UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Clean Water Act Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category

89 Fed. Reg. 4474 (Jan. 23, 2024)

Docket ID No. EPA-HQ-OW-2021-0736

Comments of Earthjustice, Environmental Integrity Project, Animal Legal Defense Fund, Atchafalaya Basinkeeper, Bayou City Waterkeeper, Bitterroot River Protection Association, Black Warrior Riverkeeper, Cahaba Riverkeeper, Cape Fear River Watch, Center for Biological Diversity, Center for Food Safety, Choctawhatchee Riverkeeper, Coastal Carolina Riverwatch, Comite Civico del Valle, Congaree Riverkeeper, Endangered Habitats League, Environment America, Environmental Working Group, FarmSTAND, Food & Water Watch, Freshwater Future, Good Stewards of Rockingham, Harpeth Conservancy, Humane Society of the United States, Los Angeles Waterkeeper, Lake Erie Waterkeeper, Local Environmental Action Demanded Agency Inc., Milwaukee Riverkeeper, MountainTrue, Ogeechee Riverkeeper, RE Sources, Rural Empowerment Association for Community Help, Save The River — Upper St Lawrence Riverkeeper, Seneca Lake Guardian, Snake River Waterkeeper, Socially Responsible Agriculture Project, Southern Environmental Law Center, Spring Creek Coalition, Tennessee Riverkeeper, Tualatin Riverkeepers, Upper Coosa Riverkeeper, Waterkeeper Alliance, Waterkeepers Chesapeake, Winyah Rivers Alliance, and Yadkin Riverkeeper

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INTRODUCTION

On behalf of our millions of members and supporters, the undersigned organizations ("Commenters") submit these comments on "Clean Water Act Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category," 89 Fed. Reg. 4474 (Jan. 23, 2024) ("Proposed Rule"), a proposed rule published by the U.S. Environmental Protection Agency ("EPA" or "Agency"). As explained in more detail below, we urge EPA to act without further delay to protect people and the environment from water pollution discharged by slaughterhouses and rendering facilities.

Nearly 10 billion animals are killed each year in slaughterhouses across the United States—that is, over 18,825 animals every minute. Slaughterhouse byproducts such as fat, bone, and feathers frequently are sent to rendering facilities for conversion into tallow, animal meal, and other products. Both slaughterhouses and rendering facilities require a near-constant flow of water, and every year, these facilities discharge hundreds of millions of pounds of water pollution into rivers and streams, including nitrogen and phosphorus, collectively known as nutrient pollution, along with dozens of other dangerous and damaging pollutants. According to EPA, slaughterhouses and rendering facilities, which together comprise the Meat and Poultry Products ("MPP") industrial point source category, are the largest industrial source of phosphorus pollution and the second largest industrial source of nitrogen pollution.

Pollution from MPP facilities has devastating consequences for human health and the environment, and it disproportionately harms people living in vulnerable and under-resourced communities. Nonetheless, EPA has failed to revise its regulations governing water pollution from the MPP industry for *at least* 20 years, even though the Agency has repeatedly acknowledged that MPP facilities could reduce pollution discharges. Some MPP facilities are still subject to outdated and under-protective standards promulgated in the mid-1970s. Among other shortcomings, EPA's existing regulations fail to impose any restrictions on discharges of phosphorus, and the Agency has *never* published national standards applicable to the vast majority of MPP facilities, which discharge wastewater through publicly owned treatment works ("POTWs"), even though EPA has known for decades that—without adequate pretreatment—pollutants in MPP wastewater pass through many POTWs into our nation's rivers and streams.

Against this backdrop, Commenters applaud EPA's decision to begin the process of strengthening water pollution control standards for the MPP industry by publishing the Proposed Rule—but strongly oppose the Agency's stated preference for Option 1, the weakest of three regulatory options presented—which, as compared to the most protective option, would allow nearly 80 million pounds of *preventable* nutrient pollution to reach rivers and streams every year, leaving over 20 million people unnecessarily at risk of harm. At the outset, EPA has improperly withheld important information related to its development and analysis of the regulatory options. Nonetheless, Option 1 is plainly inconsistent with the CWA and other federal laws, not least because EPA's preference is premised largely on the Agency's desire to avoid disruptions to our nation's meat supply like those that purportedly arose during the COVID-19 pandemic—even though the purported COVID-19 disruptions have already been resoundingly debunked by the

House Select Subcommittee on the Coronavirus Crisis. In addition, EPA's analysis of benefits and costs, which underlies its selection of Option 1, minimizes or ignores *hundreds of millions* of dollars of benefits that would flow from stricter pollution controls, including benefits related to climate change, human health, and wildlife.

Instead, Commenters urge EPA to select and strengthen Option 3, the most protective regulatory option presented. As explained in more detail below, compared with the other two regulatory options, Option 3 comes closest to meeting the CWA's requirements—but EPA must strengthen Option 3. In so doing, EPA must ensure that the final rule complies with the Act's technological standards, prevents pollutant pass-through at POTWs, and adequately controls all relevant discharges. In addition, EPA must adopt standards to control discharges of chlorides, should limit discharges of *E. coli*, and must ensure that its regulations properly encompass industrial stormwater runoff, as well as discharges from MPP facilities that rely on land application and septic tanks for waste treatment, storage, and disposal.

Despite confirming that MPP pollution exacerbates environmental injustice, EPA *expressly ignored* injustice in selecting its preferred regulatory option—an unacceptable and unnecessary decision that the Agency should correct before finalizing this rulemaking. EPA should also establish monitoring, testing, and reporting requirements and must compel facilities to comply with new and revised standards no later than three years after the effective date of the final rule. Downstream communities should not be required to wait any longer for clean water.

LEGAL BACKGROUND

The CWA sets a national goal of eliminating water pollution. To achieve this goal, the Act requires EPA to promulgate national, industry-specific pollution control standards at different levels of stringency for conventional pollutants, such as oil and grease; toxic pollutants, such as copper, zinc, and arsenic; and nonconventional pollutants, such as nitrogen and phosphorus. In addition, EPA must review existing standards at least annually and revise them as appropriate to keep pace with advances in pollution-control technology, thereby helping to "press development of new, more efficient and effective technologies." By mandating that EPA establish national minimum standards based on what is technologically achievable, the CWA guarantees "that similar point sources with similar characteristics" will achieve similar pollution-reduction targets, regardless of their location across the country.

¹ See 33 U.S.C. § 1251(a).

² See 33 U.S.C. §§ 1314(b), 1317(b). "Conventional pollutants" include, but are not limited to, "pollutants classified [by EPA] as biological oxygen demanding, suspended solids, fecal coliform, and pH." *Id.* § 1314(a)(4); see 40 C.F.R. § 401.16 (listing conventional pollutants, including oil and grease). "Toxic pollutants" are substances, such as heavy metals, that cause death or serious injury. *See* 33 U.S.C. § 1362(13); see 40 C.F.R. § 401.15. "Nonconventional pollutants" are pollutants not categorized as conventional or toxic, such as nitrogen and phosphorus. *NRDC v. EPA*, 822 F.2d 104, 110 n.3 (D.C. Cir. 1987).

³ *Id.* at 124.

⁴ Nat. Res. Def. Council, Inc. v. Train, 510 F.2d 692, 709–10 (D.C. Cir. 1974) (citation omitted).

Effluent Limitation Guidelines

For facilities that discharge directly into surface waters, EPA must promulgate control standards in the form of effluent limitation guidelines ("ELGs"), which then form the basis of the effluent limitations included in individual wastewater discharge permits. To revise ELGs, EPA first must determine the amount of pollution reduction attainable by a particular industry through the application of appropriately advanced pollution control technology. Then, EPA must establish industry-specific minimum pollution-reduction standards corresponding to the application of that technology.

The CWA identifies four levels of pollution control technology:

- "Best Practicable Control Technology Currently Available" ("BPT") is the minimum standard applicable to discharges of conventional, toxic, and nonconventional pollutants from existing facilities. Now largely outdated, BPT reflects the "average of the best levels of performance by existing plants of various sizes, ages, and unit processes within the [industrial] category or subcategory."
- "Best Conventional Pollutant Control Technology" ("BCT") is a more stringent standard applicable to discharges of conventional pollutants from existing facilities. ¹¹ BCT is at least as stringent as BPT, and, in some circumstances, it is equivalent to the BAT standard described below. ¹²
- "Best Available Technology Economically Achievable" ("BAT") is the most stringent standard applicable to discharges of toxic and nonconventional pollutants from existing facilities. At a minimum, BAT must reflect "the performance of the single best-performing plant in an industrial field." In certain circumstances, EPA may identify

⁵ See 33 U.S.C. § 1314(b).

⁶ *Id.* § 1314(b)(1).

⁷ *Id.* § 1311(b)(2).

⁸ Proposed Rule at 4479.

⁹ See Sw. Elec. Power Co. v. EPA, 920 F.3d 999, 1006 (5th Cir. 2019) (explaining that "BPT applied to limitations on direct discharges of pollutants during an interim period," which concluded in 1989); see also EPA v. Nat'l Crushed Stone Ass'n, 449 U.S. at 64, 75 (1980) (observing that EPA might require adherence to BPT if a variance from a more stringent standard is appropriate).

¹⁰ See Sw. Elec. Power Co. v. EPA, 920 F.3d at 1006 (quoting Chem. Mfrs. Ass'n v. EPA, 870 F.2d 177, 203 (5th Cir. 1989)); see also Nat'l Crushed Stone, 449 U.S. at 76 n.15 (explaining that the BPT average "is not based upon a broad range of plants within an industrial category or subcategory, but is based upon performance levels achieved by exemplary plants").

¹¹ See 33 U.S.C. § 1314(b)(4)(B).

¹² See Am. Paper Inst. v. EPA. 660 F.2d 954, 957 (4th Cir. 1981).

¹³ Sw. Elec. Power Co. v. EPA, 920 F.3d at 1006; see Kennecott v. EPA, 780 F.2d 445, 448 (4th Cir. 1985) ("In setting BAT, EPA uses not the average plant, but the optimally operating plant, the pilot plant which acts as a beacon to show what is possible.")

BAT as a technology not yet in use in the industry. ¹⁴ However it is derived, BAT must be "the gold standard for controlling water pollution from existing sources." ¹⁵

• "New Source Performance Standards" ("NSPS") are the "most stringent" standards applicable to discharges of conventional, toxic, and nonconventional pollutants from new facilities. ¹⁶ NSPS must "reflect[] the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology." ¹⁷ Technology is "demonstrated" if it is used by "even one plant." ¹⁸ In certain circumstances, NSPS may prohibit the discharge of pollutants altogether. ¹⁹

In identifying each level of pollution control technology for a particular industry, EPA must consider a range of statutory factors, including the age of facilities and equipment, the processes and engineering aspects of various pollution-control technologies, non-water quality environmental impacts such as energy requirements, and "such other factors as the Administrator deems appropriate." Appropriate "other factors" must be consistent with the CWA's "structure and . . . public safety purpose." For example, EPA may properly consider the "natural hydrological balance" of an affected waterway, ²² but it may not justify inappropriately lax standards for some sources based on pollution reductions from *other* sources. ²³

EPA must also consider the costs associated with each level of treatment technology. To determine BPT, EPA analyzes "the total cost of application of technology in relation to the effluent reduction benefits to be achieved." According to this "limited cost-benefit analysis," EPA may "limit the application of technology only where the additional degree of effluent reduction is wholly out of proportion to the costs of achieving such marginal level of reduction." BCT determinations, in turn, are based on a two-part "cost reasonableness" test: (1) the cost per pound of conventional pollutant removed by dischargers upgrading from BPT to BCT must be less than the cost per pound of conventional pollutant removed by POTWs upgrading from secondary treatment to advanced secondary treatment, which EPA estimates to

¹⁴ See Kennecott, 780 F.2d at 453 (explaining that "Congress . . . asked EPA to survey related industries and current research to find technologies which might be used to decrease the discharge of pollutants," because "[p]rogress would be slowed if EPA were invariably limited to treatment schemes already in force at the plants which are the subject of the rulemaking.")

¹⁵ Sw. Elec. Power Co., 920 F.3d at 1003.

¹⁶ Proposed Rule at 4479.

¹⁷ 33 U.S.C. § 1316(a)(1).

¹⁸ Chem. Mfrs. Ass'n v. EPA, 870 F.2d 177, 263 (5th Cir. 1989).

¹⁹ See 33 U.S.C. § 1316(a)(1).

²⁰ 33 U.S.C. §§ 1314(b)(1)(B), 1314(b)(2)(B), 1314(b)(4)(B).

²¹ Sw. Elec. Power Co., 920 F.3d at 1028.

²² See Citizen's Coal Council v. EPA, 447 F.3d 879, 902–3 (6th Cir. 2006).

²³ See Sw. Elec. Power Co., 920 F.3d at 1026.

²⁴ 33 U.S.C. § 1314(b)(1)(B).

²⁵ Nat'l Crushed Stone Ass'n, 449 U.S. at 71 n.10.

be \$1.48; and (2) the cost per pound of pollutant removed by BCT relative to BPT *divided by* the cost per pound of pollutant removed by BPT relative to no treatment must not exceed 1.29 or 0.68, depending on the availability of long-term performance data.²⁶

By contrast, in "assessing BAT[,] total cost is no longer to be considered in comparison to effluent reduction benefits." Instead, BAT limitations "require application of the best available technology economically achievable." Technology is economically achievable if the costs can be "reasonably borne" by the industry as a whole. PEPA typically determines economic achievability by estimating possible facility closures, and as discussed in more detail below, courts have upheld technological standards that could shutter one-fifth of facilities within an industry. Similarly, for NSPS, EPA "must inquire into the initial and annual costs of applying the technology and make an affirmative determination that those costs can be reasonably borne by the industry. BPA has explained, "[o]wners of new sources have the opportunity to install the best and most efficient production processes and wastewater treatment technologies . . . [so] NSPS should represent the most stringent controls attainable."

Pretreatment Standards

In drafting the CWA, "Congress recognized that regulating only those sources that discharge [pollution] directly into the Nation's waters would not be sufficient to achieve the [Act's] goals." Accordingly, to control water pollution originating from facilities that discharge pollution indirectly through POTWs, Congress directed EPA to establish pretreatment standards—that is, technology-based regulations that govern the introduction into POTWs of "pollutants which are determined not to be susceptible to treatment by [POTWs] or which would interfere with the operation of [POTWs]." The CWA directs EPA to promulgate pretreatment standards by July 15, 1973. In addition, the Act mandates that EPA "shall, from time to time, as control technology, processes, operating methods, or other alternatives change, revise [pretreatment] standards." Like ELGs, technology-based pretreatment standards "ensure that industrial facilities with similar characteristics will, at a minimum, meet similar... pretreatment

²⁶ See 33 U.S.C. § 1314(b)(4)(B); see also 51 FR 24974 (July 9, 1986).

²⁷ Nat'l Crushed Stone Ass'n, 449 U.S. at 71.

²⁸ 33 U.S.C. § 1311(b)(2)(A).

²⁹ Chem. Mfrs. Ass'n, 870 F.2d at 262; see BP Exploration & Oil, 66 F.3d 784, 799 –800 (6th Cir. 1996).

³⁰ See Proposed Rule 4497.

³¹ See infra Section IV.D.

³² Chem. Mfrs. Ass'n, 870 F.2d at 262.

³³ Proposed Rule at 4479.

³⁴ Effluent Limitations Guidelines and New Source Performance Standards for the Meat and Poultry Products Point Source Category, 69 Fed. Reg. 54,476, 54,479 (Sept. 8, 2004).

³⁵ 33 U.S.C. § 1317(b)(1); *see Chem. Mfrs. Ass'n*, 870 F.2d at 197 ("The treatment usually afforded by POTWs... may not remove all pollutants discharged into their facilities by industrial users and their operation of these facilities may be damaged by some industrial discharges.").

³⁶ 33 U.S.C. § 1317(b)(2).

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³⁷ *Id*.

standards representing the performance of the 'best' pollution control technologies, regardless of their location or the nature of . . . [the] POTW into which they discharge."³⁸

To determine whether pretreatment standards must be published or revised for a particular pollutant, EPA compares the percentage of the pollutant removed by typical, well-operated POTWs with the percentage of the pollutant removed by direct-discharging facilities applying appropriately advanced treatment technology. ³⁹ If the POTWs are less effective at removing pollution, EPA must publish or revise pretreatment standards. ⁴⁰ Appropriately stringent pretreatment standards ensure that "the combination of pretreatment and treatment by the POTW . . . achieve[s] the level of treatment that would be required if the industrial source were making a direct discharge."

There are two types of pretreatment standards:

- "Pretreatment Standards for Existing Sources" ("PSES") apply to discharges from existing facilities of any pollutant determined "not to be susceptible to treatment" by POTWs or likely to "interfere with the operation" of POTWs. 42
- "Pretreatment Standards for New Sources" ("PSNS") apply to discharges from new facilities of any pollutant determined "not to be susceptible to treatment" by POTWs or likely to "interfere with [] the operation" of POTWs. 43

Pretreatment standards are "analogous to BPT and BAT [ELGs]."⁴⁴ Thus, EPA "typically considers the same factors" in promulgating PSES for nonconventional pollutants that it considers in promulgating BAT.⁴⁵ Similarly, EPA considers the same factors in establishing PSNS that it considers in promulgating NSPS.⁴⁶

³⁸ See EPA, Preliminary Effluent Guidelines Program Plan 15, 2-1 (2021), https://www.epa.gov/system/files/documents/2021-09/ow-prelim-elg-plan-15_508.pdf.

³⁹ See Proposed Rule at 4478.

⁴⁰ *Id*.

⁴¹ *Id.* (citing Conf. Rep. No. 95–830, at 87 (1977)).

⁴² 33 U.S.C. § 1317(b)(1).

⁴³ Proposed Rule at 4480; see Nat'l Ass'n of Metal Finishers v. EPA, 719 F.2d 624, 634 (3rd Cir. 1983).

⁴⁴ Proposed Rule at 4479; *see also Chem. Mfrs. Ass'n*, 870 F.2d at 244 (finding that PSES standards "are analogous to the BAT effluent-limitation guidelines for the removal of toxic pollutants").

⁴⁵ Proposed Rule at 4479 (providing that PSES are to "be set in accordance with" the statutory factors for determining BAT).

⁴⁶ See Nat'l Ass'n of Metal Finishers, 719 F.2d at 634.

DISCUSSION

I. <u>Pollution from Slaughterhouses and Rendering Facilities Seriously Harms</u> <u>Human Health and the Environment</u>

On average, over 18,825 animals are killed each minute in slaughterhouses across the United States. ⁴⁷ Slaughterhouse byproducts such as fat, bone, and feathers are often sent to rendering facilities for conversion into tallow, animal meal, and other products. ⁴⁸ Both slaughterhouses and rendering facilities require a near-constant flow of water, and they discharge hundreds of millions of pounds of water pollution each year. ⁴⁹

Wastewater from MPP facilities typically contains nitrogen compounds and phosphorus, as well as blood, fat, oil and grease, fecal bacteria, disease-causing pathogens, detergents, and heavy metals. Nitrogen compounds and phosphorus are prevalent in MPP facility wastewater because they are present in cleaning solutions, urine and feces, and animal parts including blood, fat, and viscera. According to EPA, every year, discharging MPP facilities generate approximately 112 million pounds of nitrogen and phosphorus pollution, which together are referred to as "nutrient pollution." As a result, EPA has acknowledged that the MPP industry is the largest industrial source of phosphorus pollution and the second largest industrial source of nitrogen pollution.

Nutrient pollution has devastating consequences for human health. For instance, exposure to nitrogen compounds in drinking water can cause colorectal cancer, thyroid disease, birth defects, and—in infants under six months of age—methemoglobinemia, or "blue baby syndrome," a potentially fatal condition.⁵³ Concern about exposure to these compounds and

⁴⁷ According to the U.S. Department of Agriculture, in 2022, meat and poultry slaughterhouses killed over 34 million cattle and calves, 125 million hogs, 2 million sheep, 9.5 billion chickens, 208 million turkeys, and 26 million ducks. *See* USDA, *Livestock Slaughter 2022 Summary* (Apr. 2023), https://downloads.usda.library.cornell.edu/usda-esmis/files/r207tp32d/8p58qs65g/g445dv089/lsan0423.pdf; *see also* USDA, *Poultry Slaughter 2022 Summary*, (Feb. 2023), https://downloads.usda.library.cornell.edu/usda-esmis/files/pg15bd88s/m613p944x/ht24xx05j/pslaan23.pdf.

⁴⁸ See EPA, Technical Development Document for Proposed Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, at xii & 30 (Dec. 2023), https://www.epa.gov/system/files/documents/2023-12/mpp_tdd_proposed_dec-2023.pdf. [hereinafter "TDD"].

⁴⁹ *Id.*, at Tbl. 11-3.

⁵⁰ See EPA, Draft Memorandum, Subject: Pollutants of Concern (POC) Analysis for the Meat and Poultry Products (MPP) Proposed Rule – DCN MP00190, at 6–7, Tbl. 2, Docket ID No. EPA-HQ-OW-2021-0736 (Jan. 23, 2024).

⁵¹ *See* TDD at Tbl. 11-3.

⁵² See EPA, Preliminary Effluent Guidelines Program Plan 15, 2-1 (2021), https://www.epa.gov/system/files/documents/2021-09/ow-prelim-elg-plan-15_508.pdf.

⁵³ EPA, Environmental Assessment for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, Docket ID No. EPA-HQ-OW-2021-0736-0661, at ES-3 (Dec. 11, 2023)[hereinafter "EA"].

other pollution from MPP facilities has fundamentally changed the manner in which many people interact with waterbodies degraded by MPP pollution. A member of the Center for Biological Diversity is "no longer able to enjoy" the Raccoon River in Iowa as she once did, because the river is "visibly polluted downstream" from the point at which it receives wastewater from a slaughterhouse, "and it gives off a putrid odor."⁵⁴ The member is "afraid that exposure to MPP facility pollution could threaten [her] health, [her] husband's health, and the health of [her] pets."⁵⁵ According to the Black Warrior Riverkeeper, he and many of his organization's members avoid swimming and engaging in other activities in Graves Creek, which receives wastewater from a slaughterhouse in Blountsville, Alabama, for fear of exposure to dangerous levels of bacteria and other pollution. One member "stopped kayaking . . . because he got sick after paddling" downstream of the slaughterhouse.⁵⁶

As described in more detail below,⁵⁷ EPA admits that MPP pollution overwhelmingly harms vulnerable and under-resourced communities. In rural North Carolina, the Co-Founder and Executive Director of the Rural Empowerment Association for Community Help ("REACH"), along with many REACH members, "ha[s] given up drinking tap water" due to concerns that well water and municipal water both are "contaminated with pollution from MPP facilities and other industrial animal agriculture facilities."⁵⁸ In addition, he "stopped fishing after [he] began to catch fish with open sores," which, he believes, are caused by bacteria and other pollution.⁵⁹ And in California's Imperial Valley, the Executive Director of Comite Civico del Valle "[does] not think that it is safe to swim" in the New River, which receives wastewater from a slaughterhouse.⁶⁰ As he explains, due to water pollution in the New River, "it certainly is not very pleasant to spend time nearby."⁶¹

In addition to threatening human health, nutrient pollution and other pollution from MPP facilities can have devastating effects on the environment. According to EPA, nutrient pollution threatens iconic waterways, including the Chesapeake Bay and the Gulf of Mexico. ⁶² In addition, EPA has acknowledged that nutrient pollution causes harmful algal blooms, which render water unsafe for drinking, unfit for outdoor recreation, and uninhabitable for aquatic life. ⁶³ For these reasons, EPA has concluded that nutrient pollution is one of the most widespread, costly, and challenging environmental problems affecting water quality in the United States. ⁶⁴

⁵⁴ Decl. of Danielle Wirth ¶10 (sworn to on Aug. 26, 2022), attached as Ex. 1.

⁵⁵ *Id*. ¶ 10

⁵⁶ Decl. of Nelson Brooke ¶ 12 (sworn to on Aug. 5, 2022), attached as Ex. 2.

⁵⁷ *Infra*. Section IX.

⁵⁸ Decl. of Devon Hall ¶ 12 (sworn to on Sept. 29, 2022), attached as Ex. 3.

⁵⁹ *Id.* at ¶ 11.

⁶⁰ Decl. of Luis Olmedo ¶ 11 (sworn to on Dec. 21, 2022), attached as Ex. 4.

⁶¹ *I.A*

⁶² See EPA, Where Nutrient Pollution Occurs, https://www.epa.gov/nutrientpollution/where-nutrient-pollution-occurs.

⁶³ *See id.* at ES-2.

⁶⁴ See Proposed Rule at 4475.

On the Shenandoah River, MPP facility water pollution feeds algal blooms that "give off a terrible smell" and are "so thick that it is impossible to paddle a kayak, let alone fish." And in the Cape Fear River, "visible" and "distressing" pollution consisting of "solids[] and foamy residue," likely "a mixture of fat and chemical disinfectants," "persists miles downstream" from a direct-discharging slaughterhouse, "threaten[ing] people and wildlife" who live nearby. Fat and other solid pollutants in MPP wastewater can harm wildlife directly—for instance, by clogging fish gills, potentially resulting in asphyxiation—and indirectly, by creating anaerobic conditions during decomposition and thereby degrading habitat for fish, shellfish, and other aquatic species.

II. EPA Must Make Facility Location and Other Relevant Industry Data Publicly Available.

A. EPA Failed to Disclose Information Necessary for a Thorough Analysis of the Proposed Rule that is not CBI.

EPA has undergone extensive data collection and analyses to support this proposed rulemaking. Though EPA has made many supporting documents available on the docket, EPA has withheld critical data and information behind Confidential Business Information ("CBI") claims and limited much of the public documents related to their analyses to summaries and methodology memoranda. ⁶⁷

Some key examples of withheld datasets include, but are not limited to:

- "MPP Profile," which identifies the name, location, type of processing, discharge type, and production for the 5,055 MPP facilities;⁶⁸
- "TIP Results by MPP Facility," which identifies treatments in place at each MPP facility, and "TIP Support Analysis," which details common TIP by process type, size, and discharge type; 69
- "MPP Technology Systems Loadings and Removals," which provides EPA's estimated facility-specific loading estimates;⁷⁰

 $^{^{65}}$ Decl. of Robin Broder \P 5 (sworn to on Dec. 22, 2022), attached as Ex. 5.

⁶⁶ Decl. of Kemp Burdette ¶ 9 (sworn to on Aug. 9, 2022), attached as Ex. 6.

⁶⁷ See EPA, MPP ELG Proposed Rule User Guide and Docket Index EPA-HQ-OW-2021-0736 – DCN MP01049, Docket ID No. EPA-HQ-OW-2021-0736-0678 (Jan. 29, 2024).

⁶⁸ See ERG, CBI_MPP Profile (Excel) - DCN MP00306A1, Docket ID No. EPA-HQ-OW-2021-0736-0124 (Nov. 13, 2023).

⁶⁹ See ERG, CBI_TIP Results by MPP Facility (Excel) - DCN MP00198A01, Docket ID No. EPA-HQ-OW-2021-0736-0046 (June 23, 2023); see also ERG, CBI_TIP Support Analysis (Excel) – DCN MP00198A03, Docket ID No. EPA-HQ-OW-2021-0736-0046 (June 7, 2023).

⁷⁰ See EPA, CBI_MPP Technology Systems Loadings and Removals (Excel) - DCN MP00302A3, Docket ID No. EPA-HO-OW-2021-0736-0499 (Nov. 29, 2023).

- "CBI_MPP_FullUniverse_noCBI," which includes the location of wastewater discharge locations (even though the file name and abstract suggest that the file does not include CBI);⁷¹
- "MPP Regulatory Options Loadings and Removals," which details pollutant loadings; 72
- "Appendices to the Compliance Cost Methodology for the Meat and Poultry Products Proposed Rulemaking," which provide inputs and calculations that EPA used to derive compliance costs;⁷³ and
- "Calculation Database for Compliance Costs for the Meat and Poultry Products Proposed Rulemaking," a "database used to calculate facility-specific estimates of cost by technology systems and regulatory options."⁷⁴

In addition, EPA has heavily redacted responses to the MPP Questionnaires EPA sent to MPP facilities through an Information Collection Request (ICR) Survey. Though some responses to the questionnaire may be considered CBI, others can reasonably be considered public information, such as a facility's name and address. For example, 476 of 3,657 responses (13)

⁷¹ ICF, *CBI_MPP_FullUniverse_noCBI - DCN MP01246A10*, Docket ID No.EPA-HQ-OW-2021-0736-0628 (Nov. 29, 2023); see EPA, *MPP ELG Proposed Rule User Guide and Docket Index EPA-HQ-OW-2021-0736 – DCN MP01049*, Docket ID No. EPA-HQ-OW-2021-0736-0678 (Jan. 29, 2024).

⁷² EPA, *CBI_MPP Regulatory Options Loadings and Removals (Excel) - DCN MP00302A4*, Docket ID No. EPA-HQ-OW-2021-0736-0499 (Nov. 29, 2023).

⁷³ EPA, *CBI_Appendices to the Compliance Cost Methodology for the Meat and Poultry Products Proposed Rulemaking - Final Version - DCN MP00301A1*, Docket ID No. EPA-HQ-OW-2021-0736-0465 (Nov. 28, 2023).

