the State] to take a hard look at what [it] now recognizes has been an inadequate approach for regulating dairy waste discharges.”⁶⁶ The Board further determined that “[i]n many respects, the application of dairy waste to dairy cropland is more akin to the land application of waste produced by domestic sewage treatment plants than to the application of nitrogen fertilizer for the business enterprise of growing crops in traditional agricultural fields,”⁶⁷ necessitating more stringent regulation going forward reflecting the reality that these practices are “primarily [] a method of disposing of dairy waste that has secondary benefits of fertilizing crops, rather than a method of crop fertilization that may have incidental impacts to groundwater.”⁶⁸

These federal and state findings are supported by substantial scientific evidence demonstrating that nutrient management plans are an ineffective pollution control practice for several reasons. *First*, technical standards typically authorize the over-application of animal wastes to ensure that crops have sufficient nutrients for optimal growth, which actively undermines the ability of nutrient management plans to minimize nutrient run-off. *Second*, inherent complexities involved in designing and executing nutrient management plans significantly limit their efficacy.

Indeed, researchers have known for decades that “[e]ven under ideal conditions, with a well-planned system, there is still a significant risk of losses to the environment.”⁶⁹ This is because land application of animal waste at so-called recommended rates frequently overloads fields with far more nutrients than plants can uptake or soil can retain, posing a serious threat of water pollution.⁷⁰

⁶⁶ CALIFORNIA STATE WATER RES. CONTROL BD., DRAFT ORDER WQ 2024-00XX, IN THE MATTER OF REVIEW OF WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO R5-2013-0122 FOR MILK COW DAIRIES IN THE CENTRAL VALLEY REGION ISSUED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION 6 (Oct. 1, 2024).

⁶⁷ *Id.* at 53.

⁶⁸ *Id.* at 6.

⁶⁹ L.M. Risse et al., *Land Application of Manure for Beneficial Reuse*, NAT’L CTR. FOR MANURE AND ANIMAL WASTE MGMT. WHITE PAPERS 17 (2001).

⁷⁰ *See, e.g.*, Kimberly A Rosov et al., *Waste Nutrients from U.S. Animal Feeding Operations: Regulations are Inconsistent Across States and Inadequately Assess Nutrient Export Risk*, 269 J. ENV’T MGMT. 1, 8 (2020) (finding “standing operating procedures for land application of swine wastes create significant potential for nutrient overloads of soils and potential export of excess nutrients from CAFOs to surrounding environment.”); Philip Wayne Westerman et al., *Swine Manure and Lagoon Effluent Applied to a Temperate Forage Mixture: II. Rainfall Runoff and Soil Chemical Properties*, 16 J. ENV’T QUALITY 106 (1987) (finding manure application to tall fescue at “acceptable maximum application rates” led to “much

This is particularly the case for phosphorous. Because most crops require more nitrogen than phosphorous, nitrogen-based approaches to manure application are more common than phosphorous-based plans. This “presents a special problem because the N-to-P ratio in manures is lower than that needed by crops . . . [causing] excess P [to] build[] up to environmentally harmful levels in fields that received repeated applications.”⁷¹ This nutrient mismatch “invariably means [phosphorous] is over-applied relative to needs.”⁷²

EPA has reached similar findings in the context of dairy CAFO waste application.⁷³ Once excess phosphorous in soil reaches a particular saturation point, it begins to leach into surface and groundwater.⁷⁴ The Draft Permit does applications to be based on the limiting nutrient.⁷⁵ However, phosphorus index approaches remain highly variable, and studies demonstrate that phosphorous is nevertheless routinely over-applied even in states with phosphorous-based planning

higher applications of [nitrogen, phosphorous, potassium], and other nutrients than are normally used,” posing “surface and groundwater pollution hazards”); JoAnn Burkholder et al., *Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality*, 115 ENV'T HEALTH PERSPS. 308 (2007) (surveying literature that found high concentrations of nitrogen in surface waters adjacent to spray fields where animal waste was applied at recommended rates).

⁷¹ Risse et al., *supra* note 71, at ii.

⁷² UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION, DEMONSTRATION OF ENHANCED TECHNOLOGIES FOR LAND APPLICATION OF ANIMAL NUTRIENT SOURCES IN SENSITIVE WATERSHEDS: FINAL PROGRESS REPORT 2 (2008).

⁷³ U.S. EPA, TRANSPORT AND FATE OF NUTRIENTS AND INDICATOR MICROORGANISMS AT A DAIRY LAGOON WATER APPLICATION SITE: AN ASSESSMENT OF NUTRIENT MANAGEMENT PLANS 8 (“[A] potential problem arises when the relative content of nitrogen and phosphorous in lagoon water differs from that in the crop. In this case, NMPs that are designed to meet the nitrogen requirement for crops may result in the over-application of phosphorous.”); *see also* U. OF GEORGIA COOPERATIVE EXTENSION, SMALL FARM NUTRIENT MANAGEMENT PRIMER: FOR UNPERMITTED ANIMAL FEEDING OPERATIONS 4–6; Risse et al., *supra* note 71, at 18 (“Nutrients applied from animal manure should match the needs of the crop, but the ratios of N, P, K and various micro nutrients excreted by animals are generally different from crop requirements.”).

⁷⁴ CHESAPEAKE BAY FOUNDATION, MANURE’S IMPACTS ON RIVERS, STREAMS, AND THE CHESAPEAKE BAY 8 (July 28, 2004), https://www.chesapeake.org/stac/presentations/63_Chesapeake%20Bay%20Foundation_2004_Manures%20impact%20on%20rivers%20streams%20and%20the%20Chesapeake%20Bay.pdf; <https://perma.cc/K6LL-Z23P>.