⁷⁴ ERG, *CBI_Calculation Database for Compliance Costs for the Meat and Poultry Products Proposed Rulemaking (Access) - Final - DCN MP00711*, Docket ID No. EPA-HQ-OW-2021-0736-0125 (Nov. 8, 2023).

⁷⁵ See ICF, Clean Questionnaire Data [DCN MP00561], Docket ID No. EPA-HQ-OW-2021-0736-0606 (Jan. 23, 2024). EIP submitted a FOIA request to EPA for responses to the MPP ELG ICR via FOIAonline on September 28, 2023. EIP received an interim response from EPA on December 11, 2023. EIP has met with officials from EPA's FOIA office to discuss the request, including with respect to CBI claims and redacted ICR data. EIP also requested the listed docket materials via FOIA Public Access Portal on February 20, 2024.

⁷⁶ Commenters are aware of the MPP Universe with COMIDs - DCN MP00568 file in the rulemaking docket, which is a "[c]rosswalk identifying the COMID that receives the MPP discharge, used to define the downstream flowpath" that includes names of MPP direct and indirect dischargers. This file lacks facility addresses, GPS coordinates, and other identifiers that Commenters need to determine facility locations, other basic facility characteristics, and impacts to waterways. Given the basic information in the rulemaking docket that EPA redacted or otherwise withheld from the public, Commenters are unable to discern critical information about the nature of these facilities. Commenters are also aware of the MPP Facility List - DCN MP00118 EPA compiled in 2021 which is not the comprehensive MPP profile. Rather, this is a more expansive, preliminary list of 8,675 facilities which received EPA's ICR Survey. Although this file includes facility names, address, coordinates, and other facility characteristics from USDA, ICIS-NPDES, and more, it includes a far greater number of facilities than EPA's final profile for the proposal and does not include data EPA gathered about facility wastewater characteristics and treatment technology.

percent) include redacted facility information (name and address). Responses to whether or not a facility engages in MPP activities (slaughtering, further processing, rendering of meat and/or poultry products) were redacted from 492 respondents.⁷⁷

B. The Lack of Detailed Facility Information Significantly Limits the Public's Ability to Evaluate Local, Community Impacts.

Withholding basic information about MPP facilities—including facility locations, treatment technologies, wastewater characteristics, and pollution loadings—makes it impossible for the public to provide comments on EPA's proposal that thoroughly evaluate regional and local impacts to waterways and communities resulting from these facilities. Although EPA provided a static, national-scale map of the 5,055 MPP facilities, EPA withheld from the public as CBI underlying spatial data for facilities and the MPP Profile. The level of data provided does not include enough meaningful detail. By withholding facility-level information about, for example, treatment technologies in place, process and discharge type, production size, and pollution loadings and removals, EPA has prevented the public from evaluating if or how EPA's proposal could impact local water quality and their communities.

Given the basic information in the rulemaking docket that EPA redacted or otherwise withheld from the public, Commenters are unable to discern critical information about the MPP universe. Importantly, the limited information is insufficient to provide basic facility-level information to members of the public who are impacted by MPP water pollution, to whom a thorough understanding of facility locations and impacts is of critical importance.

C. EPA is Withholding Data Critical to Evaluating the Proposed Rule and EPA Conclusions Regarding Treatment Performance, Technologies, Passthrough, and other Factors.

The lack of transparency regarding data underlying EPA's analyses hinders the public's ability to fully review the basis of EPA's key determinations, including but not limited to EPA's proposed limits, the treatment technologies selected, and applicability thresholds. Commenters are tasked with piecing insufficient data together in an attempt to understand the industry profile using a heavily redacted MPP ICR Survey with limited respondents or from other sources, even though EPA has already compiled a robust profile with key treatment performance, technology, and wastewater characteristic information.⁷⁹

⁷⁷ See ICF, Clean Questionnaire Data -DCN MP00561, Docket ID No. EPA-HQ-OW-2021-0736-0606 (Jan. 23, 2024).

⁷⁸ See EA at 1–2.

⁷⁹ See ICF, Clean Questionnaire Data - DCN MP00561, Docket ID No. EPA-HQ-OW-2021-0736-0606 (Jan. 23, 2024); see also EPA, MPP Questionnaires Memorandum - DCN MP00234, Docket ID No. EPA-HQ-OW-2021-0736-0649, at 5 (Nov. 29, 2023); ERG, CBI_MPP Profile (Excel) - DCN MP00306A1, Docket ID No. EPA-HQ-OW-2021-0736-0124 (Nov. 13, 2023). Even if commenters were able to cobble together an industry profile using other public sources of information – which they are not – the result

EPA acknowledges the challenges of understanding the MPP industry from limited public sources—necessitating the creation of the MPP profile that EPA now withholds from the public. EPA notes in its Supporting Statement for the MPP ICR Survey, "no one data source collects information from all MPP facilities," and therefore the exact location of MPP facilities is unclear. ⁸⁰ EPA further notes that, absent the MPP ICR Survey, review of alternative data sources—including ICIS-NPDES, USDA FSIS, and data from trade associations—is challenging due to a number of factors relating to inconsistencies in facility identifiers. ⁸¹ EPA states:

The publicly available data are not sufficient to assess the current industry population, evaluate subcategories in the current ELG or future ELGs, determine characteristics of wastewater and wastewater treatment currently occurring at MPP facilities, or evaluate new treatment technologies that are being used, especially for indirect discharging facilities which comprise the vast majority of the sector.⁸²

EPA compiled comprehensive, facility-level wastewater data, such as sampling data and wastewater quantity, as part of the MPP Profile and Analytical Database, but withheld this information from the public under claims of CBI. 83 As such, commenters are left with limited wastewater sampling data from monitoring reports and permit documents for direct dischargers that comprise a small subset of the MPP sector. EPA released a subset of wastewater sampling data from the Analytical Database in the "Limitations Supplemental Data (Excel)," but this is limited to data used to calculate the proposed limits, and withholds detailed facility information, such as facility name and treatment technology in place. 84 EPA indicates data were excluded if they "did not represent treatment consistent with the technology basis," and that, for total nitrogen ("TN") and total phosphorus ("TP"), EPA used data from facilities identified in its BAT analysis. 85 However, because EPA uses different facility identifiers, the public is unable to match or verify data and treatment technology from facilities used to calculate limits. In EPA's own

may differ from EPA's MPP profile in a manner that introduces confusion that EPA should avoid by making this basic information publicly available.

⁸⁰ EPA, MPP ICR Supporting Statement for 2nd FRN - DCN MP00120, Docket ID No. EPA-HQ-OW-2021-0736-0007, at 2 (Feb. 1, 2022).

⁸¹ EPA states, "[t]ypically, the only overlapping data element between datasets is the facility name . . . [but] matching data on only facility name or city/state details is time consuming and often inaccurate as facility names change over time . . . [C]ity/state and street address information can also be confusing" for a number of reasons. *Id*.

⁸² *Id*.

⁸³ See ERG, CBI_MPP Profile (Excel) - DCN MP00306A1, Docket ID No. EPA-HQ-OW-2021-0736-0124 (Nov. 13, 2023); see also ERG, Meat and Poultry Products Analytical Database - DCN MP00303A1, Docket ID No. EPA-HQ-OW-2021-0736-0123 (Dec. 4, 2023).

⁸⁴ See ERG, Limitations Supplemental Data (Excel) - DCN MP00210, Docket ID No. EPA-HQ-OW-2021-0736-0122 (Nov. 16, 2023). EPA notes in the Excel file that facility identifiers, data sources, and sampling dates were "masked to protect CBI." *Id.*

⁸⁵ See TDD at 117–18; see also EPA, Evaluation of Technology Basis and Identification of BAT Facilities-DCN MP00304, EPA-HQ-OW-2021-0736-0594 (Nov. 28, 2023).

words, "[w]astewater sampling data . . . are critical for characterizing the wastewater generated by MPP facilities and the treated effluent discharged by MPP facilities, as well as evaluating the effectiveness of technologies used to treat MPP wastewater." ⁸⁶

Detailed information about treatment in place at facilities is also critical for commenters to evaluate the best treatment technologies, as well as the type, size, and scope of MPP facilities that use these systems, and other factors that influence the impact, cost, and strength of the EPA's proposal. EPA has completely withheld facility-level treatment in place data from the public—with the exception of data for only 23 facilities.⁸⁷ Specifically, EPA withheld EPA's TIP analysis from the public⁸⁸ and redacted every related ICR response, even where respondents did not claim the question as CBI.⁸⁹

Historically, EPA redacts ICR responses that are not claimed as CBI where EPA determines the data may otherwise be "CBI deducible" or back-calculated by disclosing information from some respondents but not others. ⁹⁰ EPA took this approach with the survey conducted as part of the Steam Electric Power Generating Effluent Guidelines rulemaking, and redacted every response to a question based on a CBI deducible finding "where only one or two companies claimed information as CBI." Where only a few facilities claim CBI, it is a simple task to back-calculate (or deduce) their responses based on the remaining, unredacted responses. By comparison, information is not deducible where more than a few respondents claim CBI. EPA diverged from this approach for the MPP industry. For example, of all 426 redacted responses to Detailed Questionnaire Question 43, related to onsite treatment systems, 140 respondents

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 $^{^{86}}$ EPA, MPP ICR Supporting Statement for 2^{nd} FRN - DCN MP00120, Docket ID No. EPA-HQ-OW-2021-0736-0007, at 25 (Feb. 1, 2022).

⁸⁷ See EPA, Evaluation of Technology Basis and Identification of BAT Facilities - DCN MP00304, Docket ID No. EPA-HQ-OW-2021-0736-0594 (Nov. 28, 2023).

⁸⁸ See ERG, CBI_TIP Results by MPP Facility (Excel) - DCN MP00198A01, Docket ID No. EPA-HQ-OW-2021-0736-0046 (June 16, 2023).

⁸⁹ *Id.*; *see also* EPA, *CBI_TIP Support Analysis* (*Excel*) - *DCN MP00198A03*, Docket ID No. EPA-HQ-OW-2021-0736-0046 (June 7, 2023); ICF, Clean Questionnaire Data [DCN MP00561], Docket ID No. EPA-HQ-OW-2021-0736-0606 (Jan. 23, 2024).

⁹⁰ See EPA, Data Dictionary for the Non-CBI Steam Electric Technical Questionnaire Database - DCN SE05924.A1, EPA-HQ-OW-2009-0819-6306 (Sept. 30, 2015); see also ERG Released Responses of Data Request for the Petroleum Refining Industry Detailed Study by the EPA, Docket ID No. EPA-HQ-OW-2018-0618-0326 (July 29, 2019).

⁹¹ EPA, *Data Dictionary for the Non-CBI Steam Electric Technical Questionnaire Database - DCN SE05924.A1*, Docket ID No. EPA-HQ-OW-2009-0819-6306 (Sept. 30, 2015) (emphasis added).

claimed CBI—not one or two. 92 EPA did not fully redact responses to similar questions in the Steam Electric survey. 93

In short, EPA has hampered the public's ability to review and analyze, among other things, the best performers beyond those EPA selected as BAT candidates, treatment performance, passthrough, and EPA's conclusions in support of the proposal. EPA must make this information public.

D. The Information Withheld From The Public Is Not Confidential Business Information.

The basic information EPA is withholding from the public is not CBI. The nature of the withheld information is non-commercial and non-confidential and there is no foreseeable harm that would result from disclosure. ⁹⁴ EPA is withholding and/or redacting basic facility identifiers and characteristics in files like the MPP Profile and TIP Results by MPP Facility, such as facility location, discharge type, and treatment in place, which are not CBI because the information is not commercial or financial in nature. The withheld information does not pertain to the "exchange of goods or services or the making of a profit," ⁹⁵ and it is not apparent that this information and other withheld data are commercial "in and of itself."

Furthermore, much of the withheld data is not information that is "customarily kept private, or at least closely held, by the person imparting it." EPA has stated that publicly available information would be used to identify facilities with treatment technologies of interest. Publicly available information from sources such as permit applications, effluent and permit data reported under the NPDES program, and POTW annual reports is not information that is customarily kept private as it is disseminated in a publicly accessible manner. Specifically, because EPA makes facility names and discharge type publicly available in at least one record, because EPA makes facility available and EPA may not redact it elsewhere in the Docket. EPA

⁹² See ERG, CBI_TIP Results by MPP Facility (Excel) - DCN MP00198A01, Docket ID No. EPA-HQ-OW-2021-0736-0046 (June 16, 2023); see also ERG, CBI_TIP Support Analysis (Excel) - DCN MP00198A03, Docket ID. No. EPA-HQ-OW-2021-0736-0046 (June 7, 2023); ICF, Clean Questionnaire Data [DCN MP00561], Docket ID No. EPA-HQ-OW-2021-0736-0606 (Jan. 23, 2024).

⁹³ See EPA, Non-CBI Final Steam Electric Technical Questionnaire Database - DCN SE05924, Docket ID No. EPA-HO-OW-2009-0819-6306 (Sept. 30, 2015).

⁹⁴ See 5 U.S.C. § 552(b)(1)–(9); see also Citizens for Resp. & Ethics in Washington (CREW) v. U.S. Dep't of Just., 58 F.4th 1255, 1262 (D.C. Cir. 2023) (standard for withholding non-trade secret commercial or financial information under Exemption 4 of FOIA).

⁹⁵ Citizens for Resp. & Ethics in Washington (CREW) v. U.S. Dep't of Just., 58 F.4th 1255, 1265 (D.C. Cir. 2023).

⁹⁶ *Id. at* 1263, 1265 (quoting *Nat'l Ass'n of Home Builders v. Norton*, 309 F.3d 26, 38 (D.C. Cir. 2002)); see 5 U.S.C. § 551(2) (defining "person" as applied to definition of commercial in nature).

⁹⁷ Food Marketing Institute (FMI) v. Argus Leader Media, 139 S. Ct. 2356, 2363 (2019).

⁹⁸ See EPA, MPP ICR Supporting Statement for 2nd FRN - DCN MP00120, at 2.

⁹⁹ See ICF, MPP Universe with COMIDs -DCN MP00568, Docket ID No. EPA-HQ-OW-2021-0736-0616 (Nov. 29, 2023).

may not withhold from the public as CBI nationally-compiled, basic data such as in the MPP Profile and the TIP Results by MPP Facility. Moreover, such information is not protected under a constitutional, statutory, or common law privilege. 100

Finally, it is not reasonably foreseeable that public disclosure of basic information EPA has withheld would cause commercial or financial harm. 101 Portions of the withheld information originate from publicly available sources or, with respect to facility names, are publicly available elsewhere in the rulemaking Docket. It is not apparent that disclosure of this already-public information would cause harm to MPP facilities. Speculation or abstract concerns are not sufficient to justify withholding. 102 EPA has not established a concrete explanation for how disclosure of the requested information would harm protected interests.

EPA failed to disclose information necessary for a thorough analysis of the proposed rule that is not CBI, and EPA must make this information available to the public.

III. Option 1 Is Inconsistent with the Clean Water Act and Other Federal Laws.

EPA's preferred regulatory option, Option 1, is unlawful for at least three reasons. First, EPA's primary justification for selecting Option 1—that more stringent regulation may lead to meat "supply chain disruptions"—is both unfounded and inconsistent with EPA's authority under the CWA. Second, by failing to include pretreatment standards for nitrogen and phosphorus discharges from indirect discharging facilities, Option 1 directly contravenes the CWA. Finally, EPA's decision to select Option 1 rests on a fundamentally flawed Benefit-Cost Analysis ("BCA") which understates—or disregards altogether—significant benefits and presents EPA's findings in an inconsistent and biased manner.

E. EPA Cannot Rely on Unsubstantiated Concerns about "Supply-Chain Disruptions" To Contravene the CWA's Requirements.

When rationalizing its decision to select Option 1, EPA primarily emphasizes its "concern[] that the more expansive options may impede the Biden Administration's [economic] initiatives," including those set forth in an Executive Order on Promoting Competition in the American Economy—which directs numerous agency heads 103 to combat anti-competitive

¹⁰⁰ See Jordan v. U.S. Dep't of Labor, 273 F. Supp. 3d 214, 231 (D.D.C. 2017).

¹⁰¹ See 5 U.S.C. § 552(a)(8)(A)(i)(I); see also Shteynlyuger v. Ctrs. for Medicare & Medicaid Servs., No. CV 20-2982 (RDM), 2023 WL 6389139, at *25 (D.D.C. Sept. 30, 2023); Reps. Comm. for Freedom of the Press v. Fed. Bureau of Investigation, 3 F.4th 350, 369–70 (D.C. Cir. 2021) (emphasizing that the foreseeable harm requirement "impose[s] an independent and meaningful burden on agencies" and that the showing must present concrete harms of disclosure).

¹⁰² See Reps. Comm. for Freedom of the Press v. Fed. Bureau of Investigation, 3 F.4th 350, 369–70 (D.C. Cir. 2021).

¹⁰³ These include the Secretary of Agriculture, the Secretary of the Treasury, the Attorney General, the Chair of the Federal Trade Commission, the Secretary of the Treasury, the Secretary of Transportation, the Secretary of Health and Human Services, the Secretary of Commerce, and the Secretary of Defense.

behavior, including in the meat and poultry industry¹⁰⁴—as well as an "Action Plan for a Fairer, More Competitive, and More Resilient Meat and Poultry Supply Chain."¹⁰⁵ In EPA's telling, it must prioritize these "crucial Administration priorit[ies]" when establishing water pollution control standards for the MPP industry, otherwise "supply chain disruptions" could threaten "the nation's food supply."¹⁰⁶ As evidence, EPA cites "disruption to [meat and poultry] supply" during the COVID-19 pandemic, which the Agency pins on MPP facility closures. ¹⁰⁷

This rationale is unlawful for two reasons. *First*, under the Clean Water Act, EPA lacks authority to consider concerns about "competition" or "supply chain disruptions" when determining BAT limits. Rather, the text, structure, and purpose of the CWA foreclose conscripting the Effluent Guidelines Program into the service of broader economic policy. *Second*, even if EPA had the authority to consider economic policy goals far beyond its purview, it may not do so in an arbitrary way. In all events, it is arbitrary to give concern about "competition" or "supply chain disruptions" dispositive weight when determining BAT. But this is especially true where, as here, EPA's evidence of supply chain disruptions during the COVID-19 pandemic has been disproven, and none of EPA's proposed regulatory options would have meaningful impacts on overall meat supply. At bottom, EPA's suggestion that the price of increased competition or food supply resilience must be weaker environmental regulation is unsupported and unlawful.

1. EPA Does Not Have Authority to Consider Competition or "Supply Chain Disruptions" as "Other Factors" When Determining BAT.

As a threshold matter, EPA lacks authority to incorporate concerns about "supply chain disruptions" into its BAT limits determination. EPA's attempt to do so impermissibly construes the Agency's authority in a manner that "undermine[s] the concept of BAT altogether." Moreover, EPA's assertion of authority is inconsistent with the very policy documents whose implementation EPA seeks to promote. As such, EPA's rationale fails as a matter of law.

The CWA sets forth several factors that EPA must consider when determining BAT limits. ¹⁰⁹ These include: the processes and engineering aspects of various pollution control techniques, the "cost of achieving effluent reduction" by employing those techniques, the "non-water quality environmental impact (including energy requirements)" associated with different

¹⁰⁴ See Exec. Order 14,036 (July 9, 2021) (directing USDA to "provid[e] clear rules that identify recurrent practices in the livestock, meat, and poultry industries that are unfair, unjustly discriminatory, or deceptive and therefore violate the Packers and Stockyards Act").

¹⁰⁵ The White House, FACT SHEET: The Biden-Harris Action Plan for a Fairer, More Competitive, and More Resilient Meat and Poultry Supply Chain (Jan. 03, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/03/fact-sheet-the-biden-harris-action-plan-for-a-fairer-more-competitive-and-more-resilient-meat-and-poultry-supply-chain/.

¹⁰⁶ Proposed Rule at 4492.

¹⁰⁷ *Id*.

¹⁰⁸ Sw. Elec. Power Co., 920 F.3d at 1028.

¹⁰⁹ See Texas Oil & Gas Ass'n v. EPA, 161 F.3d 923, 928 (5th Cir. 1998)

pollution control technologies, and "such other factors as the Administrator deems appropriate." While EPA has "considerable discretion' in weighing those factors," the Agency may not "rel[y] on factors which Congress has not intended it to consider" at all. 112

Concerns about consolidation, and the possibility of "disruptions" caused by "bottlenecks," are factors that Congress did not intend EPA to consider. While EPA points to the CWA provision that allows EPA to consider "such other factors as the Administrator deems appropriate," contrary to EPA's intimations, 114 this provision does not grant the Agency unbounded authority. On this point, *Southwestern Electric Power Company v. EPA* is instructive. There, the Fifth Circuit rejected EPA's reliance on the "other factors" clause "to justify a less stringent BAT for one pollution source by claiming it was regulating other sources more strictly and thus making reasonable progress in the industry 'as a whole." This, the court said, "would undermine the concept of BAT altogether." Accordingly, the court held that EPA may not adopt an "expansive view of the 'other factors' clause" and must instead exercise its authority consistent with the CWA's "structure and its public safety purpose." 118

That principle applies with equal force here. Here, EPA claims that the "other factors" clause empowers it to reject regulatory options that satisfy the BAT factors, ¹¹⁹ so long as it determines that those options "may impede" broader economic policy initiatives. ¹²⁰ But this

¹¹⁰ 33 U.S.C. § 1314(b)(2)(B).

¹¹¹ Sw. Elec. Power Co., 920 F.3d at 1006–07.

¹¹² Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).
113 33 U.S.C. § 1314(b)(1)(B). Notably, when EPA describes its "authority to consider these policy concerns in determining BAT," Proposed Rule at 4492, the Agency—for good reason—does not cite the CWA's injunction to consider "the cost of achieving [] effluent reduction," 33 U.S.C. § 1314(b)(2)(B). Indeed, pursuant to this statutory provision, EPA may only "take into account" certain costs borne by a "class or category" of industrial facilities—for example, possible "plant closures" and "associated job losses." Chem Mfrs. Ass'n., 870 F.2d at 250. But EPA's authority to consider such costs is heavily circumscribed, both in terms of its substantive scope, see Nat'l Crushed Stone Ass'n, 449 U.S. at 71 (noting that, unlike when assessing BPT, "in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits"), and its relative weight vis-a-vis other statutory factors, see Chem. Mfrs. Ass'n, 870 F.2d at 250 n.322 ("While costs are to be considered on a class or category basis, as opposed to a plant-by-plant basis, costs of compliance are not to be given primary importance.") (emphasis added); FMC Corp. v. Train, 539 F.2d 973, 979 (4th Cir. 1976) (EPA's "statutory duty to consider cost... should not serve as a dilatory device, obstructing the Agency from proceeding with its primary mission of cleaning up the lakes, rivers, and streams of this Nation.").

¹¹⁴ See Proposed Rule at 4492.

¹¹⁵ Sw. Elec. Power Co., 920 F.3d 999

¹¹⁶ *Id*.

¹¹⁷ *Id*.

¹¹⁸ *Id*.

¹¹⁹ As explained in Section IV.D of these comments, Option 3 easily satisfies BAT's "economic achievability" analysis.

¹²⁰ Proposed Rule at 4492.

turns the CWA on its head. ¹²¹ As courts have repeatedly stressed, the CWA was written with the understanding that "eliminating all discharges would cause some disruption in our economy." ¹²² Congress knew "that the economic impact of environmental regulations would be most severe for small plants," and that such regulations could, at times, conflict with other policy goals, like increasing competition or independent facility capacity. ¹²³ Nonetheless, Congress determined "that society must bear such costs as the price of achieving the long-term benefits of eliminating pollutants from our nation's waters." ¹²⁴

EPA's interpretation of the CWA is further undercut by the very policy documents it cites to clip its own wings. Notably absent from Exec. Order 14,036, for example, is *any* mention of the Environmental Protection Agency or its Secretary—though its text does make clear that "[n]othing in [it] shall be construed to impair or otherwise affect . . . the authority granted by law to an executive department or agency, or the head thereof." The related Fact Sheet cited by EPA tells a similar story. It announces numerous USDA investments—totaling well over \$1 billion—to support meat and poultry processing facilities, as well as various USDA initiatives designed to "[e]xpand independent processing capacity." That document's *only* reference to environmental regulation is its recognition that "[m]eat and poultry processing is a complex and technical sector that requires *strict adherence* to a host of environmental . . . requirements," mirroring other policy documents—including executive orders—that underscore the Biden Administration's commitment to promulgating strong environmental protections and furthering environmental justice. 128

https://www.doi.gov/pressreleases/biden-harris-administration-announces-51-million-investing-america-

¹²¹ Indeed, it is even more sweeping than the theory EPA furthered in *Southwestern Electric Power Company*, which at least centered the Agency "progress towards eliminating pollution" from the relevant industry. *See Sw. Elec. Power Co.*, 920 F.3d at 1027. Here, by contrast, EPA simply treats as dispositive the Proposed Rule's "potential[] harm[] [to] the Administration's priority to expand and diversify the meat and poultry processing industry." Proposed Rule at 4492.

¹²² Chem. Mfrs. Ass'n., 870 F.2d at 250.

¹²³ *Id*.

¹²⁴ *Id.* at 251.

¹²⁵ Exec. Order 14,036 § 6(a) (July 9, 2021).

¹²⁶ The White House, FACT SHEET: The Biden-Harris Action Plan for a Fairer, More Competitive, and More Resilient Meat and Poultry Supply Chain (Jan. 03, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/03/fact-sheet-the-biden-harris-action-plan-for-a-fairer-more-competitive-and-more-resilient-meat-and-poultry-supply-chain/.

¹²⁷ *Id.* (emphasis added).

¹²⁸ See Section IX Environmental Justice Analysis Supports Adopting Stringent Water Pollution Control Standards; see also Exec. Order No. 14,096 § 1, 3 C.F.R. 25251 (2023) ("To fulfill our Nation's promises of justice, liberty, and equality, every person must have clean air to breathe; clean water to drink; safe and healthy foods to eat; and an environment that is healthy, sustainable, climate-resilient, and free from harmful pollution and chemical exposure."); Exec. Order 14,008, 3 C.F.R. 7619 (2021) ("We must strengthen our clean air and water protections. We must hold polluters accountable for their actions"); U.S. Dep't of the Interior, Biden-Harris Administration Announces \$51 Million from Investing in America Agenda for Water Resources and Ecosystem Health (Nov. 15, 2023),

It is thus clear that, while the Administration has many tools to affirmatively promote competition and supply chain resilience in the meat and poultry industry, the CWA is not one of them. To the extent that EPA considers "other factors" when determining BAT limits, those factors must be consistent with the statute's other provisions, as well as its "structure and its public safety purpose." Because EPA has impermissibly elevated economic policy initiatives over its statutory mandate to eliminate pollution discharges, the Agency's primary rationale for selecting Option 1 is unlawful.

2. EPA's Consideration of "Supply Chain" Concerns is Unfounded and Unlawful.

Even if EPA had authority to consider economic policy goals as part of its BAT analysis, which it does not, EPA's consideration here is fundamentally flawed. This is so for at least three reasons: (1) EPA's concerns about "supply chain disruptions" are unfounded; (2) EPA admits that none of its proposed regulatory options would noticeably impact meat supply; and (3) even if EPA's "supply chain disruption" concerns had any basis in fact, it is unlawful to give those concerns dispositive weight when determining BAT limits.

EPA primarily justifies its selection of Option 1 as an attempt to, however indirectly, "protect against the type of supply chain disruptions that arose during the COVID–19 pandemic." To support this rationale, it opines that the MPP industry was unable to meet increased "demand for meat from grocery stores" due to the rapid spread of COVID-19, which caused facilities to "temporarily close[]" or "reduce[] line speeds" given "worker shortages and safety concerns." According to EPA, these phenomena "led to shortages and higher prices for many meat and poultry commodities."

Not only does EPA fail to identify expert support for these conclusions, ¹³² they have also been thoroughly debunked by several sources, including the House Select Subcommittee on the Coronavirus Crisis. In a May 2022 report, the Select Subcommittee presents extensive evidence

<u>agenda-water</u> (Announcing investment of \$51 million in projects that "focus on water conservation, water management and restoration efforts that will result in significant benefits to ecosystem or watershed health."); *see also* The White House, *A Proclamation on the 50th Anniversary of the Clean Water Act* (Oct. 17, 2022), ("As we celebrate the anniversary of this law, my Administration is more committed than ever to continuing its legacy, providing access to safe water, and restoring a healthier planet.").

¹²⁹ Sw. Elec. Power Co., 920 F.3d at 1028.

¹³⁰ Proposed Rule at 4492.

¹³¹ *Id*.