⁷⁵ Draft Permit S3.C.2(g)(i).

requirements.⁷⁶ Complicating matters further, recent studies show that applying waste at agronomic rates for phosphorous can cause excessive nitrogen releases to ground and surface water as well.⁷⁷ And because the current regulatory landscape explicitly allows CAFO operators to over apply both nitrogen and phosphorous in excess of crop needs and not based on water quality outcomes, downstream water quality impacts inevitably result.⁷⁸

Not only do nutrient management plans routinely sanction excessive nutrient application, but the inherent difficulties involved in accurately estimating water delivery and utilization by crops and differential nutrient uptake rates further undermines the effectiveness of nutrient planning. From the outset, EPA has acknowledged that “crafting proper waste application rates is a complicated task” requiring technical expertise in “soil science and soil fertility, nutrient application and management, crop production, soil and manure testing and results interpretation, fertilizer materials and their characteristics, BMPs for the management of nutrients and water, and applicable laws and regulations.”⁷⁹

Indeed, an EPA study “designed to test the assumption that a well-designed and executed NMP is protective” of waters identified myriad obstacles to developing

⁷⁶ ENVIRONMENTAL INTEGRITY PROJECT, MANURE OVERLOAD ON MARYLAND’S EASTERN SHORE 8 (Dec. 8, 2014), <https://environmentalintegrity.org/reports/manure-overload-on-marylands-eastern-shore/>; <https://perma.cc/3ASD-JGHW> (finding 75 percent of phosphorous from poultry operations on Maryland’s Eastern Shore was applied in excess of crop needs despite the state’s phosphorous-based planning requirements).

⁷⁷ Matthew T. Streeter et al., *Effects of cattle manure and soil parent material on shallow groundwater quality*, 6 AGROSYS. GEOSCIS. & ENV’T 3:e20380, 6 (2023) (explaining “if cattle manure (and any other nutrient input) is applied at agronomic rates for [phosphorous] while not accounting for manure [nitrogen] in the total budget for that nutrient, the potential to degrade groundwater resources with No3-N is high.”); cf. Coleen N. Brown et al., *Tracing Nutrient Pollution from Industrialized Animal Production in Large Coastal Watershed*, 192 ENV’T MONITORING ASSESSMENT 515 (2020) (detecting CAFO-derived nutrients and high nitrate concentrations in surface waters many kilometers downstream from CAFOs).

⁷⁸ Burkholder et al., *supra* note 70, at 308 (surveying literature that found high concentrations of nitrogen in surface waters adjacent to spray fields where animal waste was applied at recommended rates); Chris Jones et al., *Livestock manure driving stream nitrate*, 48 AMBIO 1143-53 (2018); Zihao Bian, *Production and application of manure nitrogen and phosphorus in the United States since 1860*, 13 EARTH SYST. SCI. DATA 2, 515-517 (2021).

⁷⁹ *Waterkeeper Alliance Inc. v. EPA*, 399 F.3d 486, 501 n. 19 (2d Cir. 2005) (quoting 68 Fed. Reg. 7176, 7213 (Feb. 12, 2003)).

effective nutrient management plans.⁸⁰ For example, difficulties in accounting for the precise water demands of crops, other sources of plant available water beyond irrigation, and preferential flow paths in soil that allow CAFO wastewater to bypass the root zone all impede the ability of nutrient management plans to minimize surface and groundwater contamination.⁸¹ Additionally, predicting accurate nutrient budgets is further complicated by the fact that other contaminants in CAFO waste actually restrict plant growth and hinder a crop's ability to uptake nutrients.⁸² In light of these factors, the Agency found that only a highly conservative plan that treated wastewater prior to application to remove most of the suspended solid content and "depleted the soil organic reservoir . . . by applying only a fraction of" plant nutrient needs (neither of which are required by current CAFO effluent guidelines or the Draft Permit) actually minimized pollution.⁸³ In contrast a "more aggressive" plan characteristic of those actually advised by USDA and state conservation standards lead to increased "leaching and contaminant migration."⁸⁴

In sum, the agencies cannot continue to rely on their previous assumptions about nutrient management planning and its ability to achieve effluent limitations and minimize nutrient transport. They must therefore revisit their fundamental approach by requiring CAFOs to manage their waste to actually achieve the permit's strict effluent limitations and protect Oregon's Water Quality Standards. Failure to do so would not comply with the CWA or Oregon law.

D. The Draft General Permit fails to require Best Professional Judgment limits for CAFO pollutants with no Effluent Limitation Guidelines.

In the Draft General Permit, ODA essentially treats CAFO waste as only containing nutrients that are beneficial to crop production if applied at agronomic rates.⁸⁵ Under this approach, any other pollutants of concern that may be found in CAFO waste, but that are not beneficial to or utilized by crops, are not considered or regulated under the NPDES program. Yet CAFO waste contains a variety of other pollutants including solids (feed, hair, feathers, etc.); salts; trace elements such as arsenic, copper, selenium, zinc, cadmium, molybdenum, nickel, lead, iron, manganese, aluminum, and pesticide ingredients; pathogens (bacteria, viruses,

⁸⁰ *Transport and Fate of Nutrients and Indicator Microorganisms at a Dairy Lagoon Water Application Site: An Assessment of Nutrient Management Plans*, *supra* note 73, at xi.

⁸¹ *Id.* at 66.

⁸² *Id.* at 67.

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ See Draft Permit S4.A (only requiring manure to be tested for phosphorus and nitrogen); S2.A (establishing effluent limits only for *E. coli*, Nitrate plus Nitrite Nitrogen, and Total Phosphorus).

protozoa, fungi, prions, and helminths); antimicrobials (antibiotics and vaccines); hormones (both natural and synthetic); pesticides; soaps; and disinfectants.⁸⁶

To address pollutants for which no effluent limitation guidelines (ELGs) have been established, EPA regulations require case-by-case effluent limitations based on Best Professional Judgment (BPJ).⁸⁷ ODA may establish BPJ limits based on the same factors the Act requires EPA to consider in developing ELGs.⁸⁸ BPJ effluent limitations can take the form of numerical limitations or best management practices.

EPA guidance further clarifies that permitting agencies must establish BPJ limits for pollutant discharges not covered by the applicable ELGs:

Where EPA has not promulgated technology-based effluent guidelines for a particular class or category of industrial discharger, *or where the technology-based effluent guidelines do not address all wastestreams or pollutants discharged by the industrial discharger*, EPA must establish technology-based effluent limitations on a case-by-case basis in individual NPDES permits, based on its best professional judgment or “BPJ.”

...
[A]n authorized state must include technology-based effluent limitations in its permits for pollutants not addressed by the effluent guidelines for that industry. 33 USC § 1314(b); 40 CFR § 122.44(a)(1), 123.25, 125.3. In the absence of an effluent guideline for those pollutants, the CWA requires permitting authorities to conduct the “BPJ” analysis discussed above on a case-by-case basis for those pollutants in each permit.⁸⁹

⁸⁶ U.S. EPA, OFFICE OF WATER, 820-R-13-002, LITERATURE REVIEW OF CONTAMINANTS IN LIVESTOCK AND POULTRY MANURE AND IMPLICATIONS FOR WATER QUALITY 2 (July 2013); AMBER MOORE & JIM IPPOLITO, DAIRY MANURE FIELD APPLICATIONS—HOW MUCH IS TOO MUCH? (Apr. 2009), U. OF IDAHO EXTENSION, <https://www.extension.uidaho.edu/publishing/pdf/CIS/CIS1156.pdf>; <https://perma.cc/4MDQ-MANE> (discussing soluble salts accumulation and “concern[] about the accumulation of copper (Cu) in the soil because of the application of dairy wastes to agricultural fields”).

⁸⁷ 40 C.F.R. § 125.3; 33 U.S.C. § 1342(a)(1) (authorizing EPA to issue permit conditions “necessary to carry out the provisions of the [CWA]”).

⁸⁸ EPA, NPDES PERMIT WRITERS’ MANUAL, CHAPTER 5: TECHNOLOGY-BASED EFFLUENT LIMITS.

⁸⁹ James A. Hanlon, Director, EPA Office of Wastewater Management, *National Pollutant Discharge Elimination System (NPDES) Permitting of Wastewater*

CAFOs are capable of discharging a variety of pollutants with no established ELGs. This includes CAFO waste handled at production areas and land applied to fields, as well as discharges of pollutants from CAFO ventilation systems. Many pollutants found in CAFO waste applied to agricultural fields are not subject to agronomic rate considerations because they are not nutrients available for use by crops. Instead, they must be treated as what they are: pollutants that CAFOs produce, handle, and dispose of in ways that potentially result in discharges to jurisdictional waters. These pollutants and those discharged by ventilation systems do not have ELGs and thus require ODA to develop BPJ limitations sufficient to protect against unpermitted discharges to Oregon waters.

E. The Draft Permit must prohibit the application of manure, litter, and process wastewater to frozen soil.

The Draft Permit invites direct discharges via winter runoff by allowing application of waste to frozen ground. Specifically, though the Draft Permit purports to prohibit permittees from applying manure, litter, or process wastewater to fields with frozen soil,⁹⁰ it undermines this prohibition by narrowly defining “frozen soil” as “soil with a frozen surface crust of 2 inches or deeper, if the soil is at or below zero degrees Celsius (32 degrees Fahrenheit).”⁹¹ Thus, the Draft Permit *does* allow permittees to apply manure, litter, and process wastewater to fields covered with frozen soil—so long as that frozen soil is less than two inches thick and/or the soil is higher than 32 degrees Fahrenheit. This will result in direct discharges to waters of the state.

Application of manure, litter, or process wastewater to frozen soil poses a clear threat to water quality by ensuring that waste will be susceptible to runoff due to precipitation or melting before crops are available to utilize waste nutrients. Accordingly, EPA has prohibited land application on frozen, snow-covered, or saturated ground in neighboring Idaho’s CAFO General Permit, explaining that, “[n]ot surprisingly, manure, litter and process wastewater cannot be effectively applied at an agronomic rate during the non-growing season, since there will be minimal or no plant uptake. At the same time, frozen, snow-covered or saturated soils

Discharges from Flue Gas Desulfurization (FGD) and Coal Combustion Residuals (CCR) Impoundments at Steam Electric Power Plants (Jun. 7, 2010) [Hanlon Memo] (emphasis added). Although this Memorandum discussed coal plant discharge limits, the statutory requirement to establish technology-based limits using BPJ is equally applicable across industries.

⁹⁰ Draft Permit S2.C.3(a) (“permittee shall not apply manure, litter, or process wastewater to . . . [f]ields with frozen soil”).

⁹¹ Draft Permit at 4 (definition 18).

will enhance and facilitate runoff.”⁹² After reviewing studies of winter manure application and nutrient losses, EPA found that “the majority of [the] studies observed substantial nutrient losses from winter-applied manure.”⁹³ In fact, “[s]tudies that specifically addressed the effectiveness of [best management practices] for winter application of manure demonstrated that although some performed better than others, *none* adequately controlled nutrient runoff.”⁹⁴ The same risks exist in Oregon, and as a result the Draft Permit falls short of federal requirements to minimize the risk of nutrient loss from land application.⁹⁵

F. The Draft Permit must include universal lagoon and composting area standards.

Under federal law, the CWA requires dischargers to obtain permits that place limits on the type and quantity of pollutants that can be released into the nation’s waters. These effluent limitations are technology-based because they are determined according to the best available or practicable technology.⁹⁶ Where effluent limitations prove insufficient to attain or maintain certain water quality standards, the CWA requires NPDES permits to include additional water quality based effluent limitations.⁹⁷ Although ordinarily, an effluent limitation consists of a requirement to abide by a specific numeric criterion for a given pollutant, effluent limitations may also be established by “best management practices” where imposing a numeric criterion is infeasible.⁹⁸

While the CWA preserves groundwater regulation primarily for state law, the CWA applies to groundwater that is hydrologically connected to surface water. The Supreme Court has held that when a discharge into groundwater is “the functional equivalent of a direct discharge” into surface water, the CWA applies.⁹⁹

⁹² U.S. EPA, FACT SHEET THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) PROPOSES TO REISSUE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE POLLUTANTS PURSUANT TO THE PROVISIONS OF THE CLEAN WATER ACT (CWA) TO: CONCENTRATED ANIMAL FEEDING OPERATIONS IN THE STATE OF IDAHO 15 (2019),

<https://19january2021snapshot.epa.gov/sites/static/files/2019-11/documents/r10-npdes-idaho-cafo-gp-idg010000-fact-sheet-2019.pdf>; <https://perma.cc/SD4K-2U4S>

⁹³ *Id.*

⁹⁴ *Id.* at 19 (emphasis added).

⁹⁵ 40 C.F.R. § 412.4(c)(1)-(2).

⁹⁶ 33 U.S.C. § 1311(b)(2)(A).

⁹⁷ 33 U.S.C. § 1311(b)(1)(C).

⁹⁸ 33 U.S.C. § 1314(e).

⁹⁹ *County of Maui v. Hawai‘i Wildlife Fund*, 140 S. Ct. 1462, 1476 (2020).