¹³² To substantiate its claims about meat "supply chain disruptions," EPA cites a paper co-authored by Dr. Brad Kim, who "leads the Meat Science and Muscle Biology research program at Purdue University," and one of his former undergraduate students. *See Meat Science & Muscle Biology Lab*, Perdue Univ. https://ag.purdue.edu/department/ansc/kimlab/. Dr. Kim, who holds a PhD in Food Science, specializes in "enhancing functional properties of muscle foods through both fundamental and applied approaches"—not supply chain effects specifically or economics generally. *Id.* Moreover, Dr. Kim touts his lab's "dedication of service to the [meat and poultry] industry," raising obvious questions about whether his research is tainted by bias.

demonstrating that meatpacking firms' "assert[ions] that reduced plant operations and worker absenteeism were making the food supply chain 'vulnerable,' . . . lacked any basis in fact." Rather, documents uncovered by the Select Subcommittee show that "industry representatives" deliberately and knowingly spread a false narrative about supply chain disruptions, choosing to "intentionally scar[e] people," and "whip[] everyone into a frenzy" in order to secure federal "insulat[ion]. . . from oversight by state and local health departments." ¹³⁴

In reality, there was no reason to afford the meat and poultry industry special treatment. As the House Subcommittee report outlines, "numerous public reports indicate that meatpacking companies had abundant inventory during [the COVID-19 pandemic]—inventory that they could have used to supply domestic grocery shelves." Specifically, the report notes:

According to the National Agricultural Statistics Service, meatpackers held 622 million pounds of frozen pork as of March 31, 2020—an amount well above levels predating the pandemic. During the first three quarters of 2020, Smithfield exported 90 percent more pork to China than it did during the same period of 2017, while JBS appears to have exported a whopping 370 percent more. The amount of total U.S. pork exports in April 2020 was higher than amounts exported during the same month in each of the preceding three years. While there was a brief slowdown in pork and beef production during the spring of 2020, there remained so much pork in cold storage as of March 2020 that an expert at the Institute for Agriculture and Trade Policy projected it would have been sufficient to supply grocery shelves for almost the next 14 months. ¹³⁶

It is clear, then, that EPA's "supply chain disruptions" rationale is built on a house of cards. And just as the MPP industry should not be permitted to raise the specter of "disruptions in the nation's food supply" to evade health, safety, and labor regulations—even as it "reap[s] enormous profits" EPA should not credulously rehearse this false industry narrative to justify insufficiently stringent pollution control standards.

This is especially so given EPA's own market effects analysis, which demonstrates that "[t]he overall effects on meat product supplies and prices are sufficiently small under all three [proposed regulatory] options that they are unlikely to have a noticeable effect on producer or consumer behavior." Indeed, EPA estimates that its most stringent regulatory option would result in a miniscule 0.065% post-compliance decrease in meat market supply. That is, for

¹³³ House Select Subcommittee on the Coronavirus Crisis, *How the Trump Administration Helped the Meatpacking Industry Block Pandemic Worker Protections*, at 10 (2022), https://perma.cc/WZ62-MEDL. ¹³⁴ *Id.* at 4.

¹³⁵ *Id*. at 10.

¹³⁶ *Id*.

¹³⁷ *Id*. at 5.

¹³⁸ Proposed Rule at 4502.

¹³⁹ *Id.*, tbl. VIII-14.

every million pounds of meat, compliance with the most stringent regulatory option would reduce the overall meat supply by just 650 pounds. 140 Thus, even if EPA could point to past evidence of "disruptions in the nation's food supply," its own analysis belies any suggestion that this rulemaking could plausibly precipitate a similar disruption in the future. ¹⁴¹

Moreover, even if EPA's concerns about "supply chain disruptions" had any basis in fact, it would be unlawful to give them dispositive weight when determining BAT limits. To be sure, EPA has "considerable discretion" in weighing [the BAT] factors," 142 but case law and Agency practice reveal that this discretion is not unbounded. For instance, courts have repeatedly held that Congress intended "the cost of achieving [] effluent reduction" to be a narrowly cabined factor in EPA's BAT analysis—and one that should not outweigh other statutory factors. 143 To the extent that EPA has given primacy to a single enumerated BAT factor, like "non-water quality environmental impact," it has done so to promote the CWA's core objectives, and the Agency's mission to act in the most "environmentally responsible" manner—not to further totally unrelated policy goals. 144 Against this backdrop, broader economic and competition policy considerations entirely extraneous to the CWA—and in diametric opposition to the CWA's goal of eliminating discharges—cannot be given primary importance over the enumerated statutory factors.

In sum, EPA's concerns about "supply chain disruptions" are factually and legally unsupported, and inconsistent with its own market effects analysis. It is thus arbitrary to give these concerns dispositive weight when determining BAT limits.

F. EPA Must Adopt Pretreatment Standards for Nitrogen and Phosphorus.

EPA's selection of Option 1 is inconsistent with the CWA in another important respect: It ignores the statute's command to promulgate pretreatment standards for

https://www.epa.gov/climateimpacts/climate-change-impacts-agriculture-and-food-supply; see also Samuel S. Myers et al., Climate Change and Global Food Systems: Potential Impacts on Food Security and Undernutrition, 38 Ann. Rev. Pub. Health 259, 260–66 (2017) (describing the impacts of climate change on agriculture). As explained below, see infra Section III.C.1, nutrient pollution in aquatic ecosystems has significant climate change consequences. Thus, to the extent that EPA is genuinely concerned about mitigating food supply chain disruptions, it will adopt robust standards that remove nutrient pollution from the nation's waterbodies consistent with the Clean Water Act's demands.

¹⁴⁰ Put another way, compared to the United States' baseline domestic meat supply, which adds up to 106.71 billion pounds of meat, if EPA's most stringent regulatory option went into effect, the United States' domestic meat supply would still add up to 106.64 billion pounds of meat—hardly the sort of reduction that would imperil the nation's food supply. See RIA at Table 6-11.

¹⁴¹ To the contrary, minimizing disruptions to the nation's food supply chain demands stronger water pollution control standards. EPA itself has recognized the sensitivity of our food supply to the impacts of climate change, which contributes to lower crop yields, eroded soil, and harm to agricultural workers and farmed animals. See Climate Change Impacts on Agriculture and Food Supply, EPA,

¹⁴² Sw. Elec. Power Co., 920 F.3d at 1006–07.

¹⁴³ See supra note 111.

¹⁴⁴ See, e.g., Citizen's Coal Council v. EPA, 447 F.3d 879, 901–03 (6th Cir. 2006).

nitrogen and phosphorus discharges from indirect-discharging MPP facilities. The CWA is clear that, once EPA "determine[s]" that certain "pollutants" are not "susceptible to treatment by [POTWs]" or "would interfere with the operation of [POTWs]" as EPA has repeatedly done with respect to nitrogen and phosphorus—the Agency is obligated to publish pretreatment standards.

In failing to include pretreatment standards for nitrogen and phosphorus, Option 1 continues EPA's longstanding and unlawful failure to comply with the CWA. Since at least 1977, EPA has recognized that MPP facility wastewater contains pollutants, such as nitrogen and phosphorus, that are not susceptible to treatment by POTWs and, thus, EPA warned that "discharge of [slaughterhouse wastewater] directly to POTWs should be avoided." 146 It reaffirmed the importance of pretreatment standards for nitrogen and phosphorus in 2013, over 10 years ago. 147 And EPA's recognition of the need for pretreatment of these pollutants continues with the present rulemaking, in which EPA once again confirms that nitrogen and phosphorus in MPP facility wastewater "pass through POTWs." ¹⁴⁸

Because EPA has acknowledged that nitrogen and phosphorus pass through POTWs, EPA must fulfill its mandatory statutory obligation to promulgate pretreatment standards for nitrogen and phosphorus. Its failure to do would constitute a violation of the APA. 149 Thus, EPA's preferred regulatory option, if adopted, would be unlawful.

G. EPA's Benefit-Cost Analysis in Support of Option 1 Contains Serious Flaws

Benefit-cost analysis ("BCA") provides a framework for resolving questions about whether "regulations are justified, beneficial, or worthwhile." ¹⁵⁰ Courts review agencies' BCAs

¹⁴⁵ 33 U.S.C. § 1317(b)(1) (emphasis added).

¹⁴⁶ EPA. Federal Guidelines: State and Local Pretreatment Programs, EPA-430/9-76-017a (1977).

¹⁴⁷ See EPA, Report on the Performance of Secondary Treatment Technology 2 (2013). https://www3.epa.gov/npdes/pubs/npdes_secondary_treatment_report_march2013.pdf (reporting that dozens of POTWs lacked nitrogen, phosphorus, and ammonia treatment capabilities). ¹⁴⁸ Proposed Rule at 4491.

¹⁴⁹ See 5 U.S.C. § 706(1); see also Am. Lung Ass'n v. Reilly, 962 F.2d 258, 263 (2d Cir. 1992); Friends of the Earth v. EPA, 934 F. Supp. 2d 40, 48 (D.D.C. 2013).

¹⁵⁰ Cass R. Sunstein, On Neglecting Regulatory Benefits, 72 Admin. L. Rev. 445, 447 (2020). While BCA may generally provide agencies with a framework for assessing regulatory options, courts have long held that that EPA lacks authority to undertake cost-benefit analysis when setting BAT. See, e.g., Nat'l Crushed Stone Ass'n, 449 U.S. at 71; see also Am. Iron & Steel Inst. v. EPA, 526 F.2d 1027, 1051-52 (3d Cir. 1975) ("With respect to the [BAT] standards," Congress intended "that there should be no cost-benefit analysis."); cf. Entergy Corp. v. Riverkeeper, Inc., 556 U.S. 208, 222 (2009) (affirming that only certain Clean Water Act standards "authorize cost-benefit analysis," and that the BAT standard does not fall within this group). Thus, while the discussion that follows critiques EPA's BCA on its own terms—and demonstrates several significant shortcomings—Commentors note that EPA's decision to perform a BCA to support this rulemaking is contrary to the text, structure, and legislative history of the Clean Water Act. See Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1046 (D.C. Cir. 1978) (noting that Congress affirmatively rejected statutory text that would have required cost-benefit analysis when setting BAT); see also Am.

"deferentially," but "when an agency decides to rely on a cost-benefit analysis as part of its rulemaking, a serious flaw undermining that analysis can render the rule unreasonable." For example, agencies may not "[in]adequately . . . substantiate [a] rule's benefits and costs," nor may they base their analyses on unexplained methodologies. As with other forms of agency decision making, agencies' BCAs must draw "a rational connection between the facts found and the choice[s] made." In conducting their analyses, agencies cannot simply "fail[] to adduce empirical data that can readily be obtained" or ignore "an important aspect of the [relevant] problem." This includes giving due consideration to "unquantified factors," which "cannot be dismissed without further inquiry where their impact is both evident and massively significant."

EPA's BCA exhibits many of these deficiencies, including: (1) EPA's failure to consider the substantial and monetizable climate change-related benefits that would result from reductions in nutrient pollution; and (2) EPA's failure to fully account for several important benefit categories, including benefits to property values, human health, threatened and endangered species, and drinking water treatment costs; (3) EPA's failure to present the regulatory options in an unbiased and consistent manner, including by misleadingly presenting costs with precision while failing to provide a clear explanation as to how EPA incorporates unquantified benefits into its assessment of which option maximizes net benefits; and (4) EPA's failure to explain that its evaluation framework systematically understates the economic importance of ecosystem-related benefits. Accordingly, EPA's BCA, as currently constituted, contains fundamental flaws.¹⁵⁸

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Textile Mfrs. Inst., Inc. v. Donovan, 452 U.S. 490, 511 (1981) (noting that "Congress uses specific language when intending that an agency engage in cost-benefit analysis").

¹⁵¹ Nat'l Ass'n of Home Builders v. EPA, 682 F.3d 1032, 1040 (D.C. Cir. 2012); see generally Cass R. Sunstein, Cost-Benefit Analysis and Arbitrariness Review, 41 Harv. Env't L. Rev. 1 (2017).

¹⁵² Chamber of Com. of U.S. v. U.S. Sec. & Exch. Comm'n, 85 F.4th 760, 777 (5th Cir. 2023).

¹⁵³ See Owner-Operator Indep. Drivers Ass'n v. Fed. Motor Carrier Safety Admin., 494 F.3d 188, 206 (D.C.Cir.2007).

¹⁵⁴ Lindeen v. Sec. & Exch. Comm'n, 825 F.3d 646, 658 (D.C. Cir. 2016)

¹⁵⁵ FCC v. Fox Television Stations, Inc., 556 U.S. 502, 519 (2009); see NRDC v. EPA, 808 F.3d 556, 573 (2d Cir. 2015) (holding EPA's decision to "turn[] a blind eye to significant information" arbitrary). ¹⁵⁶ Motor Vehicle Mfrs. Ass'n of U.S., Inc., 463 U.S. at 43.

¹⁵⁷ Md. People's Couns. v. FERC, 761 F.2d 768, 776 (D.C. Cir. 1985).

¹⁵⁸ While, as detailed in this section, EPA's BCA displays significant failures, Commenters do not suggest, and would not support, delaying finalization of the rule to augment the BCA. Indeed, given EPA's access to relevant data and methodologies, Commentors firmly believe that shortcomings in EPA's analysis highlighted in this section can be cured without delaying finalization of the rule.

1. EPA Fails to Consider Climate Change-Related Benefits Resulting from **Reductions in Nutrient Pollution.**

Although EPA devotes an entire subsection of its BCA to the climate change "disbenefits" associated with the regulatory options, ¹⁵⁹ EPA omits any consideration of the climate change benefits that would flow from more stringent water pollution control standards for MPP facilities. This oversight is surprising given research—including studies performed by EPA scientists—demonstrating "that limiting nutrient pollution in [aquatic ecosystems] not only improves water quality but also reduces greenhouse gas (GHG) emissions that contribute to climate change," 160 and, as such, there are significant, monetizable climate change-related benefits associated with nutrient pollution controls. 161

Ponds, lakes, and other bodies of water are significant sources of methane and other greenhouse gases. 162 Globally, greenhouse gas emissions from lakes are equal in magnitude to 20% of global fossil fuel emissions, primarily due to the climate impact of methane. 163 Nutrient enrichment and eutrophication increase methane emissions from aquatic surfaces. 164 Specifically, increases in total phosphorus loadings result in increases in methane emissions from aquatic systems. 165 Likewise, carbon dioxide and nitrous oxide emissions are stimulated by increases in total phosphorus and total nitrogen. 166 Thus, EPA must consider the potential climate benefit associated with reductions in nutrient loading.

¹⁵⁹ See EPA, Benefit Cost Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, at Section 5.2 (2023), https://www.epa.gov/system/files/documents/2023-12/mpp benefit-cost-analysis proposed dec-2023a.pdf. [hereinafter "BCA"].

¹⁶⁰ See Jake Beaulieu et al., EPA, Climate Benefits of Reducing Nutrient Pollution in Aquatic Ecosystems, 2021 Social Cost of Water Pollution Workshop (2021), https://cfpub.epa.gov/si/si_public_record_ report.cfm?dirEntryId=352177&Lab=CEMM. Attached as Ex. 7. ¹⁶¹ *Id*.

¹⁶² See Thomas A. Davidson et al., Synergy Between Nutrients And Warming Enhances Methane Ebullition From Experimental Lakes, 8 Nature Climate Change 156-160 (2018); see also Tonya DelSontro et al., Greenhouse Gas Emissions from Lakes and Impoundments: Upscaling in the Face of Global Change. 3 Limnology and Oceanography Letters 64 (2018).

¹⁶³ See Tonya DelSontro et al., Greenhouse Gas Emissions from Lakes and Impoundments: Upscaling in the Face of Global Change, 3 Limnology and Oceanography Letters 64 (2018).

¹⁶⁴ See Sandeep K. Malyan et al., Greenhouse Gases Trade-Off from Ponds: An Overview of Emission Process and Their Driving Factors, 14 Water 970 (2022).

¹⁶⁵ Mike Peacock et al., Greenhouse Gas Emissions from Urban Ponds are Driven By Nutrient Status and Hydrology, 10 Ecosphere e02643 (2019); see also Sandeep K. Malyan et al., Greenhouse Gases Trade-Off from Ponds: An Overview of Emission Process and Their Driving Factors, 14 Water 970 (2022). ¹⁶⁶ See Sandeep K. Malyan et al., Greenhouse Gases Trade-Off from Ponds: An Overview of Emission Process and Their Driving Factors, 14 Water 970 (2022); see also Yajing Zheng, Global Methane and Nitrous Oxide Emissions from Terrestrial Ecosystems Due to Multiple Environmental Changes, 28 Global Change Bio. 4713 (2007).

A 2021 study performed by EPA scientists and environmental economists is particularly instructive. There, researchers developed "a roadmap for estimating [climate change-related] economic benefits from nutrient management policies." They did so by first "estimat[ing] the reduction in GHG emissions from waterbodies in the Chesapeake Bay watershed that could result from the implementation of nutrient management plans developed to achieve [EPA] recommended limits on nitrogen and phosphorus loading to aquatic ecosystems." ¹⁶⁸ Researchers "predicted changes in daily GHG emissions rates resulting from changes in [pollutant] concentrations" and, "using estimates of the social cost of carbon dioxide, methane, and nitrous oxide," "monetize[d] the climate benefits associated with these emissions reductions." ¹⁶⁹ Ultimately, the study concluded that climate change benefits associated with nutrient pollution reductions in the Chesapeake Bay watershed alone could be as high as \$11.5 million per annum. The EPA researchers also noted that their "study area include[d] just 0.1% of the lake surface area in the contiguous [United States]," and that they expected climate change-related benefits to "scale more than proportionally" across the nation, "due to the lack of ice cover" in waterbodies outside the study area. 171

Given this conclusion, EPA's BCA likely fails to account for hundreds of millions of dollars in climate change-related benefits associated with stricter limits on nitrogen and phosphorus loading to aquatic ecosystems. 172 EPA has at its disposal "a roadmap for estimating economic benefits from nutrient management policies" developed by its own scientists and environmental economists. ¹⁷³ The Agency's "failure to adduce [this] empirical data that can readily be obtained" is arbitrary and thus renders EPA's reliance on the BCA unreasonable. 174

¹⁶⁷ See Jake Beaulieu et al., EPA, Climate Benefits of Reducing Nutrient Pollution in Aquatic Ecosystems, 2021 Social Cost of Water Pollution Workshop (2021), https://cfpub.epa.gov/si/si_public_record report.cfm?dirEntryId=352177&Lab=CEMM. Ex. 7.

¹⁶⁸ *Id*.

¹⁷⁰ See Jake Beaulieu et al., EPA, Climate Benefits of Reducing Nutrient Pollution in Aquatic Ecosystems, 2021 Social Cost of Water Pollution Workshop (2021), https://cfpub.epa.gov/si/si public record report.cfm?dirEntryId=352177&Lab=CEMM. Ex. 7. ¹⁷¹ *Id.* at 24.

¹⁷² EPA's 2021 study suggests that a reduction of 24% of Total Phosphorus loading and 25% of Total Nitrogen loading for the watershed they analyzed would yield a climate benefit of \$4.5-11.5 million. Their analysis represents 0.1% of the lake surface area of the contiguous United States. Regulatory Option 3 represents an 85% reduction in nutrient loading. Thus, extrapolating from EPA's 2021 study data to consider an 85% reduction in nutrient loading and greater lake surface area yields a conservative estimate on the order of hundreds of millions of dollars in climate change-related benefits.

¹⁷³ See Jake Beaulieu et al., EPA, Climate Benefits of Reducing Nutrient Pollution in Aquatic Ecosystems, 2021 Social Cost of Water Pollution Workshop (2021), https://cfpub.epa.gov/si/si_public_record report.cfm?dirEntryId=352177&Lab=CEMM. Ex. 7.

¹⁷⁴ FCC v. Fox Television Stations, Inc., 556 U.S. 502, 519 (2009).

2. EPA Fails to Monetize or Sufficiently Account for Several Important Benefit Categories.

Despite the existence of copious evidence, EPA fails to monetize or sufficiently account for multiple important benefits associated with more stringent pollution control standards for slaughterhouses and rendering facilities, including benefits to property values, human health, threatened and endangered species, and drinking water treatment costs.

Property Values

EPA acknowledges the existence of numerous studies showing that property is "more desirable when located near unpolluted water," and—unsurprisingly—that property values rise as water pollution decreases. Nonetheless, EPA does not quantify or monetize these benefits because, in its telling, the effect of water quality on property values depends on "many factors," and the heuristic that EPA uses to monetize improvements in water quality (total willingness-to-pay), may, to some unspecified extent, overlap with "shifts in property values." 176

This decision is flawed. In fact, multiple studies isolate the very "factors" EPA identifies—including "the effects of MPP pollutants on the aesthetic quality of surface water" 177—and measures their impacts on property values. As the Institute for Policy Integrity has noted, "[t]here is a robust literature that estimates the impact of nutrient pollution, water clarity, and related pollutants on home values." 178 For example, a 2021 meta-analysis "based on 36 hedonic studies that examine the effects of water quality on housing values in the United States" calculates the average elasticities for home prices based on factors including nitrogen, phosphorus, total suspended solids pollution. 179 Because the regulatory options will have significant and measurable impacts on the loadings of these pollutants, EPA should use this meta-analysis to monetize property value benefits.

Nor is EPA's concern that an analysis of property values might overlap, at least partially, with its analysis of willingness-to-pay for water quality improvements sufficient reason to ignore property value benefits wholesale. Indeed, recent research indicates that analyses of WTP for water quality improvements likely "underestimate the benefits of water pollution control," including by failing to capture "substantial" "recreational benefits of water pollution abatement." And, as the Institute for Policy Integrity has explained, "EPA can minimize any

¹⁷⁵ BCA at 2-19.

¹⁷⁶ *Id*. at 2-20.

¹⁷⁷ *Id.* at 2-19.

¹⁷⁸ Dr. David A. Keiser et al., Inst. for Pol'y Integrity, *Measuring the Benefits of Power Plant Effluent Regulation*, at 7 (2022), https://policyintegrity.org/files/publications/Steam_Electric_Analysis_Report_v2.pdf.

¹⁷⁹ See Dennis Guignet et al., Property Values, Water Quality, And Benefit Transfer: A Nationwide Meta-Analysis, 98 Land Econs. 191 (2022).

https://www.sciencedirect.com/science/article/abs/pii/S0047272722000020 See Yusuke Kuwayama et al., A More Comprehensive Estimate of the Value of Water Quality, 207 J. Pub. Econ. 104600 (2022).

overlap that does exist by conducting hedonic analysis only for homes that are close to waterbodies, where home price impacts are usually concentrated, and adding that value to benefits estimates of households living outside that range." ¹⁸¹

Moreover, relying on the "robust literature" on property value benefits would accord with relevant OMB guidance. For instance, in its recent Guidance for Assessing Changes in Environmental and Ecosystem Services in Benefit-Cost Analysis, OMB specifically urges agencies to "value[]" changes to property value caused by decreases in nutrient pollution:

Healthy aquatic systems can make nearby communities more attractive (which can be valued through changing property values) while unhealthy aquatic systems—polluted by excess nutrient runoff, nitrogen or sulfur deposition, or affected by other drivers—can make the same communities less appealing. 182

Thus, EPA's "blanket assertion that it could not find sufficient information to support quantification and monetization of the impacts on property values" 183 not only arbitrary ignores "evidence which is available," 184 it also "contrasts with OMB's assessment that currently available information generally facilitates estimation of monetary values." ¹⁸⁵

Human Health Benefits

Similarly troubling is EPA's failure to sufficiently account for benefits to human health associated with the regulatory options. EPA recognizes that reducing nitrogen, phosphorus, and pathogen water pollution from MPP facilities would provide significant health benefits because exposure to this pollution can lead to serious and fatal health problems. ¹⁸⁶ Despite acknowledging these health benefits, EPA does not monetize or quantify them due to the perceived "limitations of the available data and models." ¹⁸⁷

Once again, EPA ignores "data and research results that provide credible estimates of the value of these benefits." 188 For example, a 2019 study—which EPA does not cite—provides a

¹⁸¹ Comments of the Inst. Pol'y Integrity on EPA's Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 88 Fed. Reg. 18,824 (proposed Mar. 29, 2023), at 9 (May 30, 2023), https://policyintegrity.org/documents/Comments IPI EPA Effluents May2023.pdf.

¹⁸² See The White House, Guidance for Assessing Changes in Environmental and Ecosystem Services in Benefit-Cost Analysis, at 9–10 (2024), https://www.whitehouse.gov/wp-content/uploads/ 2024/02/ESGuidance.pdf

¹⁸³ Ernie Niemi, Natural Res. Econs., Deficiencies in EPA's Benefit Cost Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, at 6 (2024) [hereinafter "Niemi Report"]. Attached as Ex. 8.

¹⁸⁴ Motor Vehicle Mfrs. Ass'n of U.S., Inc. at 463 U.S. at 52.

¹⁸⁵ Niemi Report at 6, Ex. 8.

¹⁸⁶ See BCA at Tbl. 2-2.

¹⁸⁷ *Id.* at 2-9.

¹⁸⁸ Niemi Report at 6, Ex. 8.

"systematic review" of the "[e]conomic impact of harmful algal blooms on human health," drawing on 16 studies that estimate health costs, "includ[ing] healthcare and medication expenses, loss of income due to illness, cost of pain and suffering, and cost of death," associated with illnesses caused by exposure to nutrient pollution. The reviewed studies provide stark estimates of the economic toll of adverse health outcomes caused by harmful algal blooms: Indeed, the study determined that if 1,000 people experience such outcomes each year, the associated cost would be \$30.5 million (in \$2016). This research—in conjunction with data on the incidence of adverse health outcomes caused by harmful algal blooms collected by the Centers for Disease Control and Prevention suggest that the EPA has not accounted for millions of dollars in human health benefits associated with the proposed rule. Thus, given EPA's recognition that reducing nutrient pollution from MPP facilities will result in reduced incidence of related illnesses, including those attributable to harmful algal blooms, EPA must, at the very least, incorporate the findings of "empirical data that can readily be obtained" when accounting for the rule's human health benefits.

Impacts on Threatened and Endangered Species

EPA's treatment of benefits to threatened and endangered species suffers from similar deficiencies, both with respect to the Agency's methodology for identifying species who will be impacted by the rulemaking, as well as its failure to sufficiently account for the magnitude of these benefits. As for its efforts at identifying affected species EPA "constructed databases to determine which species have habitat ranges that intersect waters downstream from MPP direct dischargers and classified species according to their vulnerability to water pollution." Ultimately, "EPA identified 108 unique vulnerable animal and insect species that have habitat located in watersheds potentially impacted by MPP wastewater discharge." This methodological approach is flawed for at least three reasons.

First, it does not account for species whose habitat ranges include waters near indirect-discharging MPP facilities, which make up more than 95% of discharging MPP facilities. ¹⁹⁵ Whereas "the vast majority of [MPP direct dischargers are] located east of the Rocky Mountains," MPP indirect dischargers are "dispersed across the conterminous United States with higher concentrations of facilities along the west coast, Midwest, and the east coast." ¹⁹⁶ Against this backdrop, EPA's myopic focus on direct dischargers is significant. EPA identified 2,554

¹⁸⁹ Christian R. C. Kouakou & Thomas G. Poder et al., *Economic Impact of Harmful Algal Blooms on Human Health: A Systematic Review*, 17 J. Water Health (2019). ¹⁹⁰ *Id.*

¹⁹¹ See Ctrs. for Disease Control & Prevention, Summary Report – One Health Harmful Algal Bloom System (OHHABS), United States, 2021, https://www.cdc.gov/habs/data/2021-ohhabs-data-summary.html (last visited March 25, 2024).

¹⁹² FCC, 556 U.S. at 519.

¹⁹³ BCA at 2-11.

¹⁹⁴ Proposed Rule at 4507.

¹⁹⁵ *Id*.

¹⁹⁶ BCA at 3-4.

unique waterbodies that are affected by indirect discharges from MPP facilities—that is, more than 13 times as many waterbodies as are affected by direct-discharging MPP facilities. ¹⁹⁷ By ignoring species whose habitat ranges overlap with waterbodies affected by indirect discharges, EPA dramatically undercounted the MPP industry's overall impact on protected species. Indeed, 54 listed species have over 100 indirect dischargers within their ranges. ¹⁹⁸

Consider, for example, the Endangered species *Lampsilis abrupta*, or Pink Mucket Pearly Mussel, which has 70 indirect dischargers in its range, as shown below.



Figure 1. Range (orange shaded region) of Endangered species *Lampsilis abrupta* (Pink Mucket Pearly Mussel), with 70 indirect dischargers (gray points) and 4 direct dischargers (blue points). *Green points are facilities classified as direct/indirect.*

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¹⁹⁷ See id. at 3-3.

¹⁹⁸ Additionally, at least 28 of the species that EPA lists as having higher vulnerability to water pollution have more than 10 indirect dischargers within their range. For an explanation of the methodology that yielded these results, see Mustafa Saifuddin & Sarah Brickman, *Indirect Discharging Slaughterhouses and Rendering Facilities Pose Threats to Biodiversity Unaccounted for in EPA's Environmental Assessment* 2 (Mar. 25, 2024). Attached as Ex. 9.

FWS indicates that mussels like the Pink Mucket Pearly Mussel are sensitive to nitrogen concentrations in water. ¹⁹⁹ Therefore, it is reasonable to suppose that this species will benefit especially from decreased nutrient loadings achieved by the various regulatory options EPA is considering in this proposed rulemaking. EPA can—and must—fully consider benefits that would accrue to such species.

Second, EPA's methodology only accounts for the number of "unique animal species" with habitat ranges near MPP facilities, entirely neglecting to consider how many members of those species might experience benefits. This difference is critical, as ascertaining the number of affected individual animals will help determine how the proposed rule will impact species' overall chances of survival. And it is essential for the Agency to create an accurate representation of the proposed rule's quantifiable benefits, given numerous studies demonstrating that people are willing to pay to protect *individual* wild animals' lives, even in cases where there will be no population-level effects. ²⁰⁰ EPA's methodology thus fundamentally fails to capture the magnitude of benefits associated with the regulatory options, rendering its attempt at "quantification" woefully inadequate. ²⁰¹

Third, EPA's methodology only accounts for species that have already been listed as threatened or endangered. But there are "more than 500 species awaiting status review and consideration for listing," including numerous ecologically important aquatic animals (like bivalves and turtles) whose habitats face heightened risks from pollutants contained in MPP effluent. In fact, an independent analysis reveals that there are six proposed endangered species with more than 10 indirect dischargers within their ranges. For example, as shown below, the Proposed Threatened species Actinemys marmorata (Northwestern Pond Turtle), has 242

 $\underline{\underline{https://www.fws.gov/project/national-listing-workplan-prioritization}}.$

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¹⁹⁹ See USDA., Natural Res. Conservation Serv., Pink Mucket Pearly Mussel, https://efotg.sc.egov.usda.gov/references/public/WV/pink mucket.pdf (noting that the Pink Mucket Pearly Mussel "require[s] free-flowing, clean, well-oxygenated water" and is "extremely susceptible to changes in water quality"); see also U.S. Fish & Wildlife Serv., S. Atlantic-Gulf & Mississippi-Basin Unified Interior Regions Arkansas Ecological Services Field Office, Rabbitsfoot (Quadrula cylindrica cylindrica, Say 1817) 5-Year Review: Summary and Evaluation, at 50–51 (2020), https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/2983.pdf. (noting that "studies have demonstrated that excessive nitrogen concentrations can be lethal" to and "reduce the life span and size [multiple] mussel species").

²⁰⁰ See Leslie Richardson & Lynne Lewis, Getting to Know You: Individual Animals, Wildlife Webcams, and Willingness to Pay for Brown Bear Preservation, 104 Am. J. Agric. Econs. 673 (2022); see also Christopher Costello et al., The Charisma Premium: Iconic Individuals and Wildlife Values, 122 J. Env't Econs, and Mgmt. 1 (2023).

²⁰¹ See The White House, Guidance for Assessing Changes in Environmental and Ecosystem Services in Benefit-Cost Analysis, at 30 (2024), https://www.whitehouse.gov/wp-content/uploads/2024/02/ESGuidance.pdf (noting that quantification of, for example, the "number of wild animals" affected by a rule is meaningless unless it provides insight into "welfare change[s]").

²⁰² National Listing Workplan Prioritization, U.S. Fish & Wildlife Serv.

²⁰³ See EA at 4-13.

indirect dischargers in its range and the Proposed Threatened species Actinemys pallida (Southwestern Pond Turtle) has 269 indirect dischargers in its range.



Figure 2. Range (orange shaded region) of Proposed Threatened species *Actinemys marmorata* (Northwestern Pond Turtle), with 242 indirect dischargers (gray points) and 1 direct dischargers (blue points).



Figure 3. Range (orange shaded region) of Proposed Threatened species Actinemys pallida (Southwestern Pond Turtle), with 269 indirect dischargers (gray points) and no direct dischargers (blue points).

Given that EPA purports to analyze "[b]enefits and costs . . . over a 40-year period (2026 to 2065)," it is arbitrary for EPA to exclude, at the very least, "species that appear to be critically imperiled and in need of immediate action" and "species for which [U.S. Fish & Wildlife Service ("FWS")] ha[s] existing strong scientific data supporting a clear decision on status." Because these species are likely to benefit from reduced MPP facility pollution—and to experience those benefits at particularly dire junctures— EPA's quantification of benefits associated with increased protection for threatened and endangered species is incomplete absent consideration of these species..

EPA's failure to fully account for benefits to T&E species goes beyond its dramatic undercount of affected animals. For instance, despite acknowledging that multiple studies "indicate that aggregate values for preservation of T&E species are likely to be significant" given individuals' WTP for such preservation, EPA simply declines to apply the methodologies

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²⁰⁴ *National Listing Workplan Prioritization*, U.S. Fish & Wildlife Serv. https://www.fws.gov/project/national-listing-workplan-prioritization.

employed by those studies "due to a variety of challenges." ²⁰⁵ The Agency provides no further explanation as to the nature of these "challenges."

This decision is flawed. The Agency itself cites "a relatively large number of economic studies have estimated WTP for T&E protection," but protests that "these studies focused on estimating WTP to avoid species loss/extinction, increase in the probability of survival, or an increase in species population levels" rather than increased protection of threatened and endangered species. ²⁰⁶ EPA does not explain why these distinctions impact its ability to quantify benefits associated with the proposed rule. In fact, contrary to this complaint, the Agency can, based on research that has estimated the value individuals place on an "increase in the probability of survival, or an increase in species population levels," ²⁰⁷ describe, at the very least, "the general magnitude of the potential benefits from such increases." ²⁰⁸ EPA's failure to do so deprives the public and decisionmakers of important information about benefits associated with each regulatory option.

Drinking Water Treatment Costs

Similar shortcomings pervade EPA's discussion of drinking water treatment costs. While EPA recognizes that it is in possession of research and empirical data that describe and estimate how decreased nutrient pollution benefits drinking water treatment, EPA simply "fails to use the data . . . to provide readers with an assessment of the general magnitude of these benefits." This is especially surprising given that EPA itself published a thorough literature review that surveys studies about costs attributable to excess nutrient pollution—including to drinking water treatment. There, EPA identified numerous documented examples of "increased treatment costs" due to excess nutrients, which, in some cases, cost municipalities *millions of dollars*. The costs are treatment to the costs are costs as a cost municipalities millions of dollars.

While EPA acknowledges the existence of its literature review, it claims that it cannot quantify "changes in treatment costs" because there is "limited data" about "baseline operation and maintenance (O&M) costs for systems potentially affected by the proposed rule." But data in EPA's possession allows the Agency to, at the very least, describe and account for the significant magnitude of costs borne by communities seeking to "address poor drinking water"

²⁰⁵ BCA at 2-12

²⁰⁶ *Id*.

²⁰⁷ *Id*.

²⁰⁸ Niemi Report at 5, Ex. 8.

²⁰⁹ *Id*. at 6.

²¹⁰ See EPA, A Compilation of Cost Data Associated with the Impacts and Control of Nutrient Pollution, at III-11 (2015), https://19january2021snapshot.epa.gov/sites/static/files/2015-04/documents/nutrient-economics-report-2015.pdf.

²¹¹ *Id*.

²¹² BCA at 2-13.

due to excess nutrients."²¹³ For example, EPA Region 6's study of this precise issue found that the City of Waco, Texas "incurred \$70.2 million in costs" due to nutrient pollution and "potentially lost up to \$10.3 million in revenue due to taste and odor problems resulting in decreased water sales to neighboring communities prior to [necessary] treatment plant upgrades."²¹⁴ EPA's can and should rely on this data to estimate reduced costs associated with the regulatory options—or, at the very least, to give decisionmakers a sense of the general magnitude of these benefits relative to monetized costs.

3. EPA Presents Regulatory Options in a Biased and Inconsistent Manner.

EPA's presentation of the regulatory options also "blatantly violates widely accepted professional standards" in two critical respects: (1) the Agency misrepresents the uncertainty inherent in generating cost estimates by presenting social costs as monetized to a high degree of precision; and (2) simultaneously, EPA presents non-monetized and unquantified benefits in a cursory and understated fashion, without any explanation as to how EPA takes those benefits into consideration when assessing which regulatory option maximizes net benefits, as required by Execution Order 12,866. These shortcomings render EPA's BCA significantly biased and contravene OMB guidance.

Circular A-4—OMB's primary guidance "on conducting high-quality and evidence-based regulatory analysis" cautions agencies that because the "precise consequences (benefits and costs) of regulatory options are not generally known for certain," agencies "treatment of uncertainty should . . . be credible, objective, realistic, and scientifically balanced." EPA has especially good reason to adhere to this guidance, in light of its documented track record—including by the Agency itself—of overestimating costs associated with its rulemakings. Nonetheless, in its BCA, EPA states that the social costs from Option 3 will exceed those from Option 1 by precise figure: \$854.4 million. Simply put, EPA cannot credibly or realistically estimate, with this level of precision, social costs associated with the various regulatory

²¹³ See EPA, A Compilation of Cost Data Associated with the Impacts and Control of Nutrient Pollution, at III-11, III-12 (2015), https://19january2021snapshot.epa.gov/sites/static/files/2015-04/documents/nutrient-economics-report-2015.pdf.

²¹⁴ *Id*.

²¹⁵ Niemi Report at 9, Ex. 8.

²¹⁶ Exec. Order 12,866 § 1(a) (1993) (requiring agencies to "select those approaches that *maximize net benefits* (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity)") (emphasis added).

²¹⁷ Off. of Mgmt. & Budget, Circular A-4, at 2 (2003), https://www.whitehouse.gov/wpcontent/uploads/2023/11/CircularA-4.pdf [hereinafter, "Circular A-4"].

²¹⁸ Circular A-4 at 67–68.

²¹⁹ See EPA, Retrospective Study of the Costs of EPA Regulations: A Report of Four Case Studies (2014), https://www.epa.gov/sites/default/files/2017-09/documents/ee-0575 0.pdf (literature review performed by EPA).

²²⁰ See BCA at ES-6, at Tbl. ES-7.

options.²²¹ Presenting total costs in this manner "create[s] a false sense of precision,"²²² leading decision makers to conclude that costs associated with the regulatory options are both substantial and ascertainable.

Even as EPA misrepresents the uncertainty inherent in generating cost estimates, the Agency dramatically understates and obscures the importance of non-monetized and unquantified benefits. Consider, for example, EPA's summary table for the total annualized benefits and social costs of each regulatory option²²³:

Regulatory Option	Total Benefits		Total Social Costs
	Monetized Benefits	Other Benefits	Total Social Costs
Option 1	\$90.2	+	\$231.9
Option 2	\$146.2	+	\$642.8
Option 3	\$179.7	+	\$1,077.3

While EPA "describes the monetized benefits and costs with great specificity and confidence," the Agency represents "non-monetized benefits with just a simple '+'." ²²⁴

This is highly misleading for at least two reasons.

First, EPA's presentation of the total benefits and costs contravenes Circular A-4's directive that agencies should "identify[] the importance of unquantified factors." 225 Rather than include a "clear explanation" of the importance of "unquantified factors," EPA simply collapses all non-monetized benefits—including to human health, the environment, and economic productivity—into a single symbol. This approach fails to provide decisionmakers and the public with *any* insight into the "expected magnitude" of these benefits, as recommended by Circular A-4. 226 It also fails to explain whether EPA considers some non-monetized benefits to be more significant than others. As the D.C. Circuit has explained, EPA cannot "dismiss[]" "unquantified factors . . . without further inquiry where their impact is both evident and massively significant." Where, as here, EPA has repeatedly gestured at the significant magnitude of several non-monetized benefits, it cannot obscure the importance of those benefits in its final analysis. 228

²²¹ See Niemi Report at 8-9, Ex. 8.

²²² Circular A-4 at 70.

²²³ See BCA at ES-6, at Tbl. ES-7.

²²⁴ Niemi Report at 9, Ex. 8.

²²⁵ Circular A-4 at 5.

²²⁶ *Id.* at 5.

²²⁷ Maryland People's Couns. v. FERC, 761 F.2d 768, 776 (D.C. Cir. 1985)

²²⁸ Instead of obscuring the importance and magnitude of non-monetized benefits to ecosystems and ecosystems services, if anything, EPA should adopt a presumption that those benefits will outweigh any social costs associated with regulation, given the scientific consensus that "the benefits from conservation"

Second, EPA's summary contravenes OMB guidance to "assess" how the relative magnitude of non-monetized benefits informs its ranking of the regulatory options "based on estimated net benefits."²²⁹ This assessment is especially critical in this case, given numerous indications that EPA should expect non-monetized benefits to be significantly higher under Option 3 relative to Option 1. Indeed, EPA projects that Option 3 would prevent significantly more water pollution than Option 1—for example, by removing 85 percent of MPP facilities' nutrient pollution, as opposed to a mere 15 percent. ²³⁰ EPA's analysis also explains that Option 3 will entail benefits to thousands of additional unique waterbodies compared to Option 1, with obvious implications for people who live near those waterbodies, as well as threatened and endangered species who inhabit them.²³¹ In fact, according to EPA, Option 3 will benefit over 20 million more people—or 17 times as many individuals—than Option 1.²³² Despite these clear indications that the non-monetized benefits associated with Option 3 will be greatest among the regulatory options by a significant margin, EPA offers no indication as to how it expects the magnitude of non-monetized benefits to scale across the various regulatory options, nor how it purports to compare the non-monetized benefits of each regulatory option to total social costs. As such, unacceptable bias and inconsistent treatment of benefits and costs pervades the BCA.

4. EPA Fails to Explain that its Evaluation Framework Systematically Understates Economic Benefits Associated with Protecting Ecosystems and Ecosystem Services.

EPA contravenes relevant OMB guidance in another important respect: It neglects to discuss—or even mention—the serious bias that flows from its conclusion that "the economic importance [of benefits from protecting ecosystems or ecosystem services] depends on society's

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and restoration typically exceed the benefits from continued ecosystem degradation" by a significant margin. See Richard B. Bradbury at al., The Economic Consequences of Conserving or Restoring Sites for Nature, 4 Nature Sustainability 602 (2021). This is especially so where the primary ill that EPA seeks to address in this rulemaking—nutrient pollution, which EPA has identified as "one of America's costliest and most challenging environmental problems"—will only escalate in severity due to climate change, absent government action. As EPA itself has recognized, research suggests that climate change will render the impacts of nutrient pollution "more severe" and more likely to "occur more often in more waterbodies," with corresponding "wide ranging economic impacts." See EPA, Harmful Algal Blooms (HABs) in Water Bodies, https://www.epa.gov/habs/climate-change-and-freshwater-harmful-algal-blooms; see also Steven C. Chapra et al., Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment, 51 Env't Sci. & Tech. 8933 (2017).

²³⁰ See TDD at Tbl. 11-3 (EPA estimates that slaughterhouses generate 112,000,000 lbs./year of nutrient pollution. Option 1 would remove 16,500,000 lbs./year, Option 2 would remove 60,900,000 lbs./year, and Option 3 would remove 95,700,000 lbs./year.).

²³¹ See BCA at 3-3.

²³² See EA at 7-10 ("Over 60 million people live within one mile of stream or river potentially impacted from MPP wastewater discharge. Of this population, 1.3 million, 8.9 million, and 22.1 million people would be impacted by reduced nitrogen and phosphorus loads under proposed rule options 1 through 3, respectively.").

willingness to pay ("WTP") for them."²³³ For example, to the extent that EPA attempts to monetize benefits associated with water quality improvements, the Agency does so by calculating the "total WTP for changes in a variety of environmental services affected by water quality and valued by humans, including changes in recreational fishing opportunities, other water-based recreation, and existence services such as aquatic life, wildlife, and habitat designated uses."²³⁴ However, as Circular A-4 recognizes, EPA ignores a second, equally valid "framework[] for measuring opportunity cost": "willingness to accept ("WTA")," which "captures the notion of opportunity cost by measuring what individuals are willing to accept to forgo a particular good or service (i.e., as the seller)."²³⁵ Circular A-4 explains that "empirical evidence from experimental economics and psychology shows that . . . generally the value of WTA will be greater than or equal to the value of WTP."²³⁶ Accordingly, OMB urges agencies to discuss "the potential directional errors that may result" from adopting one heuristic over the other.²³⁷ As economist Ernie Niemi notes, "[t]his guidance is important because evaluation of an ecosystem based on WTP is limited by people's wealth: some might want to pay more to acquire a healthy ecosystem but have only a limited amount of money to pay for it."²³⁸

Nonetheless, EPA's BCA ignores Circular A-4's guidance. Even though "it would be reasonable to expect that, from a WTA perspective, the ecosystem-related benefits from more stringent water pollution control standards," including with respect to water quality improvements, will be larger than indicated by EPA's analysis, EPA presents WTP as the only valid evaluation framework. This oversight—which "significantly increases the likelihood that the BCA is biased against low-wealth individuals, families, and communities" especially significant given EPA's conclusion that MPP facility pollution disproportionately harms low-income communities. In sidelining WTA, EPA deprives decisionmakers of important information and reflects a serious bias against valuing ecosystem benefits relative to costs.

IV. <u>EPA Should Select and Strengthen Option 3 to Fulfill the Clean Water Act's Mandates.</u>

Option 3 comes closest to meeting the requirements of the Clean Water Act, but the proposal falls short of compliance with the Act in several critical ways. EPA must strengthen – not weaken – Option 3. First, EPA identified the correct treatment train as the bases for BAT to remove TN and TP from direct dischargers, but EPA has not demonstrated that the proposed effluent limits reflect BAT. Second, EPA identified the correct treatment train as the bases for PSES/BAT to remove TN and TP from indirect dischargers, but EPA has not demonstrated that the proposed effluent limits reflect BAT. Third, EPA must revise ammonia (as N) ELGs to reflect

²³³ Niemi Report at 13, Ex. 8.

²³⁴ BCA at 4-2.

²³⁵ Circular A-4.

²³⁶ *Id*.

²³⁷ *Id*.

²³⁸ Niemi Report at 14, Ex. 8.

 $^{^{239}}$ Id

²⁴⁰ Proposed Rule at 4513.

BAT and set ammonia (as N) pretreatment standards if EPA concludes that this pollution passes through POTWs. Fourth, Option 3 BAT costs are economically achievable. Fifth, EPA failed to evaluate whether more stringent ELGs and pretreatment standards are required to control BOD and TSS from MPP facilities. Sixth, EPA should not set conditional TN and TP limits for indirect dischargers. Seventh, EPA has failed to demonstrate how the production based applicability exemptions comply with CWA requirements.

A. BAT for TN and TP is Biological Treatment with Full Denitrification, Chemical Precipitation, and Tertiary Treatment, But EPA Has Not Demonstrated that the Proposed Effluent Limits Reflect BAT.

Under all options, EPA identified the correct treatment technologies as the bases for BAT to remove TN and TP from direct discharging MPP facilities: biological treatment with full denitrification, chemical precipitation, and tertiary treatment. These treatment technologies are technologically available and economically achievable, and the non-water quality environmental impacts are acceptable for direct dischargers. However, EPA has set the effluent limits too high because the best-performing facilities using the BAT treatment train achieve far better TN and TP removal than EPA's proposal.

1. EPA identified the correct treatment train as the basis for BAT to remove TN.

EPA identified biological treatment to achieve full denitrification as the basis for BAT to remove TN.²⁴¹ This treatment technology is available and economically achievable. See Section IV.D for a discussion of economic achievability.

EPA correctly concludes that the treatment technologies selected as the basis for BAT "are 'available' within the meaning of the statute." The technologies "are currently in use by MPP facilities across the sector" and are "widely used in municipal wastewater treatment in the U.S. and around the world." MPP facilities, across subcategories, representing the "best-performing plant[s]" in terms of TN removal are using this treatment technology. EPA has identified 14 facilities using enhanced nitrogen removal technologies . . . in both meat and poultry processing and rendering." ²⁴⁵

²⁴⁴ See CEA Engineers, P.C., Technical Memorandum Re: Clean Water Act Effluent Limitations Guidelines for the Meat and Poultry Products Point Source Category – 2024 Proposed Rule (Mar. 22, 2024) [hereinafter "CEA Engineers Report"]; see also Sw. Elec. Power Co., 920 F.3d at 1006 (citing Chem. Mfrs. Ass'n, 870 F.2d at 226). Attached as Ex. 10.

²⁴¹ *See* Proposed Rule at 4486. EPA also refers to this treatment train as "Direct Wastewater Treatment Technology System Targeting Phosphorus and Full Denitrification (P with Full N Treatment for Direct Dischargers). *See* TDD.

²⁴² Proposed Rule at 4490.

²⁴³ *Id*.

²⁴⁵ Proposed Rule at 4490.

From a technological standpoint, all components of the BAT treatment train to control TN are commonly available for procurement, installation, and use at MPP facilities. All direct and indirect MPP facilities – regardless of age, process type, and production rate – are capable of procuring and operating all components of this BAT treatment train. Thus, biological treatment to achieve full denitrification is technologically available.

2. EPA identified the correct treatment train as the basis for BAT to remove TP.

EPA identified biological treatment, chemical precipitation, and tertiary filtration as the basis for BAT to remove TP.²⁴⁹ This treatment technology is available and economically achievable. See section IV.D for a discussion of economic achievability.

As EPA correctly finds, the treatment technology selected as the basis for BAT "are 'available' within the meaning of the statute." EPA states the technologies are "are currently in use by MPP facilities across the sector" and are "widely used in municipal wastewater treatment in the U.S. and around the world." EPA has identified . . . 22 [facilities] using phosphorus removal technologies in both meat and poultry processing and rendering." The MPP facilities that represent the "best-performing plant[s]" in terms of TP removal are using this treatment technology. ²⁵³

From a technological standpoint, all components of the BAT treatment train to control TP are commonly available for procurement, installation, and use at MPP facilities. ²⁵⁴ All direct and indirect MPP facilities – regardless of age, process type, and production rate – are capable of procuring and operating all components of this BAT treatment train. ²⁵⁵ Thus, biological treatment, chemical precipitation, and tertiary filtration to control TP pollution is technologically available. ²⁵⁶

²⁴⁶ See CEA Engineers Report at 9, Ex. 10.

²⁴⁷ *Id*.

²⁴⁸ *Id*.

²⁴⁹ See Proposed Rule at 4487. EPA also refers to this treatment train as "Direct Wastewater Treatment Technology System Targeting Phosphorus and Full Denitrification (P with Full N Treatment for Direct Dischargers); see also TDD at 77–78.

²⁵⁰ Proposed Rule at 4490.

²⁵¹ *Id*.

²⁵² I.A

²⁵³ See Sw. Elec. Power Co., 920 F.3d at 1006 (citing Chem. Mfrs. Ass'n, 870 F.2d at 226).

²⁵⁴ See CEA Engineers Report at 9, Ex. 10.

²⁵⁵ *Id*.

²⁵⁶ *Id*.

3. The other BAT factors do not alter the conclusion that BAT should be based on the treatment trains EPA selected for TN and TP.

In addition to technological availability and economic achievability, the additional factors that EPA must consider in setting ELGs based on BAT do not alter the conclusion that EPA properly selected biological treatment to achieve full denitrification, chemical precipitation, and tertiary filtration as the bases for TN and TP limitations. EPA must set BAT based on a number of technology-related factors. EPA developed the TN and TP limits in part based on site visits to MPP facilities with these BAT technologies in place. In selecting facilities for site visits, EPA considered many of the statutory BAT factors, including facility process time, age, size, processes employed, and pollution prevention techniques used. Under the process and upgrades, wastewater treatment operations, water usage, and waste management operations. See section IV.D for discussion of EPA's cost evaluation. See sections III.A, III.C. and IX for a discussion of EPA's consideration of non-water quality environmental impacts.

4. EPA has not proposed effluent limits for TN and TP that reflect the BAT treatment train.

EPA proposes TN and TP ELGs that do not reflect BAT. "In setting BAT, EPA uses not the average plant, but the *optimally operating* plant, the pilot plant which acts as a beacon to show what is possible." Limits may be economically and technologically achievable even where "no plant has been shown to be able to meet all of the limitations" for a given sector. Here, EPA relied on data from plants that are not top performers—much less the single best performer—and are not optimally operating biological treatment with full denitrification, chemical precipitation, and tertiary treatment. The best performers in the MPP industry using the proposed BAT treatment train are achieving far better TN and TP removal than EPA's proposed ELGs.

²⁵⁷ 33 U.S.C § 1314(b)(2)(B) (including "the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate"). .

²⁵⁸ See Proposed Rule at 4514, 4485–86.

²⁵⁹ See TDD at 33 ("One way the EPA may take these [BAT] factors into account, where appropriate, is by dividing a point source category into groupings called 'subcategories.' Regulating an industry with subcategories, where determined to be warranted, ensures that each subcategory has a uniform set of ELGs that consider technological availability, economic achievability, and other relevant factors unique to that subcategory.")
²⁶⁰ Id.

²⁶¹ *Kennecott*, 780 F.2d at 448 (emphasis added) (citing A Legislative History of the Water Pollution Control Act Amendments of 1972, 93d Cong., 1st Sess. (Comm. Print 1973), at 798).

²⁶² Chem. Mfrs. Assn. v. EPA, 885 F.2d 253, 264 (5th Cir. 1989).

a. EPA used TN and TP sampling data from poor and average performing plants to calculate the TN and TP ELGs.

To develop effluent limitations for TN and TP, EPA relied on a statistical analysis that EPA explains is intended to "account for variation in treatment performance of the model technology." ²⁶³ EPA identified plants that are using the proposed BAT treatment train for TN and TP ("BAT candidates") and developed a data set that included effluent data from DMRs, EPA sampling data, data from state agencies, and industry data. ²⁶⁴ Among other criteria, ²⁶⁵ EPA states that it selects data that "demonstrate[s] consistently diligent and optimal operation" of the BAT technologies ²⁶⁶ and removes data where facilities have "not optimized the performance of its treatment system to the degree that represents [BAT]." ²⁶⁷ Further, EPA states that it excludes data from upsets and may exclude other "outliers that reflect poor performance[.]" ²⁶⁸ Historically, EPA has not "account[ed] for fluctuations resulting from operational failures [because] *plants with operating problems do not represent the Act's goal of Best Available Technology*." ²⁶⁹

To calculate the monthly average maximum and daily maximum TN and TP limits, EPA first calculates the long-term average ("LTA") effluent values and variability factor ("VF") for each BAT candidate. PPA describes the LTA, the geometric mean of the daily concentration values, as the "average performance level . . . that a facility with well-designed and operated model technologies (which reflect the appropriate level of control) is capable of achieving." PPA sets the LTA such that "all facilities subject to the limitations will design and operate their treatment systems to achieve the LTA performance level on a consistent basis because facilities with well-designed and operated BAT . . . technologies have demonstrated that this can be done." Next, EPA uses percentiles "to accommodate reasonably anticipated variability within the control of the facility while also reflecting a level of performance consistent with the CWA requirement that these effluent limitations be based on the 'best' available technologies." The

²⁶³ Proposed Rule at 4514.

²⁶⁴ *Id*.

²⁶⁵ EPA also reviews data to ensure that: the influent and effluent data represent typical wastewater from the industry; pollutants are present in sufficient concentrations to evaluate treatment effectiveness; and "data are valid and appropriate for their intended use[.]" *Id.* at 4514-4515.

²⁶⁶ *Id.* at 4514. "Application of this criterion typically eliminates any facility with treatment other than the candidate technology. EPA generally determines whether a facility meets this criterion based upon site visits, discussions with facility management, and/or comparison to the characteristics, operation, and performance of treatment systems at other facilities. EPA often contacts facilities to determine whether data submitted were representative of normal operating conditions for the facility and equipment." *Id.* ²⁶⁷ *Id.* at 4514.

²⁶⁸ *Id.* at 4515.

²⁶⁹ *Kennecott*, 780 F.2d at 450–51 (citing *FMC Corp. v. Train*, 539 F.2d 973, 986 (4th Cir. 1976)) (emphasis added).

²⁷⁰ See TDD at 126–128.

²⁷¹ Proposed Rule at 4514.

²⁷² *Id.*(emphasis added).

²⁷³ *Id*.

daily maximum limitation is an estimate of the 99th percentile of the distribution of the daily measurements", and the 95th percentile is calculated to establish the maximum monthly average. ²⁷⁴ Lastly, EPA calculates VFs using the facility's LTA and percentiles to account for "normal fluctuation in a facility's treatment" or, in other words, "reasonable excursions above the LTA[.]" In fact, "EPA's use of VFs results in limitations that are generally well above the actual LTA." To calculate the daily and monthly VF, EPA divides the percentiles by the LTA. ²⁷⁷ EPA then adds up all of the LTAs and all of the VFs and calculates their median values. ²⁷⁸ As the final step, the median LTA is multiplied by the median VF to calculate the limits. ²⁷⁹

As a preliminary matter, EPA's statistical analysis does not, by definition, base ELGs on the single best performer and optimally operating plant. ²⁸⁰ EPA chose 12 BAT candidates for TN and 19 BAT candidates for TP, calculating a median LTA from all facilities for each pollutant to serve as the basis for BAT. ²⁸¹ However, BAT is the single best performing plant and not the average of a group of plants operating across the spectrum of performance. ²⁸² EPA states that the statistical methodology used in the proposal "is well established and has been upheld by courts," pointing to *Chemical Manufacturers Association v. EPA*. ²⁸³ However, the issue before the court in that case was whether it was within EPA's discretion to calculate variability factors from less than 100% of the data by excluding daily data representing 1% highest discharges and monthly data representing 5% highest discharges in developing BAT limits. ²⁸⁴ The court did not consider whether EPA's inclusion of multiple plants achieving variable levels of performance in its statistical analysis was consistent with the CWA's mandate to set BAT based on the single best performing plant. ²⁸⁵

Here, EPA strays even further from the CWA by including data from poor performers in its statistical analysis, which is not allowed under the statute. ²⁸⁶ The decision in the *Chemical Manufacturers Association* case does not hold otherwise. ²⁸⁷ In that case, EPA carefully ensured "that only data representing BAT-level design and operation were retained for purposes of developing limitations" and, to that end, "edited from the data base the entire data sets from

²⁷⁴ TDD at 128.

²⁷⁵ Proposed Rule at 4514 (EPA considers "all components of variability including process and wastewater generation, sample collection, shipping, storage, and analytical variability").

²⁷⁶ *Id.* (emphasis added).

²⁷⁷ See TDD at 128.

²⁷⁸ *Id.* at 129.