Oregon has its own state water quality regulations, which are more stringent than federal law.¹⁰⁰ While the Draft Permit is only required for CAFOs with the potential to discharge to surface waters,¹⁰¹ it must also prevent discharges to groundwater that violate state law.¹⁰² State water quality standards must be “enforced through meaningful limitations” in federal NPDES permits.¹⁰³ Notably, Oregon recognizes groundwater as a water of the state.¹⁰⁴ It is therefore the policy of the state to protect, maintain, and improve groundwater quality, and to prevent, abate, and control new or existing water pollution of groundwater.¹⁰⁵ Furthermore, “it is the policy of the State of Oregon to protect the quality of the waters of this state by preventing animal wastes from discharging into the waters of the state,”¹⁰⁶ which includes groundwater. These standards should thus be enforced through meaningful limitations.

In order to prevent groundwater contamination, all state agency rules and programs affecting groundwater must be consistent with the state’s groundwater objectives.¹⁰⁷ DEQ has a major role in groundwater preservation and must coordinate interagency management of groundwater to achieve the goals of the state.¹⁰⁸ Strategies include an anti-degradation policy to emphasize the prevention of groundwater pollution, and a requirement for point sources to employ the highest and best practicable methods to prevent the movement of pollutants to groundwater.¹⁰⁹ Available technologies for treatment and waste reduction, cost effectiveness, site characteristics, pollutant toxicity and persistence, and state and federal regulations are considerations for determining the highest and best practicable methods that protect public health and the environment.¹¹⁰ Groundwater contamination levels shall be used to trigger specific governmental actions designed to prevent those levels from being exceeded or to restore ground water quality to at least those levels.¹¹¹

¹⁰⁰ Fact Sheet, *supra* note 2, 1.2

¹⁰¹ *Id.* at 1.1.

¹⁰² See Draft Permit S2.A(4) (“All manure, litter, and process wastewater authorized by this permit must be managed in a manner that will prevent a violation of the Groundwater Quality Protection Rules...”); Draft Permit S2.B(4) (“seepage to groundwater from these facilities must not violate state Groundwater Quality Protection Rules.”); Fact Sheet 3.1 (“the permit prohibits discharge to groundwater in violation of state Groundwater Quality Protection Rules under OAR 340-040.”).

¹⁰³ *American Paper Institute v. EPA*, 996 F.2d 346 (D.C. Cir. 1993).

¹⁰⁴ Or. Rev. Stat. § 468B.005(10).

¹⁰⁵ Or. Rev. Stat. § 468B.015.

¹⁰⁶ Or. Rev. Stat. § 468B.200.

¹⁰⁷ Or. Rev. Stat. § 46B.160.

¹⁰⁸ Or. Rev. Stat. § 46B.162.

¹⁰⁹ Or. Rev. Stat. § 46B.160(4); Or. Admin. R. 340-040-0020.

¹¹⁰ Or. Admin. R. 340-040-0020(11).

¹¹¹ Or. Admin. R. 340-040-0040.

The Draft Permit does not comply with state and federal regulations that protect groundwater because it lacks enforceable best-practicable protections for groundwater to ensure that CAFOs will not degrade the quality of the groundwater. As detailed above, Oregon groundwater law requires point sources to employ the highest and best practicable methods to prevent the movement of pollutants to groundwater.¹¹² Additionally, federal law requires the best-technology when groundwater is hydrologically connected to surface water such that discharge into the groundwater is the functional equivalent of a discharge into surface water.

In Washington, when Ecology failed to include sufficient technology-based protections, “all known, available, and reasonable methods of prevention, control, and treatment (AKART),” as required under Washington law, the court held that the permit was not protective of groundwater quality standards and violated Washington’s anti-degradation policy.¹¹³ The court particularly focused on manure storage lagoons and composting areas. The methods approved by Ecology were not “the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge,” failing to provide an additional layer of protection to water quality standards.¹¹⁴ Although the permits prohibited discharges to groundwater, they allowed for operation of production areas that risked doing exactly that.

Oregon has an analogous anti-degradation policy to Washington—degradation of groundwater must be avoided. Oregon’s “highest and best practicable methods” standard is similar to Washington’s AKART standards. By refusing to require the highest and best practicable methods to prevent the movement of pollutants to groundwater from CAFOs, DEQ has failed to protect against degradation of groundwater in violation of state goals and DEQ’s own administrative rules. Additionally, where groundwater is hydrologically connected to surface water so that a discharge into the groundwater is the functional equivalent of a discharge to surface water, the Draft Permit violates the CWA by not requiring the best available or practicable technology.

Many best-practice technologies are already mandatory for individual CAFOs under consent decrees and some CAFOs under the Draft Permit. Specifically, ODA should require that all lagoons are double lined with synthetic membrane liners, have a leak detection sump and pump to remove leachate collecting between the layers, and have depth markers. The Draft Permit already requires that new lagoons in GWMA are double lined with a synthetic liner and have leak detection.¹¹⁵ The Draft Permit also requires that permittees with large CAFOs have

¹¹² Or. Admin. R. 340-040-0020.

¹¹³ *Washington State Dairy Fed’n v. State*, 490 P.3d 290 (Wash. Ct. App. 2021).

¹¹⁴ *Id.* at 312.

¹¹⁵ Draft Permit S2.D(5).

depth markers in all surface liquid impoundments.¹¹⁶ Rather than a policy that is only applied to some facilities, this must be a permit condition for all CAFOs using waste lagoons. For composting areas, ODA should require lined collection ditches or strip drains in order to collect stormwater and other liquids generated there and require similar measures for silage areas. In manure areas, ODA should require mechanical dewatering equipment to remove free-draining water from separator solids. Each CAFO should also be required to install a centrifuge manure separator to reduce nitrogen and phosphorus content of the CAFO's manure.

Where including the highest and best practicable methods are infeasible or insufficient, ODA and DEQ should have established additional water quality based effluent limitations. The Draft Permit contains some effluent limits for surface water, but none for groundwater. Since Oregon law treats groundwater as a water of the State but did not include the best practicable methods for preventing contamination, the Draft Permit should at the very least have included effluent limits for groundwater. In not doing so, ODA and DEQ failed to provide an additional layer of protection to water quality standards. The Draft Permit should be modified to add these standards where best practice technologies are not sufficient to protect groundwater.