²⁷⁹ *Id*.

²⁸⁰ *Id.* at 123–129; see also CEA Engineers Report at 14, Ex. 10.

²⁸¹ TDD at 156–157.

²⁸² See Kennecott, 780 F.2d at 450–51.

²⁸³ Proposed Rule at 4514 (citing *Chem. Mfrs. Assn. v. EPA*, 885 F.2d 253 (5th Cir. 1989)).

²⁸⁴ See Chem. Mfrs. Assn., 885 F.2d at 263.

²⁸⁵ *Id*.

²⁸⁶ See Kennecott, 780 F.2d at 450–51.

²⁸⁷ Chem. Mfrs. Assn., 885 F.2d at 263.

plants that generally failed to conform to BAT standards[.]" EPA recognized that "even well-operated plants occasionally will experience quality-control problems[,]" and even so, EPA excluded data points that represented "the most extreme departures from normal operation[,]" with the assumption that such data represented problems that "either were unlikely to recur or might be overcome by more efficient operation[.]" There, "EPA identified specific quality-control measures that could be used to reduce the extreme variability reported by some of the data base plants." EPA has previously contended that "[t]he purpose of these variability factors is to account for the routine fluctuations that occur in plant operation, not to allow for poor performance." As such, EPA has historically opposed including in its calculations data "that EPA terms as 'aberrations' reporting errors or results achieved by an upset in the treatment facility caused by improper operation."

Yet EPA included data from poor performing facilities in both its TN and TP calculations. ²⁹³ Of the 12 BAT candidates, two of the Facility LTAs were approximately 20 mg N/l and one was nearly 80 mg N/l. ²⁹⁴ The next worst performing BAT candidate had an LTA of 7.53 mg N/l, and the LTA for the best performing plant was 1.44 mg N/l. ²⁹⁵ If EPA were to exclude even just the worst three performers that were clearly not performing consistent with the best performers, EPA's median Facility LTA would be approximately 5.11 mg N/l. ²⁹⁶ This revised LTA is approximately 21% less than EPA's median LTA of 6.5 mg N/l and would result in a TN ELG that is 21% lower than EPA's proposal. ²⁹⁷ For context, a direct discharging facility with flows of 1 million gallons per day would discharge 630 more pounds of TN each month under EPA's proposed limits compared to limits that excluded data from the worst performers. ²⁹⁸

For TP, EPA identified 19 BAT Candidates with Facility LTAs ranging between 0.06 mg P/l and 4.14 mg P/l.²⁹⁹ If EPA would have excluded the top 6 worst performers who were clearly not performing consistent with the best performers, the median Facility LTA would be 0.245 mg P/l, which is 34% lower than EPA's median Facility LTA of 0.373 mg P/l.³⁰⁰ For context, a direct discharging facility with flows of 1 million gallons per day would discharge 70 more pounds of

²⁸⁸ *Id.* at 263.

²⁸⁹ *Id*.

²⁹⁰ *Id*.

²⁹¹ FMC Corp., 539 F.2d at 986.

 $^{^{292}}$ Id

²⁹³ CEA Engineers Report at 14–15; see id. at 16–22, Ex. 10.

²⁹⁴ See TDD at 156.

²⁹⁵ *Id*.

²⁹⁶ CEA Engineers Report at 14, Ex. 10.

²⁹⁷ *Id*.

²⁹⁸ *Id.* at 15.

²⁹⁹ See TDD at 157.

³⁰⁰ *Id*.

TP each month under EPA's proposed limits compared to limits that excluded data from the worst performers. ³⁰¹

EPA even acknowledges that it included data from poor performers in its statistical analysis. ³⁰² EPA states:

the data sets used to calculate effluent limitations still retain some observations that likely reflect periods of less-than-optimal performance or periods where the facility was targeting less than optimal effluent quality (e.g., only limitations identified in an individual permit as opposed to the best effluent quality possible). The EPA retained these data in developing the limitations because they help to characterize the variability in treatment system effluent. 303

EPA seems to be confusing variability within a single plant, which EPA accounts for using the VF, with performance variability between multiple plants, which is not consistent with the CWA. BAT is based on the single best plant and not an average of a group of plants operating across the spectrum of performance. In short, while it may be reasonable to account for "the variability one would expect in an optimally operating plant" using the BAT treatment technologies, it is not reasonable or allowed under the CWA to include data from poor performers in setting BAT. So

b. Best performers achieve far greater TN removal than EPA's proposed TN ELG.

Numerous plants using biological treatment with full denitrification achieve average TN levels far below EPA's proposed 12 mg/l monthly average and 20 mg/l daily maximum limits. Based on a review of monthly average TN concentrations achieved by EPA's BAT Candidates for TN between 2021 and 2023, the median monthly average of the single best performing plant (NPDES Permit No. PA011159) was 2.1 mg/l. Mpplying EPA's methodology for calculating a VF based on the 95th and 99th percentiles for the single best performing plant, the monthly average limit would 4.55 mg N/l and the daily maximum limit would be 5.95 mg N/l. Mpplying Single Sin

Table X: Comparison of EPA Proposed and Single Best Performing and Operating MPP Wastewater Treatment Plant ELGs/Pretreatment Standards³⁰⁹

³⁰¹ See CEA Engineers Report at 15, Ex. 10.

³⁰² See TDD at 127–128.

 $^{^{303}}$ *Id*.

³⁰⁴ See Kennecott, 780 F.2d at 450–51.

³⁰⁵ *Id*.

³⁰⁶ *Id*.

³⁰⁷ See CEA Engineers Report at 17, Ex. 10.

³⁰⁸ *Id.* at 18.

³⁰⁹ *Id.* at 20, Tbl 3.

EPA Monthly Average ELG/PS (mg/l)	Best Performer Monthly Average ELG/PS (mg/l)	EPA % Greater	Increased Annual Load Removal at Best Performer	EPA Daily Max ELG/PS (mg/l)	Best Performer Daily Max ELG/PS (mg/l)	EPA % Greater
12	4.55	164%	62%	20	5.95	236%

Further, eleven facilities that EPA identified as BAT Candidates for TN, as well as two additional MPP facilities beyond EPA's Candidate list, achieved average monthly TN concentrations below 12 mg/l, based on Commenters' review of 2021 discharge monitoring data. More recent 2023 data show at least three MPP facilities achieving average monthly TN concentrations below 12 mg/l, Ex. 11-A. 311

In addition, facilities throughout the wastewater treatment industry typically comply with nitrogen limits well below EPA's proposal. Wastewater treatment facilities commonly remove inorganic nitrogen using activated sludge processes designed for full denitrification to comply with limits between 1 mg N/l and 2 mg N/l, 312 and achieve ammonia (as N) effluent concentrations below 1 mg N/l. 313 Biological nitrogen removal processes, including the Modified Ludzack-Ettinger process and additional treatment in the Bardenpho process, are widely used to achieve effluent nitrogen concentrations ranging from 8 mg N/l to below 3 mg N/l. 314 Effluent concentrations of 3 mg N/l or lower are also commonly achieved using advanced activated sludge processes, "especially when combined with intra or post-biological treatment filtration, such as membrane bioreactors ("MBR") or deep bed denitrification filters." Moreover, wastewater treatment facilities typically remove inorganic nitrogen using biological treatment,

³¹⁰ See EPA, Evaluation of Technology Basis and Identification of BAT Facilities - DCN MP00304; Analysis of EPA ICIS-NPDES database, see Appendix X, MPP Facilities That Achieved Average Total Nitrogen Concentrations Below 12 mg/L in 2021 or 2023. EPA's statistical analysis used 2021 data to develop the TN ELGs.

³¹¹ Analysis of EPA ICIS-NPDES database, *see* Appendix X, MPP Facilities That Achieved Average Total Nitrogen Concentrations Below 12 mg/L in 2021 or 2023. Commenters were able to confirm more than 80 percent of outfall flow was process wastewater at all but one of these facilities. Treatment in place could not be determined for each facility as treatment data has been withheld from the docket and not all permit documents were readily available. Commenters' review of publicly available permit documents indicate the majority of facilities achieving better reductions are not land applying wastewater, though documents were not obtained for every facility (land application of waste sludge is not considered here). Some permits authorize land application but there was little indication this was happening in practice. One facility has three separate landspreading outfalls covering sludge, brine, and some process wastewater. These outfalls were not considered in this analysis.

³¹² See CEA Engineers Report at 10, Ex. 10.

³¹³ *Id*.

³¹⁴ *Id.* at 11.

³¹⁵ *Id*.

clarification and filtration processes to achieve effluent concentrations below 1.0 mg N/l particulate organic nitrogen and between 0.5 mg N/l and 1.5 mg N/l soluble organic nitrogen. 316

For all these reasons, EPA has not demonstrated that the proposed TN ELG reflects BAT. 317

c. Best performers achieve far greater TP removal than EPA's proposed TP ELG.

Numerous plants using the proposed BAT treatment train achieve average TP levels far below EPA's proposed 0.8 mg P/l monthly average and 1.5 mg P/l daily maximum limits. Based on a review of monthly average TP concentrations achieved by EPA's BAT Candidates for TP between 2021 and 2023, the median monthly average of the single best performing plant (NPDES Permit No. VA0077402) was 0.05 mg P/l.³¹⁸ Applying EPA's methodology for calculating a VF based on the 95th and 99th percentiles for the single best performing plant, the monthly average limit would be 0.15 mg P/l and the daily maximum limit would be 0.24 mg P/l.

Table X: Comparison of EPA Proposed and Single Best Performing and Operating MPP Wastewater Treatment Plant ELGs/Pretreatment Standards³¹⁹

EPA Monthly Average ELG/PS (mg/l)	Best Performer Monthly Average ELG/PS (mg/l)	EPA % Greater	Increased Annual Load Removal at Best Performer	EPA Daily Max ELG/PS (mg/l)	Best Performer Daily Max ELG/PS (mg/l)	EPA % Greater
0.8	0.15	433%	81%	1.5	0.24	525%

Further, seventeen facilities that EPA identified as BAT Candidates for TP, as well as seven additional MPP facilities beyond EPA's Candidate list, achieved average TP concentrations below 0.8 mg/l in 2021, based on Commenters' review of 2021 discharge monitoring data. More recent 2023 data show eight MPP facilities achieving average TP concentrations below 0.8 mg/l (Ex. 11). 321

³¹⁷ *Id.* at 10, 16–18.

³¹⁶ *Id.* at 10.

³¹⁸ *Id.* at 19.

³¹⁹ *Id.* at 20, Tbl 3.

³²⁰ See EPA, Evaluation of Technology Basis and Identification of BAT Facilities - DCN MP00304; see also Analysis of EPA ICIS-NPDES database MPP Facilities That Achieved Average Total Phosphorus Concentrations Below 0.8 mg/L in 2021 or 2023, attached as Ex. 11. EPA's statistical analysis used 2021 data to develop the TP ELGs

³²¹ Analysis of EPA ICIS-NPDES database, MPP Facilities That Achieved Average Total Phosphorus Concentrations Below 0.8 mg/L in 2021 or 2023, Ex. 11. Commenters were able to confirm more than 80 percent of outfall flow was process wastewater at all but one of these facilities. Treatment in place could not be determined for each facility as treatment data has been withheld from the docket and not all permit

Further, wastewater treatment facilities utilizing the BAT treatment train commonly achieve effluent TP concentrations less than 0.2 mg/l and as low as 0.01 mg/l. For all these reasons, EPA has failed to demonstrate that the proposed TP ELG reflects BAT. 323

5. EPA's application of uniform numerical TN and TP effluent limits across MPP subcategories is reasonable.

EPA's decision to apply uniform numeric effluent limits for TN and TP to most subparts³²⁴ in the MPP point source category is allowed and reasonable under the CWA.³²⁵ In developing the proposed limits, EPA combined data from different MPP processes, based on a determination that the waste streams are comparable and "the raw materials for MPP processes are animals/animal products, composed of carbon, nitrogen, and phosphorus[.]"³²⁶ EPA may reasonably find that waste streams from different sources are comparable even where some processes have waste streams with higher concentrations of pollutants.³²⁷

It is reasonable – and expected – that the basis for BAT limits does not reflect treatment technology or performance at most facilities to which the limit will apply. BAT must reflect optimal operations by the single best performer using the best available technology economically achievable, and may reflect performance levels achieved with technology used in an entirely

documents were readily available. Commenters review of publicly available permit documents indicate the majority of facilities achieving better reductions are not land applying wastewater, though documents were not obtained for every facility (land application of waste sludge is not considered here). Some permits authorize land application but there was little indication this was happening in practice. One facility has three separate landspreading outfalls covering sludge, brine, and some process wastewater. These outfalls were not considered in this analysis.

³²² See CEA Engineers Report at 10–11, Ex. 10.

³²³ *Id.* at 10, 18–20.

 $^{^{324}}$ EPA is not proposing revised ELGs for the small processor category (Subcategory E). See Proposed Rule at 4488.

³²⁵ See Kennecott, 780 F.2d at 451

³²⁶ Proposed Rule at 4515; *see id.* at 4481 ("[F]acilities across the industry generally contain the same pollutants[.]")

³²⁷ See Proposed Rule at 4481; see also Kennecott, 780 F.2d at 451 (finding EPA acted reasonably in using a data from related industries to set effluent limitations for the primary metals industries, because "there is evidence to show that the treatability of wastewater depends on the solubility of the pollutants, not on their concentrations. A difference in concentration of influents would thus not affect the concentration of effluents").

³²⁸ See Chem. Mfrs. Ass'n, 885 F.2d at 264.

³²⁹ See Kennecott, 780 F.2d at 448 (citing A Legislative History of the Water Pollution Control Act Amendments of 1972, 93d Cong., 1st Sess. (Comm. Print 1973), at 798)). "[I]n identifying model technologies, the EPA may use performance data from one part of an industry for another part of that industry if there is sufficient basis in the record to support the EPA's conclusion that the data are applicable." *Chem. Mfrs. Ass'n.*, 870 F.2d at 253 ("[F]ind[ing] sufficient basis in the record to support EPA's conclusion that the data" which did not include data from combined paint/resin plants, were applicable to those facilities).

different industry. 330 "EPA may determine the 'best' plant upon which to base BAT limitations on a pollutant-by-pollutant basis" and, as a result, it would not be unreasonable if no single plant could "meet all of the limitations[.]" Similarly, EPA may establish "uniform, national pretreatment standards . . . as the legislative history of the Clean Water Act clearly reveals that Congress intended the EPA to promulgate wastewater pretreatment standards on a nationwide basis." 332

According to EPA's own findings, "[t]he technology bases for BAT are currently in use by MPP facilities across the sector" ³³³ and "EPA has not identified any practical difference in types of treatment technologies between meat products and poultry products facilities." ³³⁴ EPA's BAT analysis identifies 3 Meat First facilities, 1 Meat Further facility, 6 Poultry First facilities, 1 Poultry Further facility, and 2 Rendering facilities as BAT Candidates for Nitrogen. ³³⁵ For Phosphorus, EPA identifies 5 Meat First facilities, 1 Meat Further facility, 10 Poultry First facilities, 1 Poultry Further facility, and 3 Rendering facilities as BAT Candidates (Table X). ³³⁶

Table X. Number of MPP Facilities with Nitrogen and/or Phosphorus BAT Treatment Technologies in Place by Type of Processing³³⁷

Type of Processing	Nitrogen	Phosphorus
Meat First	3	5
Meat Further	1	1
Poultry First	6	10
Poultry Further	1	1
Rendering	2	3

Despite some differences in wastewater composition, all facilities in these subcategories using the BAT treatment train can achieve, at a minimum, the proposed effluent limits for TN

³³⁰ See Sw. Elec. Power Co., 920 F.3d at 1006; see also Am. Paper Inst, 543 F.2d at 353. BAT may be based upon process changes or internal controls, even when these technologies are not common industry practice. See Am. Frozen Foods, 539 F.2d at 132, 140; see also Reynolds Metals Co. v. EPA, 760 F.2d 549, 562 (4th Cir. 1985); Cal. & Hawaiian Sugar Co. v. EPA, 553 F.2d 280, 285–88 (2d Cir. 1977)).

³³¹ Chem. Mfrs. Ass'n., 885 F.2d at 264 (finding "at least one plant can meet every BAT limitation"....)

³³² Cerro Copper Products Co. v. Ruckelshaus, 766 F.2d 1060, 1067 (7th Cir. 1985) (disposing of challenge that "EPA, in promulgating national wastewater pretreatment standards for facilities within the copper-forming industry, failed to adequately account for the petitioners' alleged unique situation").

³³³ Proposed Rule at 4490 ("These technologies are also widely used in municipal wastewater treatment in the U.S. and around the world. Accordingly, EPA proposes to find that such technologies are "available" within the meaning of the statute. EPA identified facilities across the different MPP processes that implement this technology.").

³³⁴ *Id.* at 4481.

³³⁵ See EPA, Evaluation of Technology Basis and Identification of BAT Facilities - DCN MP00304, at 6 to 8.

³³⁶ *Id*.

³³⁷ *Id*.

and TP.³³⁸ There are at least "14 facilities using enhanced nitrogen removal technologies and 22 using phosphorus removal technologies in both meat and poultry processing and rendering."³³⁹ Facilities in each of the above subcategories are achieving even better TN and TP removal than EPA proposes.³⁴⁰

In sum, it is reasonable for EPA to apply uniform numerical limits to the MPP industry, especially in light of record evidence showing that the best performers in multiple subcategories are achieving TN and TP removals well below EPA's proposal.

B. PSES/BAT is Biological Treatment with Full Denitrification, Chemical Precipitation, and Tertiary Treatment for TN, But EPA Has Not Demonstrated that the Proposed Effluent Limits Reflect BAT.

Under Option 3, EPA correctly proposes to establish pretreatment standards to control TN and TP pollution from MPP indirect dischargers based on BAT, as this pollution passes through POTWs. As EPA acknowledges, "[p]retreatment standards are designed to ensure that wastewaters from direct and indirect industrial dischargers are subject to similar levels of treatment[.]"³⁴¹ Congress intended that pretreatment standards, in combination with treatment by POTWs, would "achieve the level of treatment that would be required if the industrial source were making a direct discharge[.]"³⁴² In setting PSES for nonconventional pollutants, EPA "typically considers the same factors . . . as it considers in promulgating . . . BAT."³⁴³

EPA selected PSES/BAT treatment technologies for TN and TP that are technologically available and economically achievable for indirect dischargers. In fact, optimally performing facilities using the PSES/BAT treatment train are achieving much greater removal of TN and TP pollution than EPA's proposed pretreatment standards. Speculative individual facility concerns regarding space constraints do not alter the conclusion that PSES/BAT for TN and TP is biological treatment with full denitrification, chemical precipitation, and tertiary treatment.

³³⁸ See CEA Engineers Report at 7; see id. at 9, Ex. 10.

³³⁹ Proposed Rule at 4490 ("These technologies are also widely used in municipal wastewater treatment in the U.S. and around the world. Accordingly, EPA proposes to find that such technologies are "available" within the meaning of the statute. EPA identified facilities across the different MPP processes that implement this technology.").

³⁴⁰ See CEA Engineers Report at 9–10, Ex. 10; see also EPA, Pollutant Loadings and Removals Methodology for the Meat and Poultry Products Proposed Rulemaking - DCN MP00302A1, Docket ID, No. EPA-HQ-OW2021-0736-0499, at Appendix C, Table C-2.

³⁴¹ Proposed Rule at 4478 (citing 33 U.S.C. § 1311(b)).

³⁴² *Id.* (citing Conf. Rep. No. 95–830, at 87 (1977), reprinted in U.S. Congress, Senate Committee on Public Works (1978), A Legislative History of the CWA of 1977, Serial No. 95–14 at 271 (1978)). ³⁴³ *Id.* at 4479.

1. EPA correctly determined that TN and TP from MPP facilities pass through POTWs.

EPA conducted a POTW Passthrough Analysis to determine that MPP indirect dischargers must pretreat their waste to remove TN and TP before discharging to a POTW.³⁴⁴ "A pollutant is deemed to pass through a POTW when the average percentage removed by well-operated POTWs performing secondary treatment is less than the average percentage removed by direct dischargers operating the BPT/BAT technology basis." As EPA explains:

For categorical pretreatment standards, EPA's approach for passthrough satisfies two competing objectives set by Congress: (1) That standards for indirect dischargers be equivalent to standards for direct dischargers; and (2) that the treatment capability and performance of the POTWs be recognized and taken into account in regulating the discharge of pollutants from indirect dischargers[.]³⁴⁶

EPA correctly concluded that TN and TP discharged from MPP facilities passes through POTWs. 347 For TN, EPA found a POTW percent removal of 39%, compared to median BAT removals of 84.5% for Meat Processing, 90.2% for Poultry Processing, and 73.5% for rendering. 348 For TP, EPA identified a POTW percent removal of 30%, 349 compared to median BAT removals of 96.9% for Meat Processing, 95.5% for Poultry Processing, and 99.7% for Rendering. 350

Despite EPA's findings and the CWA mandate, EPA's decision not to propose pretreatment standards for TN and TP under Option 1 is unlawful under the CWA for the reasons discussed in Section III.A.

In addition to EPA's passthrough determination, most MPP Facilities are, in fact, discharging to POTWs that do not have TN and TP removal technology in place, so this harmful pollution often does not get removed from MPP wastewater before it ends up in surface waters. As early as 1977, EPA warned MPP facilities to avoid discharging to POTWs without prior treatment, because nitrogen and phosphorus in MPP facility wastewater are not susceptible to

³⁴⁴ "EPA establishes pretreatment standards for those pollutants regulated under BPT/BAT that pass through POTWs[.]" Proposed Rule at 4491.

³⁴⁵ Proposed Rule at 4478; *see* EPA, Meat and Poultry Products POTW Passthrough Analysis - DCN MP00309, Docket ID No. EPA-HQ-OW-2021-0736-0087; *see also Chem. Mfrs. Ass'n*, 870 F.2d at 244, 247 (holding EPA's pass through definition does not violate the CWA).

³⁴⁶ Proposed Rule at 4478 (citing 33 U.S.C. §§ 1311(b)(1)(A), (E)).

³⁴⁷ See EPA, Meat and Poultry Products POTW Passthrough Analysis - DCN MP00309; see also Proposed Rule at 4491 (stating the passthrough analysis "indicates that . . . TN and TP pass through POTWs").

³⁴⁸ See EPA, Meat and Poultry Products POTW Passthrough Analysis - DCN MP00309.

³⁴⁹ *Id*.

³⁵⁰ *Id*.

treatment by POTWs that do not have appropriate treatment in place to remove this pollution.³⁵¹ Over forty-six years later, EPA once again acknowledges that "many POTWs are not equipped to effectively treat all pollutants found in MPP wastewater such as nitrogen [and] phosphorus[.]"³⁵²

EPA itself has concluded that, based on a review of permits for POTWs that receive MPP wastewater, "the majority do not have limits for nitrogen or phosphorus." In 2021, EPA conducted a review of 103 POTWs receiving MPP wastewater from approximately 200 MPP facilities. Many of these POTWs were not subject to any, much less comprehensive, TN or TP limits. The 103 POTWs, only 45 held permits with limits for TN, and only 15 had limits for TP. Further, Commenters' review of 226 POTWs receiving wastewater from MPP facilities show only 20 (9 percent) had wastewater discharge permits with numerical limits for TN, and only 74 (33 percent) had numerical limits for TP, as of 2023. Without permit limits for TN and TP, "many POTWs may not be removing much of the nutrient load discharged by MPP industrial users because many POTWs do not have tertiary treatment designed to remove nutrients."

Further, MPP discharges can lead to permit violations for POTWs that do have TN or TP limits in place, and pretreatment requirements could reduce these violations. According to EPA, "MPP facilities are causing problems for POTWs that receive MPP wastewater via indirect discharges." Indeed, EPA's 2021 review of 103 POTWs "show[ed] that 73 [percent] of the POTWs receiving MPP wastewater have violation(s) of permit limits for pollutants found in MPP wastewater," from 2017 to 2020. The same review showed 40 percent and 11 percent of POTWs reported nitrogen and phosphorus exceedances, respectively, despite few permit limits in place. BPA concludes:

Although this analysis was limited by available information, this initial data collection indicates that many POTWs treating wastewater from MPP facilities have had issues meeting effluent limitations for pollutants commonly discharged by these facilities. The analysis also suggests that many POTWs may not have

³⁵¹ See EPA, Federal Guidelines: State and Local Pretreatment Programs, EPA-430/9-76-017a (1977).

³⁵² Proposed Rule at 4482.

³⁵³ *Id.* at 4480.

³⁵⁴ See EPA, Analyzing Relationships Between MPP Indirect Discharges and POTWs - DCN MP00112, Docket ID No. EPA-HQ-OW-2021-0547-0110 (Aug. 31, 2021).

³⁵⁵ *Id*.

³⁵⁶ *Id*.

³⁵⁷ See Table X below.

³⁵⁸ Proposed Rule at 4480.

³⁵⁹ See Preliminary Effluent Guidelines Program Plan 15 at 6-2.

³⁶⁰ *Id.* at 6-2; EPA, *Analyzing Relationships Between MPP Indirect Discharges and POTWs - DCN MP00112*, Docket ID No. EPA-HQ-OW-2021-0547-0110 (Aug. 31, 2021), at 11.

³⁶¹ See EPA, Analyzing Relationships Between MPP Indirect Discharges and POTWs [DCN MP00112], at 11-12.

effluent limitations for all pollutants commonly discharged by MPP facilities, suggesting that promulgating pretreatment standards may be supported. 362

Commenters' review of 226 POTWs receiving MPP wastewater, shown in Table X below, shows 81 POTWs reported nitrogen exceedances, and 27 reported TP exceedances. Of the 20 POTWs with a TN limit, 25% reported exceedances of these limits.³⁶³

³⁶² *Id.* at 12.

³⁶³ See Table X below.

Table X. Permit Requirements and Violations at 226 POTWs Receiving MPP Wastewater. 364

	Total Nitrogen	Any Nitrogen Compound*	Total Phosphorus
Monitoring Required in 2023	126 (56%)	222 (98%)	192 (85%)
Numerical Limits in Place in 2023	20 (9%)	201 (89%)	74 (33%)
Effluent Violations (Jan. 2020- Dec. 2023)**	5 (25%)	81 (40%)	27 (36%)

^{*} Reflects data for Total Nitrogen, Total Kjeldahl Nitrogen (TKN), Ammonia, Nitrate, Nitrite, Inorganic and Organic Nitrogen.

For all of these reasons, EPA must set pretreatment standards for TN and TP discharged from indirect discharging MPP facilities.

2. EPA correctly determined that biological treatment with full denitrification, chemical precipitation, and tertiary treatment is technologically available and economically achievable, but EPA has not demonstrated that the proposed effluent limits reflect PSES/BAT.

For the reasons explained in Sections IV.A.2 through IV.A.4, EPA correctly identified biological treatment to achieve full denitrification as the basis for BAT to remove TN and biological treatment, chemical precipitation, and tertiary filtration as BAT to remove TP. These treatment technologies are technologically available and economically achievable for MPP indirect discharging facilities. However, as demonstrated in Section IV.A.5, EPA's proposed TN

EPA Enforcement and Compliance History Online ICIS-NPDES DMR data downloaded March 6, 2024. *See* MPP POTW Monitoring, Limits, and Violations, for detailed data. Attached as Ex. 12.

53

^{**} Percentages reflect the percent of effluent violations at POTWs with numerical limits in place.

³⁶⁴ 754 respondents to EPA's ICR survey publicly-disclosed a POTW or PrOTW. Commenters limited their review to POTWs where questionnaire respondents provided the POTW name and permit ID in a format consistent with an EPA NPDES ID or a Texas WQ Permit ID matched by the state agency. This yielded 237 unique permit IDs, further narrowed to 226 after excluding PrOTWs, MPP facilities, data entry errors, and POTWs with no DMR data. Commenters analyzed data from ICIS-NPDES and ECHO to review effluent violations and numerical limits. See ICF, Clean Questionnaire Data - DCN MP00561; EPA, Analyzing Relationships Between MPP Indirect Discharges and POTWs [DCN MP00112], at 4–9;

and TP effluent limits are too high, and more stringent limits are compelled by the CWA and record evidence.

3. Individual facility concerns regarding potential space constraints do not alter the PSES/BAT determination under Option 3.

Industry representatives raised concerns to EPA regarding space constraints relating to installation of the BAT treatment technologies at some indirect MPP facilities located in or near urbanized areas, ³⁶⁵ as well as potential restrictions on acquisition of land. ³⁶⁶ Representatives identified concerns related to the portion of the BAT treatment train consisting of anaerobic lagoons, which are utilized to remove BOD and TSS. ³⁶⁷

EPA determined under Option 3 that the treatment technologies selected as the basis for BAT to remove TN and TP are technologically available. BPA may not alter this conclusion based on potential, facility-specific space constraints that would only be applicable to some MPP facilities. A technology is "available" if it is in use in the industry, even if only by the best-performing plant in the industry, or if it can be demonstrated to be available through pilot studies or its use in other industries. The CWA therefore does not allow EPA to consider such highly case-specific factors as part of this determination of technological achievability. The Further, these potential concerns, raised to EPA through the SBAR Final Report, are not supported by any analyses in the record.