G. The Draft Permit must prohibit all production area discharges.

As explained above, Oregon's state water quality regulations are more stringent than federal law, and Oregon must enforce them through meaningful limitations in federal NPDES permits. Indeed, ODA acknowledges that "an NPDES permit is required for the discharge of any wastes into the waters of the state."¹¹⁷ Accordingly, ODA must prohibit all production area discharges—to do otherwise invites continued, rampant CAFO pollution of waters of the state.

Commenters support the Draft Permit's prohibition on discharges from the production area to surface waters of the state when it comes to large swine, poultry, and veal CAFOs, the construction of which commenced after April 14, 2003.¹¹⁸ But this prohibition does not go far enough—instead of creating a loophole for other

¹¹⁶ Draft Permit S2.D(4).

¹¹⁷ Fact Sheet, *supra* note 2, at 1.2

¹¹⁸ Draft Permit S2.B ("For all CAFOs, (except large swine, poultry, and veal CAFOs, the construction of which commenced after April 14, 2003): The permittee must not discharge manure, litter, or process wastewater to surface waters of the state from the production area, except when: (a) Rainfall events cause an overflow of waste management and storage facilities designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater, including the runoff and direct precipitation, from a 25-year, 24-hour rainfall event and (b) The production area is operated in accordance with the applicable inspection, maintenance, recordkeeping, and reporting requirements of this permit.").

CAFOs, it should extend to all CAFOs registered to the General Permit. At the very least, the Agencies must not give legacy status to CAFOs upon which construction commenced before April 14, 2003. No CAFOs should be permitted to discharge to waters of the state, regardless of size, species of confined animals, or time of construction.

H. The Draft Permit must account for the aerial deposition of ammonia and other pollutants into surface waters.

The Draft Permit does not account for the discharge of ammonia and litter-dust from ventilation systems found on chicken barns at poultry CAFOs, from uncovered outdoor litter piles, feedlots, or from open-air lagoons which release nitrogen (in the form of ammonia) and other pollutants into the atmosphere. Once ammonia and other pollutants are released into the atmosphere, they can be carried a short distance to surface waters. This meets the definition of discharge under Oregon’s definition of pollution for water pollution control laws.¹¹⁹

Oregon, as a CWA-delegated state, is authorized to impose requirements that are more stringent than what is required by the CWA and EPA’s regulations.¹²⁰ And there can be little doubt that Oregon has done so—Oregon not only has defined the word “discharge,” but also has expanded the definition of “pollutant” by further defining the terms “wastes” and “industrial waste” to include gases like the waste ammonia. Under Oregon law, “discharge” means “placing wastes into public waters, on land, or otherwise into the environment in a manner that affects or may tend to affect the quality of public waters.”¹²¹ A “pollutant” includes “industrial, municipal, and agricultural waste discharged into water.”¹²² And Oregon further defines “wastes” to include “industrial wastes, and all other liquid, gaseous, solid, radioactive, or other substances, that will or may cause or tend to cause pollution of

¹¹⁹ “Pollution’ or ‘water pollution’ means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, *or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state*, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.” ORS 468B.005(5) (emphasis added).

¹²⁰ *Id.*; 40 CFR §§ 122.44(d), 123.25(a).

¹²¹ OAR 340-045-0010(5).

¹²² OAR 340-045-0010(18); *see also* 33 USC § 1362 (mirroring federal CWA definition).

any waters of the state.”¹²³ “Industrial waste” is gaseous waste from “any process of industry, manufacturing, trade, or business.”¹²⁴ Those definitions plainly reach gaseous ammonia emissions: under either the general definition of “waste” or the more specific definition of “industrial waste,” gaseous ammonia emissions are a covered pollutant. And under Oregon’s definition of “discharge,” emission of gaseous ammonia (from, for instance, a CAFO fan) is a discharge of a pollutant.

At least one state court recently agreed that gaseous ammonia emissions should properly be regulated under the state’s expansion of the CWA. In 2021, a Maryland state court considered whether the Maryland Department of the Environment (MDE) unlawfully failed to set effluent limitations for ammonia emitted from CAFOs near Chesapeake Bay.¹²⁵ The circuit court held that MDE erroneously concluded that gaseous ammonia emissions are not governed by Maryland’s expansion of the CWA and remanded for MDE “to mandate effluent limitations for ammonia.”¹²⁶ The court noted that Maryland defined “pollutant” as “any liquid, gaseous, solid, or other substance that will pollute any waters of this State.”¹²⁷ In addition, the state defined “discharge” as “the addition, introduction, leaking, spilling, or emitting of a pollutant into the waters of this State.”¹²⁸ Under this construction, the court explained, “it is clear that CAFOs in Maryland, particularly CAFOs operating as poultry farms, emit gaseous ammonia by discharging noxious fumes onto the waters of the State via industrial fans.”¹²⁹ On appeal, although the Maryland Supreme Court disagreed with the circuit court’s finding that the permit failed to set effluent limitations for ammonia, it did not reverse the circuit court’s conclusion that gaseous ammonia emissions are governed by Maryland’s expansion of the CWA. Instead, it agreed this conclusion was correct, acknowledging MDE’s own admission that it can regulate such emissions.¹³⁰

Gaseous ammonia emissions also need not be “direct” to constitute a “discharge” within the meaning of the CWA. In *County of Maui v. Hawai’i Wildlife Fund*, the Supreme Court addressed the test for indirect discharges, holding that indirect discharges of pollutants still trigger CWA requirements if they are the

¹²³ OAR 340-045-0010(31) (emphasis added).

¹²⁴ OAR 340-045-0010(10) (emphasis added). *Cf.* 33 USC § 1362 (failing to expand the definition of discharge and failing to further define pollutants subcategories).

¹²⁵ *See In re Petition of Assateague Coastal Trust*, No.: 482915-V (Md. Cir. Ct. Mar. 11, 2021).

¹²⁶ *Id.* at 12.

¹²⁷ *Id.* at 8–9 (emphasis in original).

¹²⁸ *Id.* at 9 (emphasis in original).

¹²⁹ *Id.* at 10.

¹³⁰ *Id.* at 478–84.