Where potential space constraints may exist, the nature of the constrains will vary widely and can and should be evaluated on a case-by-case basis. ³⁷¹ In fact, many facilities could likely use the more compact and space-efficient treatment technologies to treat TN and TP pollution, which can be designed for use at an MPP indirect discharger to accommodate small footprints. ³⁷² As EPA correctly points out, "after the limitations and standards are established, dischargers may use any technology that meets the limitations and standards." ³⁷³ More compact treatment technologies are technologically available for MPP indirect dischargers, and are capable of

³⁶⁵ See Proposed Rule at 4493.

³⁶⁶ "Industry stakeholders have also indicated that zoning restrictions may prevent them from acquiring adjacent parcels of land that may be needed for installation of such technology." *Id.* at 4493. Even for direct dischargers, NPDES permits "do[] not convey any property rights of any sort, or any exclusive privilege." 40 CFR § 122.41(g). As such, it the responsibility of the discharging facility to secure property rights in order to ensure compliance with the CWA, and that process is separate from the implementation of national technology-based limitations.

³⁶⁷ See Proposed Rule at 4487, 4489, and 4493 and Table VII-2.

³⁶⁸ *Id.* at 4489; see also CEA Engineers Report at 9, Ex. 10.

³⁶⁹ See Chem. Mfrs. Ass'n, 870 F.2d at 226; see also Am. Petroleum Inst. v. EPA, 858 F.2d 261, 265 (5th Cir. 1988); see also Kennecott, 780 F.2d at 448.

³⁷⁰ See Chem. Mfrs. Ass'n, 870 F.2d at 226; see also Am. Petroleum Inst., 858 F.2d at 265; Kennecott, 780 F.2d at 448.

³⁷¹ See CEA Engineers Report at 32, Ex. 10.

³⁷² *Id.* at 32–33.

³⁷³ Proposed Rule at 4478.

achieving TN and TP removals in compliance with EPA's proposed limits – and even to considerably lower levels when operated optimally.³⁷⁴ Options for achieving TN removal include sequencing batch reactors (SBR), membrane bioreactors (MBR), and moving bed biofilm reactors (MBBR).³⁷⁵ MBR also achieves TP removal.³⁷⁶ MBR and MBBR technologies achieve removal of BOD and TSS pollution.³⁷⁷ DAF, which are commonly used at MPP facilities to remove BOD, TSS, O&G in conjunction with screening, also typically have a small footprint.³⁷⁸

As an example, a space-efficient approach was successfully achieved by the Draper Valley Farms ("DVF") Poultry First facility, which is an indirect discharger located in Mount Vernon, Washington – a densely-developed, urbanized area. With limited space, the DVF facility installed MBBR and an additional DAF unit to optimize configuration of the existing and new wastewater treatment facilities and achieve additional BOD and TSS removal. Numerous adjacent commercial and retail properties, roadways, and related infrastructure directly abut the facility. DVF utilized a portion of its existing truck loading/unloading area and modified trucking loading operations.

In conclusion, the treatment technologies EPA selected as the bases for BAT to control TN and TP are clearly "available" in the MPP industry, and the CWA does not permit EPA to alter this conclusion based on potential, facility-specific space constraints that would only be applicable to some MPP facilities. Individual facility concerns about potential space constraints depend on facility-specific variables and may be addressed by use of compact treatment technologies.

C. BAT for Ammonia is At Least Activated Sludge with Nitrification.

EPA must revise the ELG for ammonia (as N) to reflect BAT and set ammonia (as N) pretreatment standards if EPA concludes that this pollution passes through POTWs. The record does not demonstrate that EPA even considered whether to revise the existing ammonia (as N) ELGs, despite evidence in the record that MPP facilities achieve far better removals of the pollutant than the current ELGs. The current ELGs include limits of 4 mg/l maximum monthly average and 8 mg/l daily maximum for ammonia (as N). Leaving these outdated limits in place contravenes the intent of the CWA to strengthen limits over time as treatment technology

³⁷⁴ CEA Engineers Report at 32–33, Ex. 10.

³⁷⁵ *Id.* at 33–35.

³⁷⁶ *Id.* at 34.

³⁷⁷ *Id.* at 34–35.

³⁷⁸ *Id.* at 35.

³⁷⁹ *Id.* at 35–37.

³⁸⁰ *Id.* at 36.

³⁸¹ *Id*.

³⁸² *Id*.

³⁸³ Proposed Rule at 4476.

³⁸⁴ See e.g. 40 CFR § 432.13.

improves. "Indeed, seeking to find systems that are capable of doing better than the current standard is in keeping with the technology-forcing aspect of the CWA." 385

Evidence in the record demonstrates that the current ELGs allow the industry to discharge more ammonia (as N) pollution than achieved by the best performers.

EPA recently reviewed ammonia discharges from MPP facilities in relation to EPA's 2019 National Review of Nutrient Discharges from Industrial Sources. Based on data for 119 MPP facilities, EPA found "the median annual average . . . was approximately 0.5 m/L, which is far lower than the 4 mg/L required under the ELG regulations. Moreover, EPA observed that "[m]any [MPP] facilities had permits with water-quality-based ammonia limits more stringent than the existing 2004 MPP ELGs . . . [and] some MPP facilities are performing better than the existing 2004 ELG for nutrient discharges (nitrogen and *ammonia*)[.]" EPA itself acknowledged that "these initial results indicated that revised ELGs may be appropriate as the industry is capable of achieving effluent limitations well below the current 2004 regulations." 389

Activated sludge processes with nitrification, which is part of the proposed BAT treatment train for TN and TP, "are commonly able to remove 90% of ammonia and achieve effluent concentrations less than 1 mg N/l with technology limits of less than 0.5 mg N/l." This treatment technology is technologically available and economically achievable for direct and indirect discharging MPP facilities. ³⁹¹ Thus, EPA must update the ELG for ammonia (as N) to reflect BAT based on this technology.

In addition, EPA must conduct a pass-through analysis for ammonia based on performance of the BAT treatment train relative to removals achieved by well-operated POTWs to determine whether pretreatment standards are compelled by the CWA. ³⁹² EPA found that TN passes through POTWs, and ammonia is a component of TN, so it is highly likely that ammonia also passes through POTWs. ³⁹³ It is likely that ammonia (as N) pretreatment standards are necessary to "ensure that wastewaters from direct and indirect industrial dischargers are subject to similar levels of treatment[.]" ³⁹⁴ If EPA finds that ammonia (as N) passes through POTWs, EPA must set pretreatment standards to control this pollution as the CWA requires. ³⁹⁵

³⁹⁰ CEA Engineers Report at 10, Ex. 10.

³⁸⁵ NRDC v. EPA, 808 F.3d 556, 571 (2d Cir. 2015).

³⁸⁶ See Proposed Rule at 4480; see also EPA, National Review of Nutrient Discharges From Industrial Sources (USEPA. 2019. EPA–821–R–19–005 (2019).

³⁸⁷ Proposed Rule at 4480.

³⁸⁸ *Id.* (emphasis added).

³⁸⁹ Id

³⁹¹ *Id.*; see Section IV.A.2, IV.A.3, and IV.D.

³⁹² See 33 U.S.C. §§ 1311(b)(2)(A), 1317(b)(1).

³⁹³ CEA Engineers Report at 23, Ex. 10.

³⁹⁴ Proposed Rule at 4478 (citing 33 U.S.C. § 1311(b)).

³⁹⁵ See 33 U.S.C. §§ 1311(b)(2)(A), 1317(b)(1).

For these reasons, EPA must revise the existing ammonia (as N) ELGs to reflect BAT and must conduct a pass-through analysis to determine whether to set ammonia pretreatment standards based on record evidence and as required by the CWA.

D. Option 3 BAT Costs are "Economically Achievable"

EPA solicits comment on whether BAT costs under Option 3 are economically achievable for the industry as a whole. ³⁹⁶ Based on EPA's own financial and economic impact analyses, it is clear that the BAT technology standards in Option 3 are economically achievable for four reasons. First, less than 1% of the industry would likely face economic hardship as a result of BAT costs. Second, even looking at the aggregate costs of BPT, BCT, and BAT, 1% or fewer facilities and less than 0.5% of firms owning one or more facilities would face economic hardship. Third, the market impacts of these aggregate costs on supply, price, and employment are all minimal. In addition, the likely industry impact is even smaller than EPA estimated because EPA assumed that none of the costs would pass through to suppliers or customers and failed to account for federal financial assistance to the industry. Finally, the costs required to comply with TN and TP effluent limits that reflect BAT would be relatively minimal and would not change the overall conclusion that Option 3 is economically achievable.

Courts have interpreted economic achievability to mean that the cost of the regulations can be "reasonably borne" by the industry. Estimates of possible facility closures are the traditional way EPA considers economic achievability. The legislative history of the Act makes clear that Congress understood that the goal of eliminating all water pollution discharges would cause "some disruption in our economy," including plant closures and job losses. Recognizing Congress' judgment that "society must bear such costs as the price of achieving the long-term benefits of eliminating pollutants from our nation's waters," courts have routinely held that large economic impacts, including projected 50 percent closure rates, can be "reasonably borne" by the industry. Here, the possible facility closures of the proposed BAT limitations, along with

³⁹⁷ Chem. Mfrs. Ass'n, 870 F.2d at 262; BP Exploration & Oil, 66 F.3d 784, 799–800 (6th Cir. 1996).

³⁹⁶ See Proposed Rule at 4497.

³⁹⁸ See Proposed Rule 4497.

³⁹⁹ Chem. Mfrs. Ass'n, 870 F.2d at 262; see also Am. Iron & Steel Inst., 526 F.2d at 1051–52 ("With respect to the overall impact of the legislation, Congress clearly contemplated that cleaning up the nation's waters might necessitate the closing of some marginal plants.").

⁴⁰⁰ Chem. Mfrs. Ass'n, 870 F.2d at 262 (finding a pretreatment standard economically achievable where EPA estimated that compliance would force 14% of all indirect discharging plants to close and cause a 1.2% reduction in total industry employment and where 50% of small plants would be severely impacted); see National Ass'n of Metal Finishers, 719 F.2d at 660,66 (approving a projected 20% closure rate for the electroplating industry and the loss of more than 737 firms and 12,000 jobs); see also Am. Iron & Steel Inst., 526 F.2d at 1045 (sanctioning a 14% closure rate for integrated steel plants in the iron and steel industry); Ford Motor Co. v. EPA, 718 F.2d 55, 58 (3rd Cir. 1983) (employment disruption for an estimated 5400 persons in the metal finishing industry); Ass'n of Pacific Fisheries v. EPA, 615 F.2d 794, 808 (9th Cir. 1980) (holding a 16% plant closure rate for direct dischargers in the seafood processing industry and a closure rate of approximately 50% of plants in two of the smaller subcategories in that

the related price and employment effects, are considerably smaller than the impacts that EPA has historically considered to be economically achievable.

a. Few Facilities Would Face Economic Hardship from BAT Costs

EPA evaluated the economic achievability of BAT technology using two approaches to predict how many facilities would close or face significant financial impacts. First, EPA used a cash-flow analysis to conclude that only 29 MPP facilities—that is, 0.6% of the total 5,055 facilities across the country—face "possible closure" as a result of the costs required to achieve BAT under Option 3. 401 Second, EPA used a compliance cost-to-revenue analysis to conclude that only 38 MPP facilities—that is, 0.75% of the industry—are likely to face any economic impacts at all. 402 Both of these analyses show that the BAT costs in Option 3 would threaten very few facilities in this large industry, and that the BAT costs can be "reasonably borne" by the industry as a whole.

Few Facilities or Firms Would Face Economic Hardship from Aggregate Costs

While BAT standards should be evaluated and set based on the economic achievability of the BAT costs alone, EPA's analysis of the economic impacts of the BPT, BCT, and BAT costs combined only bolsters the argument that the costs of Option 3 are economically achievable by showing that few facilities or firms will face serious economic burdens.

At the facility level, EPA predicted that only 53 MPP facilities – that is, 1% of the total 5,055 facilities across the country – face "possible closure" based on the aggregate regulatory implementation costs of Option 3. ⁴⁰³ EPA also found that only 44 MPP facilities – that is, 0.9% of the industry – are likely to face any economic impacts at all. ⁴⁰⁴

EPA also looked at the economic impact of the regulatory options at the parent entity level, assessing the regulatory impact on entities that own one or more facilities. These results found that the impacts are even lower. Only 18 firms -0.4% out of the 4,127 total firms with MPP facilities – are likely to face any economic impact Option 3. ⁴⁰⁵ Further, only 15 out of the

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industry to be acceptable); Weyerhauser Co. v. Costle, 590 F.2d at 1047 (sanctioning the loss of 1,800 jobs or 1.5% of the total employment for the pulp and paper industry).

⁴⁰¹ Proposed Rule at 4497, Table VIII-2. Note, in the Proposed Rule, EPA reports the predicted facility closures as a percentage of the number of discharging MPP facilities (3,879) rather than the total number of MPP facilities (5,055). *Id.* This is misleading and overstates the industry impacts. *See* Jonathan S. Shefftz, JShefftz Consulting, *Memo re U.S. EPA Proposed Clean Water Act Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category*, at 9 (2024) [hereinafter "Shefftz Report"]. Attached as Ex. 13.

⁴⁰² *Id.* at 4498, Table VIII-7; *id.* at 4498 (explaining that a cost-to-revenue ratio of less than one percent suggests that a facility is "unlikely to face economic impacts").

⁴⁰³ Proposed Rule at 4499, tbl. VIII-8.

⁴⁰⁴ *Id.* at 4499, tbl. VIII-9.

⁴⁰⁵ *Id.* at 4500.

3,233 small firms – only 0.5% - are likely to face economic impact under Option 3, while 92% of small firms would face no costs at all, demonstrating that this regulatory option does not impose a significant financial burden on small firms that own MPP facilities. 406

Impacts on Supply, Price, and Employment are Minimal

Moreover, these regulatory costs will not have major effects on consumers or workers. The record shows that the overall effects on meat product supplies and prices are minimal and "are unlikely to have a noticeable effect on producer or consumer behavior," reducing meat product supply by only 0.065% 408 and increasing prices for different meat products by only 0.02% for turkey, 0.03% for beef, and 0.05% for pork and chicken. The predicted employment effects are similarly minimal, with Option 3 predicted to result in short-term losses of 4% of total industry employment and a long-term net gain of 1,603 jobs. 410

EPA Overestimated the Regulatory Costs for Industry

The industry impact reported above is even lower than EPA predicted because its economic analyses are based on substantial overestimates of the regulatory costs that MPP facilities and firms will bear under this proposed rule.

First, in the analysis reported in the Proposed Rule, EPA assumed the "worst case scenario" that industry itself will bear the full regulatory compliance costs. However, in reality, when businesses incur regulatory compliance costs, they can choose to pass a portion or all of these additional expenses to other entities in the supply chain, including suppliers and consumers. This means that the costs EPA used to calculate the number of facility closures and facilities facing economic impact reported in the Proposed Rule and discussed above were inflated. Indeed, in Chapter 8 of the RIA, EPA calculated that the worstcase scenario costs are 26.7% to 28.2% higher than the costs industry will bear factoring in cost-pass through. Based on these lower industry costs, EPA found that only 49 facilities would face closure under Option 3,413 compared to the 53 facility closures predicted in the Proposed Rule. Similarly, only 38

⁴⁰⁸ *Id.*, tbl. VIII-14.

⁴⁰⁶ *Id.* at 4501, Tbl. VIII-2.

⁴⁰⁷ *Id.* at 4502.

⁴⁰⁹ *Id.* at 4502, tbl. VIII-15.

⁴¹⁰ See RIA at 7-8, tbl. 7-7.

⁴¹¹ *Id.* at 4499; *see also* RIA 8-1.

⁴¹² Compare RIA tbl.4-1: Estimated Total Annualized After-Tax Compliance Costs (in millions, 2022\$) with Tbl. 8-3: Estimated Total Annualized After-Tax Compliance Costs with CPT (in millions, 2022\$); see Shefftz Report at 7, Ex. 13.

⁴¹³ See RIA 8-5, Table 8-6.

⁴¹⁴ See Proposed Rule at 4499, tbl. VIII-8.

facilities would likely face an economic impact based on cost-to-revenue ratio under Option 3, 415 compared to the 44 facilities reported in the Proposed Rule. 416

EPA's economic achievability analysis also failed to account for recent federal financial assistance to the Meat and Poultry Processing industry, including more than \$500 million in USDA funding through the American Rescue Plan to "support new competitive entrants in meat and poultry processing", and \$150 million to strengthen small and very small processing facilities. USDA also funds a Meat and Poultry Intermediary Lending Program to facilitate financing for projects involving the start-up, expansion, or operation of meat and poultry processers. These funding sources make the MPP industry more resilient and capable of affording these regulatory costs than EPA's revenue-based analysis suggests. EPA should account for this federal financial assistance when evaluating the industry's capability to bear the regulatory costs of this Proposed Rule.

Compliance Costs Associated with More Stringent TN and TP Limits Would Be Minimal.

The compliance cost methodology that EPA used to evaluate costs associated with the proposed TN and TP effluent limitations is adequate and consistent with prudent engineering cost estimation methodologies. 419

Moreover, the compliance costs associated with more stringent TN and TP limits that reflect performance of optimally operating plants, as discussed in Sections IV.A.5 and IV.B.2, would be minimal and achievable. EPA's own compliance cost estimate evaluated costs for Poultry First and Poultry Further facilities based on effluent monthly average TN and TP concentration of 4.23 mg N/l and 0.02 mg P/l, which are closer to levels achieved by optimal performance than EPA's proposed effluent limitations. Assuming these greater levels of TN and TP removal, EPA estimated a compliance cost of only 7% greater compared to EPA's proposed TN and TP limits.

⁴¹⁵ See RIA 8-3, Table 8-4..

⁴¹⁶ See Proposed Rule at 4499, tbl. VIII-9.

⁴¹⁷ USDA, USDA Announces \$500 Million for Expanded Meat & Poultry Processing Capacity as Part of Efforts to Increase Competition, Level the Playing Field for Family Farmers and Ranchers, and Build a Better Food System (July 9, 2021), https://www.usda.gov/media/press-releases/2021/07/09/usda-announces-500-million-expanded-meat-poultry-processing.

⁴¹⁸ See USDA, Meat and Poultry Intermediary Lending Program (2022), https://www.rd.usda.gov/sites/default/files/MPILP_FactSheet_FINAL.pdf.

⁴¹⁹ See CEA Engineers Report at 39–40, Ex. 10.

⁴²⁰ *Id.* at 21.

⁴²¹ *Id*.

⁴²² *Id*.

In addition, MPP facilities may use MBR treatment technology to achieve TN reductions far below EPA's proposal. 423 Typically, capital and operating costs associated with MBR systems can be higher than conventional activated sludge systems. 424 However, EPA's own comparison of compliance costs demonstrates that additional annualized costs associated with MBR are relatively minimal compared to the BAT treatment train, at 12% higher. 425 In fact, EPA acknowledges that compliance costs associated with MBR may actually be approximately equivalent or lower than the BAT treatment train, depending facility-specific considerations. 426 Therefore, the costs required to comply with TN and TP effluent limits that reflect BAT would be relatively minimal and achievable for the MPP industry. 427

In summary, EPA's own analysis from the facility to the market level shows that the economic impacts of Option 3 are minimal. These impacts would be even smaller if EPA were to properly account for cost pass-through and federal financial assistance available for the MPP industry. The costs associated with the more stringent TN and TP effluent limits that reflect BAT would be relatively minimal and would not substantially change EPA's economic analysis. Thus, Option 3 is economically achievable.

- E. EPA Failed to Evaluate Whether More Stringent ELGs and Pretreatment Standards are Required for TSS and BOD from Direct and Indirect Discharging MPP Facilities.
 - 1. The CWA requires ELGs and pretreatment standards to control conventional pollutants based on BCT.

For all conventional pollutants discharged from all categories and classes of point sources, EPA must establish ELGs, as well as pretreatment limits to control pollutants that pass through or interfere with POTWs. 428 Conventional pollutants include oil & grease, BOD, TSS, fecal coliform, and pH. 429 To control conventional pollutants, the CWA directs EPA to set increasingly stringent limits based on BPT and BCT.

The 1972 amendments to the CWA directed EPA to establish initial limits that reflect BPT, based on a number of statutory factors. 430 BPT reflects "the 'average of the best'

⁴²⁵ *Id*.

⁴²³ *Id.* at 22.

⁴²⁴ *Id*.

⁴²⁶ *Id*.

⁴²⁷ *Id.* at 21.

⁴²⁸ See 33 U.S.C. §§ 1311(b)(2)(A), (E), (F); see id. at §§ 1317(a)(1)-(2), (b)(1); 40 C.F.R. § 125.3(a). In limited circumstances that are not present here, EPA may "defer[] a nationwide effluent guideline and allow[] a case-by-case determination of BAT by permitting authorities." Sw. Elec. Power Co., 920 F.3d 999, 1021 (5th Cir. 2019); see Nat'l Wildlife Fed'n v. EPA, 286 F.3d 554, 566-67 (D.C. Cir. 2002). ⁴²⁹ See 33 U.S.C. 1314(a)(4)). The Administrator designated oil & grease as an additional conventional

pollutant. See 40 CFR § 401.16.

⁴³⁰ See 33 U.S.C. §§ 1311(b)(1)(A)–(B) ("the cost of achieving effluent reductions in relation to the effluent reduction benefits, the age of equipment and facilities, the processes employed, the engineering

performers in the industry."⁴³¹ Notably, "[t]his average is not based upon a broad range of plants within an industrial category or subcategory, but is based upon performance levels achieved by *exemplary plants*."⁴³² "If, however, existing performance is uniformly inadequate, EPA may establish limitations based on higher levels of control than what is currently in place in an industrial category, based on an Agency determination that the technology is available in another category or subcategory and can be practicably applied."⁴³³

Section 301(b)(2)(E) of the CWA, however, directs EPA to set increasingly more stringent limits for conventional pollutants that reflect BCT, based on number of statutory factors. 434 "BCT provisions were intended to establish an *intermediate* level between BPT and the stricter BAT limitations for conventional pollutants by adding a cost-effectiveness test for incremental technology requirements that exceed BPT technology."435 EPA has stated that "BCT . . . replaces BAT for the control of conventional pollutants."436 BCT may be "the equivalent of [BPT] or something a little bit better, even as far as [BAT] in some circumstances."437

In setting ELGs and pretreatment standards based on BCT, in addition to the statutory factors under Section 304(b)(4)(B), EPA must also consider:

the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharge from publicly

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aspects of the control technologies, process changes, non-water quality environmental impacts (including energy requirements), and such other factors as the Administrator deems appropriate").

⁴³¹ Chem. Mfrs. Ass'n, 870 F.2d at 20–08. "Traditionally, as is consistent with the statute, its legislative history and caselaw, EPA defines 'currently available' based on the average of the best performance of facilities within the industry, grouped to reflect various ages, sizes, processes, or other common characteristics." Proposed Rule at 4479 (citing Chem. Mfs. Ass'n, 870 F.2d at 207–08).

⁴³² Nat'l Crushed Stone Ass'n, 449 U.S. at 76 n. 15 (emphasis added) (citing 39 Fed. Reg. 6580 (1974); see EPA, Effluent Guidelines Div., Development Document for Mineral Mining and Processing Point Source Category 409 (1979); Leg. Hist. 169-170 (remarks of Sen. Muskie)).

⁴³³ Proposed Rule at 4479.

⁴³⁴ See 33 U.S.C. §1311(b)(2)(E); see also id. at § 1314(b)(4)(B) ("the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate").

⁴³⁵ Chem. Mfrs. Ass'n, 870 F.2d at 205, 207 (emphasis added).

⁴³⁶ Oil and Gas Extraction Point Source Category; Offshore Subcategory Effluent Limitations Guidelines and New Source Performance Standards, 58 Fed. Reg. 12454, 12456 (1993).

⁴³⁷ Am. Paper Inst., at 954, 957 (citing 123 Cong. Rec. H12, 944 (daily ed. Dec. 15, 1977) (remarks of Rep. Johnson)). ⁴³⁸ 33 U.S.C. § 1314(b)(4)(B). EPA considers the same factors in setting pretreatment limits based on BCT as it considers when setting ELGs based on BCT. See Proposed Rule at 4495 (evaluating reasonableness of BCT candidate treatment technology for indirect dischargers).

owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources[.]⁴³⁸

In light of that obligation, EPA conducts a two-part "cost-reasonableness" test that consists of a POTW test and an industry cost-effectiveness test (i.e. the "BCT cost test"). As Passing the BCT cost test "is all that is statutorily required" to limit conventional pollutants based on treatment technology or operations more stringent than BPT. The POTW test calculates "the cost per pound of conventional pollutant removed by industrial dischargers in upgrading from BPT to the candidate BCT." The POTW test is passed when this cost is less than EPA's benchmarks, which represent "the cost per pound of conventional pollutant removed in upgrading POTWs from secondary treatment to advanced secondary treatment." Under the industry cost-effectiveness test, EPA divides "the cost per pound removed by the BCT candidate technology relative to BPT . . . [by] the cost per pound removed by BPT relative to no treatment." This ratio must be less than the applicable benchmark, which represents "the cost per pound to upgrade a POTW from secondary treatment to advanced secondary treatment . . . divided by the cost per pound to initially achieve secondary treatment from raw wasteload."

2. As a preliminary matter, BPT costs are not wholly disproportionate to the effluent reduction benefits.

To establish BPT, EPA must consider "the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application." The legislative history behind this provision provides that "[t]he balancing test between total costs and effluent reduction benefits is intended to limit the application of technology only where the additional degree of effluent reduction is wholly out of proportion to the costs of achieving such marginal level of reduction for any class or category of sources." Based on this legislative history, courts have held that EPA must apply BPT controls unless costs are "wholly disproportionate" to the effluent reduction benefits. ⁴⁴⁶ Courts have repeatedly held that BPT

⁴³⁸ 33 U.S.C. § 1314(b)(4)(B). EPA considers the same factors in setting pretreatment limits based on BCT as it considers when setting ELGs based on BCT. *See* Proposed Rule at 4495 (evaluating reasonableness of BCT candidate treatment technology for indirect dischargers).

⁴³⁹ See 51 Fed. Reg 24974 (July 9, 1986) (explaining EPA's methodology for development of BCT limitations).

⁴⁴⁰ BP Expl. & Oil, Inc. (93-3310) v. EPA, 66 F.3d 784, 803 (6th Cir. 1995) ("As for BCT, EPA maintains that zero discharge passes the BCT cost test, which is all that is statutorily required.").

⁴⁴¹ 51 Fed. Reg. at 24974.

⁴⁴² *Id*.

⁴⁴³ *Id.* at 24976.

⁴⁴⁴ *Id*.

⁴⁴⁵ 33 U.S.C. § 1314(b)(1).

⁴⁴⁶ Chem. Mfrs. Ass'n, 870 F.2d at 204, 205; see Kennecott Copper v. EPA, 612 F.2d 1232, 1238 (10th Cir. 1979); see also Am. Frozen Food v. Train, 539 F.2d 107, 117, 119 (D.C. Cir. 1976).

costs close to \$1 per pound of pollution reduction were not "wholly disproportionate." Here, EPA finds that the cost per pound of conventional pollution reduction for Option 3 is only \$0.14. Here, Thus, the BPT costs of conventional pollutant reductions under Option 3 are not wholly disproportionate to the effluent reduction benefits.

3. EPA must evaluate whether it is appropriate to revise ELGs for BOD and TSS from direct dischargers.

The CWA requires EPA to review and, if appropriate, revise effluent limitations at least once every five years. 449 The record does not demonstrate that EPA evaluated, under any of the regulatory options, whether revisions to the ELGs for conventional pollutants are appropriate to reflect BCT or even BPT. Instead, EPA would leave in place the current ELGs based on BPT that EPA promulgated in the mid-1970's for most facilities, and nearly two decades ago for Poultry First and Poultry Further facilities. 450 Yet these technology-based standards are not static and change over time to reflect improvements in technology and operations. 451

EPA has not evaluated whether the decades-old BPT determinations for this industry must, in fact, be revised to reflect BPT in 2024. In other words, it is not clear that the BPT limits reflect BOD and TSS removal that reflect treatment technology and "performance levels achieved by exemplary plants." Instead, EPA continues to rely on a technological analysis conducted in 2004, which set limits based on biological treatment, nitrification, and disinfection for Poultry First and Poultry Further facilities, and left BPT limits in place from the mid-1970's for all other subcategories. EPA must evaluate whether BPT has improved based advances in treatment technology and on current industry performance and conclude whether revisions are appropriate as the CWA requires.

⁴⁴⁷ *Chem. Mfrs. Ass'n*, 870 F.2d at 204 (finding costs of 71 cents per pound of pollution reduction were not "wholly disproportionate"); *see Rybachek v. EPA*, 904 F.2d 1276, 1290 (9th Cir. 1990) (upholding EPA's determination of BPT where the removal cost was less than \$1 per pound of pollution). Note, when the costs in these case cases are adjusted based on inflation to 2024 dollars, they are \$1.42 and \$1.86 respectively. *See* Shefftz Report at 11, Ex. 13.

⁴⁴⁸ See Proposed Rule at 4496, tbl. VIII-1.

⁴⁴⁹ See 33 U.S.C. § 1311(d).

⁴⁵⁰ See Effluent Limitations Guidelines and New Source Performance Standards for the Meat and Poultry Products Point Source Category, 69 Fed. Reg. 54476 (Oct. 8, 2004); see EPA, Technical Development Document for the Final Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, at 1-4 to 1-5, 13-7 to 13-43 [DCN MP00200], Docket ID No. EPA-HQ-OW2021-0736-0048 (Jul. 1, 2004) [hereinafter "2004 TDD"].

⁴⁵¹ See NRDC. v. EPA, 822 F.2d 104, 124 (D.C. Cir. 1987) ("As technology advances, EPA is instructed to revise its regulations at least annually, if necessary, and to revise effluent limitations every five years to reflect progress toward the goal of eliminating pollution.") (citing 33 U.S.C. §§ 1311(d), 1314(b)).

⁴⁵² See Nat'l Crushed Stone Ass'n, 449 U.S. at 76 n. 15.

⁴⁵³ See 2004 TDD at 1-4 to 1-5, 13-7 to 13-43.

⁴⁵⁴ See 33 U.S.C. § 1311(d); see also NRDC, 822 F.2d at 124.

EPA also failed to consider revisions to BOD and TSS limits for direct dischargers based on a more stringent BCT treatment, and the record lacks any explanation for EPA's failure to do so. 455 The proposed BAT treatment train for TN and TP is capable of achieving greater BOD and TSS reductions compared to the existing limits, 456 as the record clearly shows. 457 Chemical precipitation improves removal of both pollutants, tertiary filtration further reduces TSS, and anoxic zones increase BOD removal rates. 458 MPP facilities using the BAT treatment train for TN and TP are achieving far greater TSS and BOD reductions compared to the existing ELGs set at BPT. 459 EPA should have considered the BAT treatment train for TN and TP as a BCT candidate for direct dischargers.

A review of facilities that EPA identified as BAT candidates for TN and TP illustrates the capability of this treatment system in achieving far greater BOD and TSS removal than the existing limits. A60 Between 2021 and 2023, a Poultry First facility achieved a median monthly average BOD concentration of 2.0 mg/l. During the same period, four Poultry First facilities achieved median monthly average TSS concentrations of 1.5 mg/l, 1.6 mg/l, 2.3 mg/l, and 5.2 mg/l. Using the BAT treatment train for TN and TP, these facilities consistently achieved BOD and TSS levels considerably lower than the monthly average BOD limit of 16 mg/l and TSS limit of 20 mg/l applicable to Poultry First facilities.

EPA only used the BCT cost test to consider the BAT treatment train for indirect dischargers. 464 Based on evidence in the record, EPA must consider whether conventional ELG revisions are appropriate to reflect more stringent BCT based on the BAT treatment train. If the

⁴⁵⁵ See TDD at 84 ("The proposed rule would revise BPT limitations for conventional pollutants for indirect dischargers *only* and consider whether more stringent BCT limitations pass the two-part BCT cost test *for indirect dischargers.*") (emphasis added).

⁴⁵⁶ See CEA Engineers Report at 27–28, Ex. 10.

⁴⁵⁷ See Proposed Rule at 4496 (stating the BAT treatment train "can achieve greater removals of conventional pollutants than the candidate BPT standards[.]").

⁴⁵⁸ See CEA Engineers Report at 28, Ex. 10.

⁴⁵⁹ *Id.* at 27–28. The BAT treatment train for TN and TP is technologically available. *Id.* at 31. All direct discharging MPP facilities – regardless of age, process type, and production rate – are capable of procuring and operating all components of this BAT treatment train. *Id.*

⁴⁶⁰ *Id.* at 28-30. This review focused on Poultry First and Poultry Further facilities that EPA identified as MPP candidates for TN and TP. EPA set concentration-based BOD and TSS limits for these facilities in 2004, whereas all other subcategories have production-based BOD and TSS limits established in the mid-1970s. Further, EPA withheld treatment in place information in the Docket for facilities that EPA did not identify as BAT candidates for TN and TP. *See id* at 28.

⁴⁶¹ *Id.* at 28-29.

⁴⁶² *Id.* at 29.

⁴⁶³ *Id.* at 28–29.

⁴⁶⁴ See TDD at 85 ("EPA also considered establishing BCT requirements for BOD, O&G, and TSS for *indirect dischargers* based on screening/grit removal, DAF (for O&G treatment), anaerobic lagoon (for BOD pretreatment), biological treatment with activated sludge to achieve nitrification and full denitrification, chemical phosphorus removal with ferric chloride, sand filtration, and solids handling (gravity thickener, filter press, hauling/landfilling).") (emphasis added).

BAT treatment train passes the BCT cost test for direct dischargers, that "is all that is statutorily required" to set more stringent BCT limits for these pollutants. 465

In sum, the record does not demonstrate that EPA considered whether it is appropriate to revise BPT/BCT based on current performance of the BPT technology, the BAT treatment train for TN and TP, or any other treatment technologies. For these reasons, EPA must evaluate whether revision is appropriate for the outdated conventional ELGs. 466

4. EPA's proposal to set BCT equal to BPT for BOD and TSS from all indirect dischargers is not supported by the record.

Under all three regulatory options, "EPA proposes to establish BCT effluent limitations equal to the candidate BPT limitations based on screens followed with DAF for indirect dischargers[.]"⁴⁶⁷ EPA proposes to find that screening and DAF "represent the average of the best performance as they are in use by MPP facilities across the subcategories" including at 21 indirect discharging facilities "in both meat and poultry processing and rendering."⁴⁶⁸ EPA chose to set less stringent conventional pretreatment standards based on this lower level of control (screening and DAF), in part, because EPA concluded that POTWs provide some additional treatment of these pollutants. ⁴⁶⁹ EPA states:

[T]hese technologies are widely used by a variety of industrial classes and in municipal wastewater treatment for the control of conventional pollutants . . . DAF technologies have a small footprint, and EPA has no data indicating that the facilities that would be subject to pretreatment standards for conventional pollutants under the preferred Option 1 would not be able to implement DAF technologies at existing and new facilities. 470

Although EPA evaluated a treatment train with greater removal of BOD and TSS, EPA proposes to set BCT as equal to BPT.⁴⁷¹ Under the two-part BCT cost test, EPA compared the BPT technology (screening and DAF) to only one candidate BCT technology – the BAT treatment train for TN and TP.⁴⁷² This treatment technology is technologically available and economically achievable for MPP indirect discharging facilities.⁴⁷³

⁴⁶⁵ BP Expl. & Oil, Inc. (93-3310), 66 F.3d at 803.

⁴⁶⁶ See 33 U.S.C. § 1311(d).

⁴⁶⁷ Proposed Rule at 4496.

⁴⁶⁸ *Id.* at 4491. EPA finds DAF is the technology "most commonly used by MPP facilities" to remove oil & grease. *Id.*

⁴⁶⁹ *Id.* at 4496.

⁴⁷⁰ *Id.* at 4491.

⁴⁷¹ *Id.* at 4491, 4496.

⁴⁷² *Id.* at 4496 (stating the BAT treatment train "can achieve greater removals of conventional pollutants than the candidate BPT standards[.]"); *see also* TDD at 84–89, 136–138.

⁴⁷³ See CEA Engineers Report at 31, Ex. 10; see Sections IV.A.2, IV.A.3, and IV.D.

EPA misleadingly "proposes to find that [the BAT treatment train] does not pass the BCT cost test under any of the proposed options." For all subcategories under Option 1 and Option 2, the BAT treatment train passes the POTW test, but fails the industry cost test. Yet under Option 3, all subcategories passed the POTW test, and Meat First facilities (Subcategories A-D) and Renderers (Subcategory J) also passed the industry cost test – thus passing both parts of the BCT cost test. Compared to the industry cost test benchmark of 1.29, EPA calculated industry cost ratios of 0.678 for Meat First facilities and 1.27 for Renderers. Further, several results under the industry cost ratio test for multiple subcategories were close to the 1.29 industry cost benchmark under Options 2 and 3 (i.e., 1.33, 1.76, 1.82, 2.04). EPA does not explain how any of the industry cost ratios were derived, which makes it impossible for the public to evaluate these calculations.

Passing the BCT cost test "is all that is statutorily required" to set more stringent limits based on BCT. ⁴⁸⁰ Although EPA has discretion to consider other factors in setting BCT, ⁴⁸¹ EPA must explain its decision to reject more stringent limits where the BCT cost test is satisfied. ⁴⁸² At minimum, EPA should reconsider establishing more stringent BCT standards based on the BAT treatment train for Subcategories A-D and J, which pass the BCT cost test. ⁴⁸³ In the event that EPA rejects those more stringent BCT limits, EPA must explain the basis of its decision in the record. ⁴⁸⁴

Further, the record does not show that EPA evaluated other BCT candidates aside from the BAT treatment train for TN and TP. The CWA directs EPA to establish effluent limitations based on BCT, and EPA must ensure that conventional limits reflect this standard. Here, EPA has not demonstrated that it considered any BCT candidate treatment technologies or operations that achieve better removal of conventional pollution compared to DAF and screening, but with

⁴⁷⁴ Proposed Rule at 4496.

⁴⁷⁵ See TDD at 89, 138. Under Options 1 and 2, EPA found that the cost "for . . . 719 facilities to upgrade from candidate BPT to candidate BCT would range from \$0.26 to \$1.32 per pound of pollutant removed depending on the subcategory." Under Option 3, EPA found the cost for 1,485 facilities to upgrade from BPT to BCT "would range from \$0.30 to \$1.03 per pound of pollutant removed depending on the subcategory." Proposed Rule at 4496.

⁴⁷⁶ See TDD at 138; see Shefftz Report at 14, Ex. 13.

⁴⁷⁷ TDD at 138. EPA calculated industry cost ratios of 1.82 for Meat Further facilities, and 24.2 and 20.5 for Poultry First and Poultry Further Facilities, respectively. *Id*.

⁴⁷⁸ See Shefftz Report at 15, Ex. 13.

⁴⁷⁹ See TDD at 138; see also Shefftz Report at 15, Ex. 13.

⁴⁸⁰ BP Expl. & Oil, Inc. (93-3310), 66 F.3d at 803.

⁴⁸¹ See 33 U.S.C. § 1314(b)(4)(B).

⁴⁸² EPA must show that it examined "the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

⁴⁸³ See BP Expl. & Oil, Inc. (93-3310), 66 F.3d at 803.

⁴⁸⁴ See State Farm Mut. Auto. Ins. Co., 463 U.S. at 43.

⁴⁸⁵ See 33 U.S.C. §§ 1311(b)(2)(E); 1314(b)(4)(A).

lower costs than the full BAT treatment train. Yet other treatment technologies are available that EPA did not consider.

For example, some MPP facilities use metal salts to promote settling and improve TSS and BOD removal. 486 "Enhanced settling through metal salts addition can result in typical increased TSS removal rates of approximately 40% and typical increased BOD removal rates of approximately 100%. Addition of metal salts also improves removal by flotation by creating particulate flocs that become more easily entrained by DAF bubbles. 487 The use of metal salts addition to achieve greater BOD and TSS removal than the current BPT limits result in approximately \$37,000 in annual increased O&M costs and 600 hours in labor costs, a relatively minimal increase in annual compliance costs. 488 In addition, other BCT candidates may be available that could result in greater BOD and TSS removal than the BPT treatment train consisting of DAF and screening. 489

In sum, EPA must explain why it rejects a more stringent BCT standard based on the BAT treatment train for the Subcategories that pass the BCT cost test. Further, the record does not demonstrate that EPA considered any BCT candidates other than the BAT treatment train, and EPA has not explained why metal salts addition or other treatment technologies or operations that result in greater removal of BOD and TSS than the proposed BPT limits, are not BCT. For these reasons, the record does not demonstrate that EPA's decision to set BCT pretreatment standards equal to BPT is appropriate.

F. EPA Should Not Set Conditional Limits for TN and TP for Indirect Dischargers.

EPA solicits comments on exempting MPP indirect dischargers from pretreatment standards for TN and TP under Options 2 and 3. The CWA requires EPA to establish technology-based pretreatment limits to control all nonconventional and conventional pollutants discharged from all categories and classes of point sources that pass through or interfere with POTWs. ⁴⁹⁰ By mandating that EPA establish national minimum standards based on what is technologically and economically achievable, the CWA guarantees "that similar point sources with similar characteristics" will achieve similar pollution-reduction targets regardless of their location. ⁴⁹¹ Broad exemptions from pretreatment standards would cut against the intent of Congress that

⁴⁸⁶ CEA Engineers Report at 31, Ex. 10.

⁴⁸⁷ *Id*.

⁴⁸⁸ *Id*.

⁴⁸⁹ *Id.* at 31–32.

⁴⁹⁰ See 33 U.S.C. § 1317(b)(1). In limited circumstances that are not present here, EPA may "defer[] a nationwide effluent guideline and allow[] a case-by-case determination of BAT by permitting authorities." *Sw. Elec. Power Co.*, 920 F.3d 999, 1021 (5th Cir. 2019); *see Nat'l Wildlife Fed'n*, 286 F.3d at 566 (holding EPA's case-by-case approach was reasonable where "EPA found . . . that elimination of discharge is not 'technologically and economically achievable' for color pollutants as a category or class[.]"

⁴⁹¹ NRDC v. Train, 510 F.2d 692, 709–10 (D.C. Cir. 1974) (citation omitted).

pretreatment standards, in combination with any treatment by POTWs, "achieve the level of treatment that would be required if the industrial source were making a direct discharge[.]"⁴⁹²

The meat and poultry products industry is the nation's largest discharger of phosphorus pollution and second-largest discharger of nitrogen pollution,⁴⁹³ and indirect discharging MPP facilities have effectively had a free pass to pollute for decades. EPA should not finalize a broad exemption that would allow the industry to continue to discharge this pollution without technology-based controls as the CWA requires.

1. EPA should not exclude indirect dischargers from TN and TP standards using conditional limits.

EPA is considering exemptions from TN and TP pretreatment standards where a facility demonstrates that the POTW to which it discharges achieves removal equivalent to BAT. ⁴⁹⁴ EPA states that such exemptions would reduce costs to MPP indirect dischargers and eliminate redundant treatment. ⁴⁹⁵ Yet even where POTWs have nutrient controls in place, some POTWs that receive MPP wastewater struggle to comply with TN and TP limits due to the high concentrations of these pollutants in MPP wastewater. ⁴⁹⁶

In directing EPA to establish national pretreatment standards under the CWA, Congress understood that "it would be impossible to accommodate each and every facility within an industrial category." As such, "Congress expressly intended that the EPA, when establishing national wastewater pretreatment standards for the various industrial categories, not take into

⁴⁹² Proposed Rule at 4478 (citing 33 U.S.C. § 1311(b); Conf. Rep. No. 95–830, at 87 (1977), reprinted in U.S. Congress, Senate Committee on Public Works (1978), A Legislative History of the CWA of 1977, Serial No. 95–14 at 271 (1978)).

⁴⁹³ In EPA's 2019 cross-industry review of 2015 DMR and TRI data on nutrient discharges from industrial sources, "[t]he MPP industry ranked as one of the highest in the analysis for total nitrogen and total phosphorus, leading EPA to focus on this industry[.]" Proposed Rule at 4480 (citing USEPA. 2019. EPA-HQ-OW-2019-0618)). "EPA found that the MPP industry discharges the highest phosphorus levels and second highest nitrogen levels of all industrial categories." *Id.* at 4480.

⁴⁹⁴ Proposed Rule at 4487, 4493–94. EPA received a recommendation from the SBAR Panel Report to consider such exemptions, under which, provided "documentation and approval by the POTW/control authority, and public posting of this information, the MPP facilities would not need to treat the wastewater for nitrogen and phosphorus before discharging to the POTW." EPA, *Final Report of the Small Business Advocacy Review Panel on EPA's Planned Proposed Meat and Poultry Products Effluent Limitations Guidelines Rulemaking*, at 16 [DCN MP00347A1], Docket ID No. EPA-HQ-OW2021-0736-0110 (Sept. 19, 2023).

⁴⁹⁵ See Proposed Rule at 4493.

⁴⁹⁶ See Section IV.B.1.

⁴⁹⁷ *Cerro Copper Products Co.*, 766 F.2d at 1068 (disposing of challenge that "EPA, in promulgating national wastewater pretreatment standards for facilities within the copper-forming industry, failed to adequately account for the petitioners' alleged unique situation" with respect to its relationship with the POTW).

account the individual characteristics of each industrial facility and POTW."⁴⁹⁸ Yet EPA intends to make facility-specific accommodations for the MPP industry by allowing "flexibility" with otherwise uniform limits so as "not to interfere with . . . existing agreements" between POTWs and indirect dischargers. ⁴⁹⁹ EPA noted that individual "facilities would be able to work with the POTW to achieve the limit, possibly contributing funding for upgrade or expansion of treatment technologies at the POTW."⁵⁰⁰ However, facility-specific relationships between POTWs and point sources – whether existing or anticipated – are not an appropriate consideration to justify broad exemptions from national pretreatment standards under the CWA.

In addition, the profile of the MPP category is significantly different from the other industrial categories where EPA has narrowly set conditional limits for ammonia and other nitrogen compounds (Steel Manufacturing, Pharmaceutical Manufacturing, and Fertilizer Manufacturing), which include much fewer indirect dischargers and are otherwise incomparable to the MPP point source category. Allowing conditional TN and TP limits for MPP facilities — one of the top industrial sources of these pollutants — would represent a significant departure from the facts and circumstances related to the promulgation of prior conditional limits. First, MPP wastewater contains very high concentrations of the specific pollutants that EPA proposes to exempt. By comparison, EPA identified that "lower reported discharge concentrations" of TN discharges from the Iron & Steel Manufacturing point source category "indicates that the majority of facilities are already achieving discharges consistent with concentrations achieved by POTWs implementing more advanced nutrient removal." 502

Second, EPA estimates that the MPP point source category includes 3,708 indirect-discharging facilities. ⁵⁰³ Of those facilities, TN and TP limits would apply to 143 or 777 facilities under Options 2 or 3, respectively. ⁵⁰⁴ By comparison, EPA set conditional limits for only three

⁴⁹⁸ Id (finding "Congress int

⁴⁹⁸ *Id.* (finding "Congress intended the EPA to promulgate uniform, national wastewater pretreatment standards and then permit modification of these standards through the removal credits program."). ⁴⁹⁹ EPA, *Notes from EPA's Meat and Poultry Products Effluent Limitations Guidelines Rulemaking Update with Industry Representatives May 18, 2023*, at 3 [DCN MP00227], Docket ID No. EPA-HQ-OW-2021-0736-0067 (May 18, 2023). ⁵⁰⁰ *Id.*

EPA has set conditional ammonia limits for indirect dischargers in the Iron and Steel and Pharmaceutical Manufacturing point source categories so long as receiving POTWs have nitrification capability, which is defined in the ELG. *See* 40 C.F.R. §§ 420.15, 420.16, 420.25, 420.26, 420.35, 420.36, 439.16(b), 439.17(a), 439.36(a), 439.37(a). EPA set conditional limits for ammonia and other nitrogen compounds from indirect fertilizer plants if the POTW's permit requires a certain percentage removal of an otherwise incompatible pollutant. *See* 40 C.F.R. §§ 418.26, 418.36, 418.46. The Fertilizer Manufacturing conditional limit for "otherwise incompatible pollutant[s]" is limited to ammonia (as N), organic nitrogen (as N), nitrate (as N), or different combinations across three sub-sectors.

⁵⁰² EPA, EPA's Review of Nutrients in Industrial Wastewater Discharge, at Tbl. 3-2 [DCN 08784], Docket ID No. EPA-HQ-OW-2018-0618 (Dec. 2020)

⁵⁰³ See Proposed Rule at 4481.

⁵⁰⁴ *Id.* at 4493.

Iron and Steel Manufacturing subcategories: cokemaking, sintering, and ironmaking. ⁵⁰⁵ EPA's review of the sector during rulemaking found just eight cokemaking indirect dischargers, zero sintering indirect dischargers, and two indirect dischargers involved in blast furnace ironmaking or direct-reduced ironmaking operations. ⁵⁰⁶ EPA set conditional limits for two Pharmaceutical Manufacturing subcategories, ⁵⁰⁷ for which EPA identified 88 indirect discharger facilities that discharged just 15 percent of the subcategories' total process wastewater volume. ⁵⁰⁸ Finally, EPA set conditional limits for two Fertilizer Manufacturing subcategories: Ammonia and Urea. ⁵⁰⁹ Based on a review of publicly available data, commenters have identified just one indirect discharger among 21 ammonia manufacturing plants that discharges process wastewater. ⁵¹⁰ In contrast to EPA's past practice of only setting conditional limits to very narrow subsets of a category, EPA would be creating a large loophole for hundreds of MPP indirect dischargers, potentially exempting them from limits meant to control a top industrial source of nitrogen and phosphorus pollution.

For all these reasons, conditional limits that exempt facilities from TN and TP standards are not appropriate for this industrial sector.

2. If EPA establishes conditional limits, EPA must clearly define the scope of applicability, require the submission of sufficient documentation, and put in place robust public participation requirements.

The scope of applicability for pretreatment standards must comply with the statute's technology-based requirements. The record must demonstrate that, in excluding point sources from pretreatment limits, EPA considered the technology-based factors enumerated in the CWA. Specifically, EPA must ensure that waste discharged indirectly to POTWs will be

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⁵⁰⁵ See 40 CFR §§ 420.15, 420.16, 420.25, 420.26, 420.35, 420.36.

⁵⁰⁶ See EPA, Development Document for Final Effluent Limitations Guidelines and Standards for the Iron and Steel Manufacturing Point Source Category, at 7-30 [DCN MP00885], Docket ID No. EPA-HQ-OW-2021-0736-0402 (Apr. 1, 2002).

⁵⁰⁷ See 40 CFR §§ 439.16(b), 439.17(a), 439.36(a), 439.37(a).

⁵⁰⁸ See EPA, Development Document for Final Effluent Limitations Guidelines and Standards for the Pharmaceutical Manufacturing Point Source Category, at 5-19 (1998).

⁵⁰⁹ Conditional limits are also listed for the Ammonium Nitrate subcategory but have been suspended until further notice as of 1975. *See* 40 CFR § 418.26, 418.36, 418.46.

⁵¹⁰ See Environmental Integrity Project, "The Fertilizer Boom" at 12-13 (Apr. 17, 2023),

https://environmentalintegrity.org/reports/the-fertilizer-boom/. Process wastewater is discharged to Hopewell Water Renewal under VPDES permit VA0066630. According to HWR's 2021 NPDES permit application, 79-85 percent of the wastewater it treats comes from industrial users, and the plant was retrofitted with BNR-equivalent technology to reduce ammonia and total nitrogen loads in 2017. See Va. Dep't. of Env't. Quality (2023) VPDES Permit Fact Sheet VA0005291, Attached as Ex.14; see also Hopewell Water Renewal 2021 Industrial Pretreatment Program Annual Report at 4 to 5).

⁵¹¹ See 33 U.S.C. §§ 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

treated at a level equivalent to BAT for TN and TP. ⁵¹² In the event that EPA establishes conditional limits exempting indirect dischargers from TN and TP limits, EPA must ensure that, without pretreatment, POTWs will treat MPP discharges at a level equivalent to BAT. As such, EPA should implement a clear process, through regulation, that includes explicit criteria for identifying, documenting, and reporting to ensure compliance with the CWA.

It is critical that this process requires evaluation of both the treatment in place and the operations and performance of this treatment at the POTW. There is ample evidence in the record that treatment-in-place at the POTW, without accounting for operations and performance, is not sufficient to ensure that a POTW will achieve treatment of MPP waste equivalent to BAT.⁵¹³ Any conditional waiver process in the final rule should include the following minimum elements, to be established by regulation:

- The POTW must certify installation and operation of treatment technology that can achieve removal of the pollutant of concern at levels equivalent to the technology selected as the basis for BAT.
- The POTW must demonstrate and certify, at regular intervals (e.g. annually), optimal performance of the treatment technology at a level equivalent to the basis for BAT.
- The POTW must hold a current NPDES permit with limits for the pollutant of concern that are equivalent to limits based on BAT for large MPP direct dischargers.
- The POTW must be in compliance with limits to remove the pollutant of concern for a minimum defined period (e.g. three years).
- The POTW's non-compliance with limits to control the pollutant of concern must trigger applicability of pretreatment requirements for the pollutant of concern to MPP indirect dischargers that send waste to the POTW.
- The POTW must certify, at regular intervals (e.g. annually) that the MPP discharge to the POTW, absent pretreatment for the pollutant of concern, does not contribute to passthrough or interference or otherwise interfere with the POTW's ability to achieve optimal operation and performance of the wastewater treatment system. Further certification should be triggered by major changes to the POTW influent, such as addition of new MPP industrial users.
- The POTW must certify, at regular intervals (e.g. annually) that the MPP discharge to the POTW, absent pretreatment for the pollutant of concern, does not cause or contribute to sanitary sewer overflows (SSOs) and/or combined sewer overflows (CSOs) that would otherwise be prevented by pretreatment by the MPP facility.
- The POTW must identify the MPP facilities from which it receives discharges and which facilities receive exemptions from pretreatment standards.

⁵¹² Congress intended that pretreatment standards, in combination with treatment by POTWs, would "achieve the level of treatment that would be required if the industrial source were making a direct discharge[.]" Proposed Rule at 4478 (citing Conf. Rep. No. 95–830, at 87 (1977), reprinted in U.S. Congress, Senate Committee on Public Works (1978), A Legislative History of the CWA of 1977, Serial No. 95–14 at 271 (1978)).

⁵¹³ See Section IV.B.1.

- The MPP indirect discharger must be in compliance with all other applicable general and categorical pretreatment standards.
- If the MPP indirect discharger also discharges directly under a NPDES permit, the facility must be in compliance with limits in the discharge permit.
- The exemption application and approval process must be transparent and should include robust public participation opportunities prior to approval. All of the above information must be made publicly available and easily accessible.

EPA oversight is critical to any industry-wide exemption program, especially considering the number of indirect dischargers that may be eligible to receive such exemptions at some point. As part of any such program, EPA should regularly review implementation to ensure that exemptions do not result in treatment of MPP discharges at POTWs below levels achievable by optimal performance using BAT. At regular intervals (e.g. during annual ELG reviews) EPA should review documentation of compliance, monitoring, and reporting to evaluate the implementation of such exemptions to determine whether treatment of MPP indirect discharges, absent pretreatment, are achieving levels equivalent to BAT. If EPA determines that equivalent treatment is not occurring, EPA should determine whether revocation of the industry-wide conditional limitation is necessary to comply with the CWA.

G. EPA Has Failed to Demonstrate How the Production Based Applicability **Exemption Complies with CWA Requirements.**

EPA must demonstrate that any exemptions from ELGs and pretreatment standards comply with the CWA. For all pollutants discharged from all categories and classes of point sources, EPA must establish technology-based ELGs, as well as pretreatment limits to control pollutants that pass through or interfere with POTWs. 514 By mandating that EPA establish national minimum standards based on what is technologically and economically achievable, the CWA guarantees "that similar point sources with similar characteristics" will achieve similar pollution-reduction targets regardless of their location. 515 Once EPA decides to regulate an industrial category, like the MPP point source category, the CWA requires that EPA establish BAT limits for all "classes of point sources[.]"516

⁵¹⁴ 33 U.S.C. §§ 1311(b)(2)(A), (E), (F); *id.* §§ 1317(a)(1), (a)(2), (b)(1); 40 C.F.R. § 125.3(a). In limited circumstances that are not present here, EPA may "defer[] a nationwide effluent guideline and allow[] a case-by-case determination of BAT by permitting authorities." Sw. Elec. Power Co., 920 F.3d at 1021 (5th Cir. 2019); see Nat'l Wildlife Fed'n, 286 F.3d at 566 (holding EPA's case-by-case approach was reasonable where "EPA found . . . that elimination of discharge is not 'technologically and economically achievable' for color pollutants as a category or class[.]").

⁵¹⁵ *NRDC*, 510 F.2d at 709–10 (citation omitted).

⁵¹⁶ 33 U.S.C § 1311(b)(2)(A); see NRDC v. Costle, 568 F.2d 1369, 1374 (D.C. Cir. 1977) (holding EPA could not exempt industrial stormwater from permitting because the CWA required permits for point sources like industrial stormwater).

Here, the record does not demonstrate that EPA considered and applied the technology-based factors enumerated in the CWA to develop the proposed production based thresholds. ⁵¹⁷ However, if EPA decides to determine applicability of these limits – whether on the basis of production or wastewater generation - EPA must explain how any exemptions from compliance with the ELGs and pretreatment standards complies with the CWA.

1. EPA Must Demonstrate that Exemptions Based on Production Thresholds Comply With the CWA.

Under all regulatory options, EPA proposes varying production-based thresholds, below which facilities would be exempt from the limitations. The record does not demonstrate that, in defining these exclusions, EPA applied the technology-based factors for BAT, BCT, and BPT. Specifically, EPA did not account for the technological or economic achievability of BAT when excluding "small" facilities from BAT-based ELGs for ammonia, TN and TP, and pretreatment standards for TN and TP. In fact, there is ample evidence in the record that the treatment technology under all three regulatory options is available for smaller facilities. EPA did not even evaluate economic achievability for the exempted facilities, relying, at least in part, on an analysis that is approximately 20 years old.

Instead, EPA's single rationale for proposing the production thresholds under each regulatory option is that the thresholds will minimize impacts to small firms. EPA evaluated the impact of varying production thresholds on small firms—with Option 3 applicable to the greatest number of facilities. Further, under Option 3, some facilities would only be subject to conventional limits based on BPT/BCT, and the additional TN and TP limits would only apply to a much smaller group of facilities. EPA set this higher threshold for TN and TP limits to minimize impacts to small firms. Ultimately, EPA determined that all three regulatory options,

⁵¹⁷ See 33 U.S.C. §§ 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

⁵¹⁸ *Id*.