“functional equivalent” of direct discharges.¹³¹ There, the plaintiffs brought a CWA citizen suit against the county, alleging that it was discharging a pollutant into navigable waters without the required permit.¹³² The Supreme Court upheld the lower court’s finding of liability, articulating a test for when pollution reaches navigable waters in an indirect way (there, through groundwater to the Pacific Ocean).¹³³ The Supreme Court held that the CWA requires a permit when there is the “functional equivalent of a direct discharge.”¹³⁴ In other words, “an addition [of a pollutant] falls within the statutory requirement that it be ‘from any point source’ when a point source directly deposits pollutants into navigable waters, or when the discharge reaches the same result through roughly similar means.”¹³⁵

The same reasoning applies to the discharge of gaseous ammonia and particulate matter from CAFOs. Indeed, the Supreme Court in *County of Maui* expressly observed that excluding pollutants that travel through air would be an absurd interpretation.¹³⁶

Courts have previously considered the situation of aerial deposition and found it covered by the CWA. In *National Cotton Council of America v. EPA*, the Sixth Circuit considered an EPA rule that declared the agency would consider the residues of pesticides discharged from point sources in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to be nonpoint source pollutants.¹³⁷ The Sixth Circuit ruled against the agency, highlighting EPA’s “longstanding position” that an “NPDES pollutant is ‘added’ when it is introduced into a water from the ‘outside world’ by a point source.”¹³⁸ The court held that to determine whether there is an addition from a point source, “the relevant inquiry is whether—but for the point source¹³⁹—the pollutants would have been added to the receiving body of water.”¹⁴⁰ The court concluded “[i]t is clear that but for the application of the pesticide, the pesticide residue and excess pesticide would not be added to the water[.]”¹⁴¹ Thus, “the pesticide residue and excess pesticide are from a

¹³¹ 590 U.S. 165 (2020).

¹³² *Id.*

¹³³ *Id.* at 1470.

¹³⁴ *Id.* at 1476

¹³⁵ *Id.* (emphasis added).

¹³⁶ *Id.* at 1475–76 (excluding a discharge from a pipe because it travels through air before hitting navigable waters would be absurd).

¹³⁷ 553 F3d 927, 934 (6th Cir 2009).

¹³⁸ *Id.* at 940.

¹³⁹ After *Maui* 590 U.S. 165 (2020), the test is now the functional equivalent test detailed above.

¹⁴⁰ *Id.* (citing *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 103 (2004)).

¹⁴¹ *Id.*

‘point source.’”¹⁴² The same logic applies here. The gaseous ammonia and particulate matter are emitted from a point source.

In 2013, the U.S. Government Accountability Office found that “[a]tmospheric deposition... can significantly impair water quality in the nation’s rivers lakes, bays, and estuaries, and harm human health and aquatic ecosystems.”¹⁴³ These airborne pollutants can be deposited either directly onto the surface of a waterbody or onto land and then transported into a waterbody through runoff.

A 2008 study in North Carolina found that, “[a]tmospheric deposition of nitrogen emissions now accounts for up to 40% of new nitrogen inputs to coastal ecosystems.”¹⁴⁴ Many CAFOs in Oregon can be found in coastal communities like Tillamook County,¹⁴⁵ putting these coastal ecosystems at great risk of nitrogen pollution. Atmospheric deposition of nitrogen in the form of ammonia can cause acidification, harmful algal blooms, reduced oxygen, and toxicity, all of which can significantly impact aquatic life and drinking water quality.¹⁴⁶

I. The General Permit must be unavailable to CAFOs using anaerobic digestion and/or engaging in land application of digestate.

The Agencies must revise the Draft Permit to prohibit CAFOs using anaerobic digestion and/or land-applying digestate from obtaining coverage under the General Permit. Digestion fundamentally changes the characteristics of CAFO waste, creating additional risks for water quality that the Draft Permit fails to take into account and that are ill-suited for a one-size-fits-all approach. CAFOs operating digesters or land-applying digestate should be required to obtain individual permits that impose additional best management practices, technology, monitoring, and

¹⁴² *Id.*

¹⁴³ *Water Quality: EPA Faces Challenges in Addressing Damage Caused by Airborne Pollutants*, U.S. Government Accountability Office, GAO-13-39 (released Feb. 25, 2013).

¹⁴⁴ Jennifer K. Costanza et al, *Potential geographic distribution of atmospheric nitrogen deposition from intensive livestock production in North Carolina, USA*, SCI. OF THE TOTAL ENV’T, Vol. 398, Issues 1–3, 2008, Pages 76–86.

¹⁴⁵ Tillamook County has the largest concentration of CAFOs in Oregon with 102 permitted CAFO operations. *See* Alejandro Figueroa, *How Oregon farms manage manure and what’s changing this year*, OREGON PUBLIC BROADCASTING (May 17, 2024).

¹⁴⁶ We incorporate by reference the aerial deposition briefing from Pet’rs’ Resp. to Resp’ts’ Mot. for Partial Summ. *J., Eastman v. Or. Dep’t of Agric.*, No. 22CV34340 (Or. Cir. Ct. Linn Cnty. Nov. 16, 2023)

nutrient management requirements calculated to achieve and document compliance with CAFO effluent limitations.

Digestate presents additional and more serious water quality risks than undigested manure because “[c]ompounds such as nitrogen, phosphorous, and other elements become more soluble due to anaerobic digestion and therefore have higher potential to move with water.”¹⁴⁷ Recent studies confirm that digested CAFO waste behaves much differently on the landscape than undigested manure due to its altered chemical composition, increasing short-term nitrogen loss, and contributing to metals and antibiotic-resistant pathogen accumulation.¹⁴⁸

Digestate has more ammonium, higher pH, and more water-soluble nitrogen and phosphorus.¹⁴⁹ This altered composition makes the nutrients in digestate more susceptible to runoff and groundwater infiltration than nutrients in undigested CAFO waste.¹⁵⁰ Anaerobic digestion of CAFO waste also increases pollutant volatility, creating heightened risks that pollutants will be aerosolized and then redeposit in nearby waterways.¹⁵¹ These are just some of the ways in which pollution impacts from digestate differ from undigested CAFO waste.

¹⁴⁷ USDA-NRCS, Conservation Practice Standard Code 366, Anaerobic Digester 8-9 (Aug. 2023), https://www.nrcs.usda.gov/sites/default/files/2023-08/366_NHCP_CPS_Anaerobic_Digester_2023.pdf.

¹⁴⁸ See Roger Nkoa, *Agricultural Benefits and Environmental Risks of Soil Fertilization with Anaerobic Digestates: A Review*, 34 AGRONOMY FOR SUSTAINABLE DEV. 473, 482–84 (2014); Chengjun Pu, et al., *Impact of Direct Application of Biogas Slurry and Residue in Fields: In Situ Analysis of Antibiotic Resistance Genes from Pig Manure to Fields*, 344 J. HAZARDOUS MATERIALS 441, 443, 446–47 (2018).

¹⁴⁹ Kurt Moller & Torsten Muller, *Effects of Anaerobic Digestion on Digestate Nutrient Availability and Crop Growth: A Review*, 12 Eng. Life Sci. 3, 242 (2012), https://www.ofvi-abc.nl/wp-content/uploads/2024/03/Moller-Muller_2012_Effects-anaerobic-digestion-digestate-nutrients-crop-growth.pdf; <https://perma.cc/3ACT-G9RC>. Importantly, though some studies suggest anaerobic digestion of CAFO wastes also neutralizes pathogens, research shows viable pathogen content of digestate is highly variable. Tucker R. Burch et al., *Fate of Manure Borne Pathogens during Anaerobic Digestion and Solids Separation*, J. ENVT'L QUAL. 342 (2018) (“Anaerobic digesters inactivated pathogens and fecal indicators, but the extent of inactivation for fecal indicators was generally poor compared with expectations based on the literature.”); Burkholder et al., *supra* note 70 (“Overall, inactivation of pathogens and fecal indicators was highly variable.”).

¹⁵⁰ USDA, Natural Resources Conservation Service, Conservation Practice Standard for Anaerobic Digester, 366-CPS-9 (Aug. 2023).

¹⁵¹ Moller & Muller, *supra* note 149.

Due to the unique hazards associated with anaerobic digesters and their byproducts, facilities using these technologies must be subject to additional best management practices and monitoring protocols that are absent from the CAFO Permit. For instance, weekly visual inspections are likely insufficient to identify all spills and other accidents that occur with increased frequency at facilities with digesters.¹⁵² Further, digestate composition—and therefore pollution risks—are variable depending on the feedstock used.¹⁵³ For instance, feedstocks that include food wastes can be contaminated with pathogens capable of surviving digestion.¹⁵⁴

The Draft Permit does not address any of these issues. It only references digestion in the context of NMP elements, stating an NMP must include “[p]rocedures to ensure proper operation and maintenance of composting or anaerobic digestion activities required under OAR 340-096.”¹⁵⁵ Draft Permit S3.C.(2)(i). OAR 340-096, in turn, addresses solid waste requirements for composting facilities, including digesters. These requirements focus on operation of the digester itself and are extremely vague regarding proper disposal of digestate, requiring “adequate capacity” and referencing “agronomic rates,” but providing no detail as to how that compares to a CAFO NMP and not addressing the unique risks of digestate land disposal at all.¹⁵⁶ Merely incorporating these separate requirements by reference is inadequate because it will not result in NMPs that are actually designed to achieve the Permit’s effluent limitations. Instead, it will allow CAFOs with digesters to improperly dispose of digestate using a generic NMP calculated for application of non-digested CAFO waste, leading to unpermitted discharges. Because the Draft CAFO permit is not an appropriate tool to regulate anaerobic digesters, Commenters ask that ODA and DEQ expressly prohibit facilities with digesters from coverage under the final CAFO General Permit and

¹⁵² Carlin Molander & Molly Armus, Making a Bad Situation Worse: Manure Digesters at Mega Dairies in Wisconsin 6 (Friends of the Earth & Soc. Responsible Agric. Project 2024); For example, in 2019, a manure digester at the Port of Tillamook Bay spilled 300,000 gallons of waste. *Manure spill splashes 300,000 gallons near Tillamook Bay*, OREGONLIVE (Jul. 23, 2019), <https://www.oregonlive.com/news/2019/07/manure-spill-splashes-300000-gallons-near-tillamook-bay.html>.

¹⁵³ Alessandra Fusi et al., *Life Cycle Environmental Impacts of Electricity from Biogas Produced by Anaerobic Digestion*, FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY 15 (March 2016).

¹⁵⁴ See Lauren Russell et al., *A Small Study of Bacterial Contamination of Anaerobic Digestion Materials and Survival in Different Feed Stocks*, 7 BIOENGINEERING 116 (Sep. 22, 2020) (finding that strains of listeria that can cause illness in humans were present in food waste digester feedstock and persisted even after digestion).

¹⁵⁵ Draft Permit S3.C.(2)(i).

¹⁵⁶ OAR 340-096-0070.

fully address the unique water quality risks of digestate in individual NPDES permits for such facilities.

J. The Draft Permit must prioritize environmental justice.

CAFOs have a long history of creating environmental injustice, resulting in the impacts from CAFOs not affecting all Oregonians equally. The Agencies must ensure that the CAFOs that they permit avoid harming environmental justice communities and violating state laws and regulations, including ORS 182.545, and DEQ’s Environmental Justice Policy.

The waste produced by CAFOs “contains antibiotics, hormones, pathogens, heavy metals, and other animal drugs and chemicals that contaminate significant ground and surface water across the country.”¹⁵⁷ CAFOs and their pollutants “are generally unwanted in local communities and are often thrust upon those sectors with the lowest levels of political influence.”¹⁵⁸ EPA conducted its own analysis of CAFOs’ locations in relation to environmental justice populations and found areas at risk of disproportional impacts from virtually every type of CAFO—broiler, egg, turkey, hog, beef, and dairy.¹⁵⁹

Many studies have shown that nationally a disproportionate number of CAFOs are located in low-income and Black, Indigenous, and People of Color (BIPOC) communities that unfairly bear the brunt of the environmental pollution from this industry.¹⁶⁰ The same is true in Oregon. In Oregon, the majority of CAFOs—and particularly the state’s mega dairy CAFOs—are located in rural Umatilla and Morrow Counties.¹⁶¹ According to census data, approximately 40% of Morrow County’s population is Hispanic or Latino 35% of the county’s population speaks a language other than English at home. In Umatilla County, approximately 31% of the population is Hispanic or Latino, and almost 23% of the county’s

¹⁵⁷ Phoebe Gittelson et al., *The False Promises of Biogas: Why Biogas Is an Environmental Justice Issue*, 15 ENVTL. JUSTICE 352, 356 (May 2021), <https://www.liebertpub.com/doi/pdf/10.1089/env.2021.0025>.

¹⁵⁸ *Id.*

¹⁵⁹ U.S. EPA OFFICE OF WATER, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) REPORTING RULE, ANALYSIS UNDER EXECUTIVE ORDER 12898: FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS 4 (Oct. 3, 2011).

¹⁶⁰ Gittelson, *supra*, note 157.

¹⁶¹ U.S. Census Bureau, American Community Survey: 2018–2022 ACS 5-Year Estimates, Morrow County, Oregon, <https://data.census.gov> (last visited Jan. 11, 2026).

population speaks a language other than English at home.¹⁶² Both counties are also home to the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) reservation and usual and accustomed treaty rights territory.

DEQ and ODA have failed to adequately comply with their obligations under ORS 182.545 and DEQ's Environmental Justice Policy in the Draft Permit. Commenters therefore request that DEQ and ODA: (1) withdraw the Draft Permit; (2) develop a process to inform environmental justice communities of the Draft Permit's impacts; (3) develop a quantitative and qualitative analysis of CAFOs and impacts of facilities issued General Permits on environmental justice communities; (4) incorporate environmental justice considerations in a revised Draft Permit; and (5) thereafter reissue the Draft Permit for public comment only after the agencies can ensure that BIPOC and low-wealth communities are not disproportionately harmed as a result of the General Permit issued by the agencies.

Commenters also reiterate that many of the items identified in other sections of these comments are necessary to protect communities that live and work near the permitted CAFOs from the staggering amounts of waste that the facilities generate. For example, the Draft Permit must require rigorous government oversight, monitoring, and reporting that would allow the state and the public to understand the full extent to which pollutants from permitted facilities are getting into the air and water and making people sick. Without those measures, the Draft Permit will continue to fall short of what is needed to protect human health and the environment.

In 2007, SB 420 established Oregon's Environmental Justice Task Force and environmental justice guidelines for the state's natural resource agencies. Under that law, ODA and DEQ have a legal duty to consider the facility's impacts on BIPOC and low-wealth communities. Because it failed to do so here, it is in violation of this law.

Pursuant to ORS 182.545,

In order to provide greater public participation and to ensure that all persons affected by decisions of the natural resources agencies have a voice in those decisions, each natural resource agency shall:

- (1) In making a determination whether and how to act, consider the effects of the action on environmental justice issues.

¹⁶² U.S. Census Bureau, American Community Survey: 2019–2023 ACS 5-Year Estimates, Umatilla County, Oregon, <https://data.census.gov> (last visited Jan. 11, 2026).

- (2) Hold hearings at times and in locations that are convenient for people in communities that will be affected by the decisions stemming from those hearings.
- (3) Engage in public outreach activities in the communities that will be affected by decisions of the agency.
- (4) Create a citizen advocate position that is responsible for:
 - (a) Encouraging public participation;
 - (b) Ensuring that the agency considers environmental justice issues; and
 - (c) Informing the agency of the effect of its decisions on communities traditionally underrepresented in public processes.

DEQ and ODA are “Natural Resource Agencies” under ORS 182.535. “Environmental justice” is not defined under the law, but according to the staff measure summary to the Committee on Environment and Natural Resources during the consideration and ultimate passage of the law, “[e]nvironmental justice issues have generally been defined to include problems that have a disproportionately negative impact on minority and low-income communities.”¹⁶³

Complementing this law, in 1997 DEQ established an Environmental Justice Policy (DEQ EJ Policy) to ensure involvement of affected communities in its decision making, to disseminate and make accessible relevant information, to provide opportunities for public participation by affected communities, to foster community partnerships, and to pursue innovative responses to problems that center equity to affected communities.¹⁶⁴

First, it is unclear the extent to which DEQ and ODA “consider[ed] the effects of the action on environmental justice issues” in revising the draft permit.¹⁶⁵ This information should be available and DEQ and ODA should develop and make available to the public a quantitative and qualitative analysis of CAFOs and impacts of facilities issued General Permits on environmental justice communities.

¹⁶³ U.S. Census Bureau, American Community Survey: 2019–2023 ACS 5-Year Estimates, Umatilla County, Oregon, <https://data.census.gov> (last visited Jan. 11, 2026).

¹⁶⁴ OR. DEP’T OF ENVTL. QUALITY, ENVIRONMENTAL JUSTICE POLICY (1997), <https://www.oregon.gov/deq/FilterDocs/DEQeJpolicy.pdf>; <https://perma.cc/KX8Y-5L3W> (DEQ EJ Policy).

¹⁶⁵ ORS 182.545(1); *see also* DEQ EJ Policy, *supra* note 164.

Second, the public hearing on the Draft Permit was held on Tuesday, December 16, 2025, at 3PM—a time when most people are at work. Holding only one hearing in the middle of the workday before many people’s work hours have finished effectively prevents them from participating in these meetings and having their voices heard, in violation of ORS 182.545(2). Further, the hearing was held the same day as the LUBGWMA rules hearing. Many stakeholders impacted by the LUBGWMA rules are also impacted by the Draft Permit. Holding both hearings on the same day further limits community participation in violation of ORS 182.545(2).

Third, while we were glad to see that the notifications for the Draft Permit and hearing were published on ODA’s website in Spanish, the agencies should have had translation services available during the public hearing and made the power point presentation relied on during the public hearing process available in Spanish. Since a significant number of people living in the areas around CAFOs in Oregon speak Spanish, DEQ and ODA also did not reasonably comply with the requirements of ORS 182.545(3) to “[e]ngage in public outreach activities in the communities that will be affected by decisions of the agency.”

K. The Draft Permit must not reduce the amount of time for public comment following a public hearing.

The Draft Permit reduces the opportunity for public participation in the CAFO permitting process by reducing the public comment period following a public hearing from seven to five days.¹⁶⁶ This comment period was already short, and reducing it by two days will further impair public participation in the permitting process—a critical avenue for community members to safeguard their water resources from CAFO pollution. If anything, DEQ and ODA should lengthen this comment period to encourage and facilitate fulsome public participation.

Sincerely,

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¹⁶⁶ Draft Permit S1.H(3).

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