⁵¹⁹ See CEA Engineers Report at 10, 31, Ex. 10.

⁵²⁰ See Proposed Rule at 4492 (EPA "reasonably considered impacts on small businesses in setting production thresholds for applicability based on avoiding cost to revenue ratios indicating likelihood of economic impacts[.]"); *id* at 4486 ("EPA carefully considered impacts of new or revised effluent limitations and pretreatment standards on small business by using facility production thresholds to distinguish smaller facilities with lower revenues from larger facilities[.]"). EPA's Regulatory Impact Analysis for this rulemaking explicitly states that "EPA defined the regulatory options to exclude the smallest facilities and reduce impacts on small businesses." EPA, *Regulatory Impact Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category*, DCN MP00400, at 9-9, Docket ID No. EPA-HQ-OW2021-0736-0659 (Dec. 5, 2023). ⁵²¹ See Proposed Rule at 4486.

⁵²² Nitrogen and phosphorus pretreatment limits would only apply to facilities above the 30 million lb/year threshold, which "would impact only 21 percent of indirect discharging facilities" – or about 777 indirect dischargers. Proposed Rule at 4486, 4493.

⁵²³ EPA reasons that, for more than 700 indirect dischargers that exceed the 5 million lb/year threshold but not the 30 million lb/year threshold, only the "lower cost wastewater treatment technologies" to remove conventional pollutants would be required. *Id.* at 4486.

including Option 3, "would not have a significant economic impact on a substantial number of small entities" ⁵²⁴ and "the primary economic burden of the rule is born by the large facilities and firms." ⁵²⁵ Yet EPA ignored its own findings when EPA rejected Option 3 and does not address at all whether significant impacts to small firms would occur at production thresholds below those proposed in Option 3.

Instead, EPA relies on outdated or vague statements to justify the proposed production-based thresholds. For example, under Option 1, EPA proposes to continue using the thresholds established in 2004 – and to extend them to indirect dischargers – which EPA also used to exclude smaller facilities. In 2004, twenty years ago, EPA's exclusion of "small" poultry facilities was driven, at least in part, by a finding that "[t]he treatment options promulgated for larger poultry slaughtering and further processing facilities are economically unachievable" for small poultry facilities. ⁵²⁶ In contrast, EPA here did not evaluate economic achievability for facilities below the existing production based thresholds, much less make a specific determination that any of the treatment options are economically or technologically unachievable for facilities below the production thresholds in any of EPA's regulatory options.

In addition, EPA's rationale for excluding small facilities in 2004 is not consistent with CWA requirements and no longer reflects reality. In 2004, EPA excluded small facilities because:

(1) small MPP facilities as a group discharge less than 3 percent of the conventional pollutants . . . 1 percent of the toxic pollutants . . . 4 percent of the nutrients . . . and less than 1.5 percent of the pathogens . . . as compared to all discharges from the entire MPP industry; (2) EPA determined that only a limited amount of loadings removal would be accomplished by improved treatment at small facilities; and (3) EPA determined that small MPP facilities would discharge a very small portion of the total industry discharge. 527

This rationale for the 2004 thresholds, which EPA now proposes to adopt for all facilities under Option 1, does not reflect the technology-based factors for BAT, BCT, and BPT in the CWA. ⁵²⁸ "[T]his consideration finds scant support in the statutory scheme given that the relative size of a stream is absent from the statutory BAT factors." ⁵²⁹

525 *Id.* at 4501–02.

⁵²⁴ *Id.* at 4519.

⁵²⁶ 2004 TDD at 2-15.

⁵²⁷ *Id.* at 2-13 to 2-14. In finalizing the 2004 rule, EPA actually lowered the production threshold for rendering facilities compared to the proposal. *Id.* at 2-14.

⁵²⁸ See 33 U.S.C. §§ 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

⁵²⁹ Sw. Elec. Power Co., 920 F.3d at 1029, 1032 (holding EPA could not set BAT for leachate pollution based an ineffective treatment technology, and "reject[ing] EPA's argument that its regulation is justified by the fact that leachate pollution constitutes 'a very small portion of the pollutants discharged collectively by all steam power plants'" because EPA's rationale "rests on an impermissible interpretation of the Clean Water Act[.])"

In any case, EPA's 2004 rationale does not support exclusion of these facilities. It is not true that "small" facilities under this definition "discharge a very small portion of the total industry discharge."530 Out of 3,879 discharging facilities, Option 1 would only require some limits for 845 facilities – and would only require TN and TP limits for 126 direct dischargers. 531 It is also not true that "only a limited amount of loading removal would be accomplished by improved treatment",532 under Option 3. Compared to Option 1, Option 3 applies TN and TP limits to the largest indirect dischargers and additional direct dischargers that exceed the lower production threshold. While Option 1 would reduce nutrient pollution by an estimated 16.5 million pounds per year, adding TN and TP limits to additional facilities under Option 3 would go over five times further – reducing nutrient pollution by nearly 96 million pounds per year. 533

With respect to Option 3, EPA states that "[e]conomic analyses . . . were used in determining the applicable [] size thresholds,"534 but the record does not present EPA's rationale for selecting the specific thresholds beyond considerations related to minimizing small firm impacts.535

For all these reasons, EPA failed to demonstrate how the production based thresholds under any of the options account for the technology-based factors for BAT, BCT, and BPT in the CWA 536

> 2. EPA must demonstrate that any exemptions based on wastewater generation comply with the CWA, and EPA should not create implementation loopholes.

EPA proposes to use wastewater generation as a metric for determining applicability and exemptions for smaller facilities that may not track the necessary information about production

⁵³⁰ 2004 TDD at 2-13 to 2-14.

⁵³¹ See Proposed Rule at 4487.

⁵³² 2004 TDD at 2-13 to 2-14.

⁵³³ See EA at ES-3: see also 2004 TDD at Tbl. 11-3.

⁵³⁴ EA at 1-6.

⁵³⁵ EPA's RIA includes a discussion of economies of scale with respect to poultry and meat slaughterhouses and processing facilities, but this discussion relies on the studies published between 2000 and 2005 that EPA relied on in setting production thresholds for direct dischargers in the 2004 rulemaking for this industry. See EPA, Regulatory Impact Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category, at 9-10 (2023), https://www.epa.gov/system/files/documents/2023-12/mpp regulatory-impact-analysis proposed dec-2023.pdf. In 2004, EPA evaluated economies of scale and competition between meat and poultry sectors that existed at the time in setting the production thresholds for direct-discharging poultry facilities. EPA, Economic and Environmental Benefits Analysis of the Final Meat and Poultry Products Rule, at 2-5 to 2-6 EPA-821-R-04-010 (Feb. 2004). EPA has not updated that evaluation to reflect changes in the industry that have occurred in the last 20 years or to incorporate a consideration of indirect discharging facilities. ⁵³⁶ See 33 U.S.C. § 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

to otherwise determine whether the standards apply to their facility.⁵³⁷ EPA is considering the use of "wastewater flows that correlate various production thresholds to help facilities understand the applicability of the regulations."⁵³⁸ If EPA decides to base applicability on wastewater generation, EPA must explain how any exemptions from compliance with the ELGs and pretreatment standards complies with the CWA.⁵³⁹

It may be appropriate to determine applicability of ELGs and pretreatment standards based on wastewater generation. "Wastewater discharge rate data collection is relatively simple, presents minimal costs that would not be burdensome on the industry, and requires installation of a flow meter(s) in the ultimate discharge pipe(s) and routinely collecting totalized volume readings." ⁵⁴⁰ In which case, EPA should also require, by regulation, continuous flow monitoring for wastewater generation for applicability purposes.

However, EPA's proposal appears to consider wastewater generation as an alternative metric in addition to the existing production thresholds.⁵⁴¹ EPA should not use multiple metrics to determine applicability of ELGs and pretreatment standards, as this may lead to inaccurate or inconsistent implementation. "[T]he range of process wastewater generation relative to production levels varies considerably and is facility specific based on overall water usage, wastewater reuse practices, and operational practices."⁵⁴² For example, EPA has, itself, identified facilities with production rates far above the current thresholds that generate wastewater far below the median rate for their subcategories, as well as a facility with a production rate under 5 million lb/year that generates wastewater above the median wastewater generated by facilities with production rates above 200 million lb/year in the same subcategory.⁵⁴³

Regulated entities and permit writers need absolute clarity regarding applicability of these standards in order to ensure compliance. Using multiple, inconsistent metrics to define applicability of national, uniform limits would risk creating implementation loopholes.

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⁵³⁷ EPA, Final Report of the Small Business Advocacy Review Panel on EPA's Planned Proposed Meat and Poultry Products Effluent Limitations Guidelines Rulemaking at 14 [DCN MP00347A1], Docket ID No. EPA-HQ-OW2021-0736-0110 (Sept. 19, 2023). EPA solicits comment on "alternatives to production thresholds for determining regulation, such as water usage, specifically as a way to minimize impacts to small firms or to provide an alternative means of determining applicability to small firms that may not track production." Proposed Rule at 4495.

⁵³⁸ EPA, Final Report of the Small Business Advocacy Review Panel on EPA's Planned Proposed Meat and Poultry Products Effluent Limitations Guidelines Rulemaking at 14 [DCN MP00347A1], Docket ID No. EPA-HQ-OW2021-0736-0110 (Sept. 19, 2023).

⁵³⁹ 33 U.S.C. §§ 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

⁵⁴⁰ CEA Engineers Report at 38, Ex. 10.

⁵⁴¹ See Proposed Rule at 4495.

⁵⁴² CEA Engineers Report at 38, Ex. 10.

⁵⁴³ *Id*.

In sum, if EPA were to choose wastewater generation as a threshold for applicability, EPA must explain how the thresholds comply with the CWA. EPA should clearly define applicability using a consistent metric that does not create implementation loopholes.

V. <u>EPA Must Adopt Zero-Discharge ELGs and Pretreatment Standards for Chlorides.</u>

EPA is considering zero discharge ELGs and pretreatment standards for chlorides from "all facilities (both direct and indirect) producing more than 5 million pounds per year with high chloride processes[.]"⁵⁴⁴ Under all regulatory options, EPA's proposal would prohibit the common management practice of diluting high chloride wastestreams through commingling with other wastestreams.⁵⁴⁵ EPA must set zero-discharge ELGs for chlorides, as well as zero-discharge pretreatment standards, based on EPA's conclusion that chlorides will otherwise pass through POTWs.⁵⁴⁶

The CWA directs EPA to set "effluent limitations [which] shall require the *elimination* of discharges of all pollutants if the Administrator finds . . . that such elimination is technologically and economically achievable[.]"⁵⁴⁷ Congress intended BAT to "push[] industries toward the goal of zero discharge as quickly as possible."⁵⁴⁸

EPA correctly selected segregation of high-chlorides wastestreams and a forced circulation evaporation system as basis for the zero-discharge chlorides limits. This treatment technology is technologically available for use in the MPP industry. EPA selected forced circulation evaporation as the basis because it is zero discharge, does not depend on climate or land availability for operation as is the case with evaporation ponds, and is currently used in the industry. EPA identified MPP facilities operating "various types of mechanical evaporation"

⁵⁴⁴ Proposed Rule at 4488; see id. at 4494.

⁵⁴⁵ CEA Engineers Report at 25, Ex. 10.

⁵⁴⁶ EPA, Meat and Poultry Products POTW Passthrough Analysis - DCN MP00309, at 1 ("POTWs are not designed to remove 100 percent of chlorides [such that] this pollutant would pass through."); TDD at 73; *see* Proposed Rule at 4483 (stating "[w]astewater treatment technologies commonly found at POTWs and many MPP facilities do not remove chlorides.").

⁵⁴⁷ 33 U.S.C. § 1311(b)(2)(A); *see id.* at § 1314(b)(3) ("Such regulations shall . . . identify control measures and practices available to eliminate the discharge of pollutants from categories and classes of point sources, taking into account the cost of achieving such elimination of the discharge of pollutants[.]").

⁵⁴⁸ Kennecott, 780 F.2d at 448; see Nat. Res. Def. Council, 822 F.2d at 123.

⁵⁴⁹ TDD at 79

⁵⁵⁰ CEA Engineers Report at 26, Ex. 10; see TDD at 73-74.

⁵⁵¹ EPA, Compliance Cost Methodology for the Meat and Poultry Products Proposed Rulemaking - DCN MP00301, Docket ID No. EPA-HQ-OW2021-0736-0465, at 6 (Nov. 28, 2023); *see* EPA, Treatment in Place (TIP) Analysis for the Meat and Poultry Products (MPP) Proposed Rule – DCN MP00191, at 9, Docket ID No. EPA-HQ-OW-2021-0736-0142 (Nov. 15, 2023) ("EPA issued a CWA 308 request to a subset of facilities performing operations that may generate this type of wastewater . . . EPA reviewed

systems, which have smaller footprints [relative to evaporation lagoons] and can be used in any type of climate."⁵⁵² EPA specifically identified two MPP facilities achieving zero discharge of high chloride wastewater which "use a forced circulation evaporation system[.]"⁵⁵³ Forced circulation evaporation involves use of steam with a heat exchanger and condenser, resulting in water evaporation and salt crystallization.⁵⁵⁴ From a wastewater treatment technological availability standpoint, there is no reason any direct or indirect discharging MPP facility, regardless of size or process type, could not operate the forced circulation and evaporation system.⁵⁵⁵

The availability of a zero-discharge standard is further supported by the use of other technologies to achieve the same result, including spray dryer systems, evaporation ponds, and internal facility reuse. ⁵⁵⁶ EPA itself identified MPP facilities operating "a brine evaporation lagoon, which uses an impoundment to allow the water to naturally evaporate while the solids precipitate. ⁵⁵⁷ EPA identified three MPP facilities that achieve zero discharge of high-chloride wastewater which "use evaporation ponds as the sole treatment mechanism to achieve volume reduction." ⁵⁵⁸ The capital and O&M costs associated with evaporation ponds, although site-specific, are "typically considerably lower relative to other treatment evaporation treatment technologies[.]" ⁵⁵⁹

Under all regulatory options, segregation of high-chlorides wastestreams and a forced circulation evaporation system to achieve zero discharge of chlorides is economically achievable, because the costs can be "reasonably borne" by the MPP industry. ⁵⁶⁰ As an initial matter, EPA expects that its estimated cost for zero-discharge of chlorides "may be an overestimate for many facilities as the cost was based on hide processing water, which is the highest in chloride concentration of the MPP high chloride streams, and potentially most difficult to treat." ⁵⁶¹ In addition to reduced loadings of chlorides, EPA makes clear that segregation of these wastestreams "can reduce costs and energy required for treatment." ⁵⁶² EPA's cost methodology and results with respect to the proposed zero-discharge chloride limits is adequate and consistent

these responses to determine facilities that are already achieving zero discharge or partial zero discharge of this stream.").

⁵⁵² TDD at 74.

⁵⁵³ EPA, Sanitized Summary of High Chlorides Wastewater Data Memorandum – DCN MP00305, at 7, Docket ID No. EPA-HQ-OW-2021-0736-0436 (Nov. 22, 2023); *see* TDD at 74.

⁵⁵⁴ CEA Engineers Report at 26, Ex. 10..

⁵⁵⁵ *Id*.

⁵⁵⁶ *Id.* at 26-27; TDD at 73-74.

⁵⁵⁷ TDD at 73.

⁵⁵⁸ EPA, Sanitized Summary of High Chlorides Wastewater Data Memorandum – DCN MP00305, at 7.

⁵⁵⁹ CEA Engineers Report at 27, Ex. 10.

⁵⁶⁰ See Chem. Mfrs. Ass'n, 870 F.2d at 262; Shefftz Report at 11-13 & 16, Ex. 13.

⁵⁶¹ EPA, Compliance Cost Methodology for the Meat and Poultry Products Proposed Rulemaking - DCN MP00301 at 6.

⁵⁶² Proposed Rule at 4483.

with prudent engineering cost estimation methodologies through use of real direct capital and O&M cost data provided by industry for segregation and mechanical evaporation systems. ⁵⁶³

EPA evaluated compliance costs associated with all three regulatory options both with and without the zero-discharge chlorides limits.⁵⁶⁴ The record demonstrates that, under all regulatory options, a zero-discharge chlorides standard is economically achievable for the MPP industry. 565 First, in this scenario, under all regulatory options, EPA estimates only 1% or fewer of all MPP facilities would face possible closure. 566 Congress understood that the goal of eliminating all water pollution discharges would cause "some disruption in our economy," including plant closures and job losses⁵⁶⁷ and courts have determined economic achievability where projected facility closures were much higher than 1%. 568 Second, the market level effects of zero-discharge chlorides limits are minimal. Under Option 3 with chloride limits, EPA estimates a decrease of domestic meat product supply of 0.077%, ⁵⁶⁹ and price increases of only 0.03% for beef, 0.06% for pork, 0.06% for chicken, and 0.02% for turkey. 570 Third, under Option 3 with chlorides limits, EPA estimates that the industry will incur short-term job losses of 4%, but a long-term net gain of 1,553 jobs. ⁵⁷¹ As discussed in Section IV.D, these projected facility closure, supply, price, and employment impacts are within the range of impacts that courts have routinely held to be economically achievable. 572 Moreover, for the reasons explained above and in Section IV.D., EPA's economic analyses substantially overestimate the regulatory costs that would be borne by MPP facilities under the proposed rule.

In sum, segregation of high-chloride wastestreams and evaporation is a technologically available, economically achievable option for eliminating chlorides in MPP wastewater. Allowing the discharge of chlorides here would contravene the Clean Water Act, which requires

⁵⁶³ *Id.* at 4494; CEA Engineers Report at 39-40, Ex. 10.

⁵⁶⁴ RIA at 3-1.

⁵⁶⁵ *See* Shefftz Report at 11-13 & 16, Ex. 13.

⁵⁶⁶ RIA at 5-6. EPA estimated 54 possible facility closures under Option 3 with zero-discharge chlorides limits, which is less than 1% of the estimated 5,055 facilities in the MPP industry. *Id*; *see* Proposed Rule at 4475.

⁵⁶⁷ Chem. Mfrs. Ass'n v. EPA, 870 F.2d at 262.

⁵⁶⁸ Supra.

⁵⁶⁹ EPA, Regulatory Impact Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category - DCN MP00400, at 6-12, Tbl. 6-11 (calculated based on sum quantity decrease in each meat product divided by the total baseline quantity of meat product).

⁵⁷⁰ *Id.* at 6-11, Tbl 6-10; Shefftz Report at 12, Ex. 13.

⁵⁷¹ EPA, Regulatory Impact Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category - DCN MP00400, at 7-6, tbl. 7.7. EPA's estimate of long-term net gain of jobs is likely conservative, because EPA did not estimate employment requirements associated with operation of high chloride wastewater treatment systems and "EPA expects the long-run labor impacts associated with regulatory options with chlorides to be larger than for those without chlorides." *Id.* at 7-6.

⁵⁷² *Supra*.

the elimination of a waste stream if doing so is "technologically and economically achievable." ⁵⁷³

VI. <u>EPA Should Set an E. Coli Limit Based on BAT for Direct Dischargers and</u> Eliminate the Fecal Coliform ELG.

EPA's proposal to set ELGs to control *E. coli* from direct dischargers based on BAT is supported by the record and the CWA.⁵⁷⁴ EPA should replace fecal coliform limits based on BPT/BCT with *E. coli* limits based on BAT because *E. coli* serves as a better proxy for fecal contamination in MPP discharges.⁵⁷⁵ Commenters agree with EPA that *E. coli* is a more reliable indicator of pathogen pollution than a fecal coliform parameter.⁵⁷⁶ Further, EPA should finalize a tighter *E. coli* limit than EPA's proposal to reflect BAT.

Well-designed and well-operated direct discharging MPP facilities can achieve much greater *E. coli* removal than EPA's proposal. ⁵⁷⁷ Well-operated facilities using UV disinfection or chlorine disinfection can achieve microorganism inactivation rates up to 99.9999% and 99.999%, respectively. ⁵⁷⁸ In developing the proposed *E. coli* limits based on BAT, EPA calculated an LTA for the best-performing MPP facility of 1.00 MPN/100 ml, which is much lower than EPA's proposal. ⁵⁷⁹ EPA should thus evaluate whether a more stringent *E. coli* ELG is needed to reflect BAT based on performance by the optimally operating plant.

VII. EPA Must Establish ELGs that Address Industrial Stormwater Runoff.

EPA must revise the MPP ELGs' applicability regulation, 40 CFR § 432.1, to explicitly include industrial stormwater runoff from MPP facilities, or otherwise revise the MPP ELGs to clearly address the regulation of MPP industrial stormwater. In 1987, Congress amended the CWA to specifically require permits for stormwater discharges "associated with industrial activity." The conference committee agreed that "a discharge is 'associated with industrial activity' if it is directly related to manufacturing, processing or raw materials storage areas at an

⁵⁷³ 33 U.S.C. § 1311(b)(2)(A).

⁵⁷⁴ Proposed Rule at 4494.

⁵⁷⁵ CEA Engineers Report at 23-24, Ex. 10.

⁵⁷⁶ Proposed Rule at 4494.

⁵⁷⁷ *Id.* at 24-25.

⁵⁷⁸ *Id.* at 24.

⁵⁷⁹ *Id.* at 24-25.

⁵⁸⁰ 33 U.S.C. § 1342(p)(2)(B) (emphasis added).

industrial plant."⁵⁸¹ In 1990, EPA promulgated stormwater regulations incorporating the 1987 CWA amendments.⁵⁸²

These 1990 regulations include runoff from MPP sites as regulated industrial stormwater. The regulations defines "industrial activity," to include all activities subject to new source performance standards under 40 CFR subchapter N, which includes the MPP category. The 1990 regulation also explicitly includes SIC 20 food and kindred products in the definition of industrial activity. The MPP ELGs apply primarily to SIC 20 activities: SIC 2011 (Meat Packing Plants), 2013 (Sausages and Other Prepared Meat Products), 2015 (Poultry Slaughtering and Processing), 2047 (Dog and Cat Food), 2048 (Prepared Feed and Feed Ingredients for Animals and Fowls), 2077 (Animal and Marine Fats and Oils), and 0751 (Livestock Services, Except Veterinary).

The current MPP ELGs apply only to "process wastewater," which the ELGs do not explicitly define. The current MPP ELGs are not clear as to whether "process wastewater" includes industrial stormwater (as regulated under the 1990 definition). The 2004 Development Document made a number of inconsistent statements as to what kind of stormwater is included in "process wastewater" and thus within the ELGs. These statements include that the MPP ELGs only apply to "contact" stormwater, which the document defines as "storm water that is commingled with MPP operations process wastewater prior to treatment or discharge"; that the MPP ELGs apply to "surface runoff from the immediate process area that has the potential to become contaminated," which is similar to EPA's pre-1987 stormwater regulations; and that the MPP ELGs apply to "storm water associated with industrial activity," which is consistent with the 1990 industrial stormwater definition. The ELGs themselves do not include any mention of stormwater or runoff.

Without an explicit direction in the MPP ELGs to apply the ELGs to industrial stormwater, states and EPA have failed to apply any technology-based limits to most or all MPP stormwater that is not co-mingled with process wastewater. Per EPA's ECHO records, more than 900 state or federal industrial stormwater general permits have been issued to facilities with the MPP SIC codes, most of which are modeled after EPA's multi-sector industrial stormwater general permit (MSGP). ⁵⁸⁸ The EPA MSGP does not apply the current MPP ELGs and does not

⁵⁸¹ 133 Cong. Rec. 976, 985 (daily ed. Jan. 8, 1987) (Rep. Hammerschmidt's summary of the conference committee on the House floor).

⁵⁸² 40 CFR § 122.26(b)(14); 50 Fed. Reg. 48011 (Nov. 16, 1990).

⁵⁸³ 40 CFR § 122.26(b)(14)(i).

⁵⁸⁴ *Id.* § 122.26(b)(14)(xi).

 $^{^{585}}$ See 40 CFR § 432.1 (applicability); 40 CFR § 432.2 (definitions); see also 40 C.F.R. §§ 432.10, 432.20, 432.30, 432.40, 432.110 (all stating that "[p]rocess wastewater includes water from animal holding areas at these facilities").

⁵⁸⁶ 2004 TDD at 15-8, 15-9, 16-9.

⁵⁸⁷ *Id.* at 15-8, 15-9,16-9.

⁵⁸⁸ See Industrial Stormwater Permits at MPP Facilities, Attached as Ex. 15. Analysis from EPA ECHO Facility Search as of March 22, 2024. Search criteria include CWA Media Type, General Permit Covered Facility, "Industrial Stormwater" permit component, and the following SIC codes: 0751, 2011, 2013, 2015, 2047, 2048, and 2077. EPA, ECHO Facility Search, https://echo.epa.gov/facilities/facility-search.

include any limits for any MPP stormwater. Specifically, the MSGP regulates stormwater from the MPP's meatpacking, sausage, and poultry slaughter activities (SIC 2011, 2013, 2015) under Subsector U3, which includes no pollution limits. The EPA MSGP regulates stormwater from the MPP's dog and cat food and prepared ingredients for animals and fowls categories (SIC 2047, 2048) under Subsector U1, which includes a TSS monitoring benchmark but no limits. The EPA MSGP regulates stormwater from the MPP's animal and marine fats and oils category (SIC 2077) under Subsector U2, which includes a number of monitoring benchmarks but no limits. The EPA MSGP does not mention the SIC 0751 category (Livestock Services, Except Veterinary). Nor do any of the state industrial general permits Commenters reviewed apply the current MPP ELGs to industrial stormwater runoff from MPP facilities. S92

In essence, it is likely that much of stormwater runoff from MPP facilities, while meeting EPA's definition of industrial stormwater, is currently being discharged without *any* limits for known pollutants of concern, including bacteria and pathogens, nitrogen, and phosphorus, let alone limits that represent, as the CWA requires, the best available treatment technology. ⁵⁹³

The proposed MPP ELGs and the supporting documents continue to be ambiguous as to whether the MPP ELGs apply to industrial stormwater runoff at MPP facilities. The proposed MPP revisions (and the accompanying Federal Register notice) do not include any mention of industrial stormwater, nor do they clarify whether the ELGs' current definitions of process wastewater includes industrial stormwater. EPA's 2023 Technical Development Document for the proposed rule does define "process wastewater" to include "storm water associated with industrial activity." ⁵⁹⁴ The term "storm water associated with industrial activity," includes industrial stormwater runoff from MPP facilities, 40 CFR §§ 122.26(b)(14)(i), (xi), which implies that the ELGs do apply to MPP stormwater, but EPA does not explain its use of the definition in the Technical Development Document or whether this definition is a change from the current ELGs.

⁵⁸⁹ EPA, 2021 MSGP § 8.U. "Sector-Specific Requirements for Industrial Activity" available at, https://www.epa.gov/sites/default/files/2021-01/documents/2021_msgp_-_permit_part_8_-_sector_specific_requirements.pdf/ (last visited March 21, 2024) [hereinafter "EPA MSGP"]. ⁵⁹⁰ EPA MSGP § 8.U.7.

⁵⁹¹ EPA MSGP § 8.U.

⁵⁹² See, e.g., Colorado Dept. of Public Health and Environment, CDPS General Permit COR900000, available at https://cdphe.colorado.gov/renewal-industrial-stormwater-general-permit (no limits for MPP (SIC 0751, 2011, 2013, 2015, 2047, 2048, 2077) stormwater); Arkansas Dept. of Envtl. Quality, Authorization to Discharge Stormwater Under the National Pollutant Discharge Elimination System and the Arkansas Water and Air Pollution Control Act (ARR000000), available at https://www.adeq.state.ar.us/water/permits/npdes/stormwater/pdfs/industrial/arr000000-2019-renewal-permit-final-20190701.pdf (Arkansas industrial stormwater general permit) (same); Alabama Dept. Envtl. Protection, National Pollutant Discharge Elimination System General Permit (ALG150000) available at https://adem.alabama.gov/programs/water/permits/ALG150000Food.pdf (Alabama food and kindred products stormwater general permit, limits only oil and grease for food production stormwater).

⁵⁹³ 33 U.S.C §§ 1311(b)(2).

⁵⁹⁴ 2024 TDD at xii.

Unless EPA clarifies that the MPP ELGs apply to industrial stormwater or otherwise regulates stormwater, the MPP ELGs will continue to be unclear and discharge permits will continue to fail to apply the ELGs to industrial stormwater runoff from MPP facilities. Such a result would be contrary to law. Once EPA has decided to regulate an industrial category, like MPP facilities, the CWA requires that EPA establish BAT limits for all "classes of point sources," which includes industrial stormwater. The only exception to this CWA requirement is when EPA makes specific findings on the record as to why stormwater ELGs are infeasible and directs permitting authorities to establish case-by-case technology-based limits instead.

Here, because it falls under the definition of industrial stormwater, stormwater runoff from MPP facilities is a class of point sources. ⁵⁹⁷ The CWA thus requires that EPA explicitly address MPP stormwater in the MPP ELGs, by including stormwater as part of the definition of "process wastewater," by establishing separate limits, or by explaining why national ELGs are infeasible and instructing permitting authorities to set case-by-case limits. The CWA does not allow EPA to continue to ignore stormwater in the MPP ELG rulemaking process.

VIII. EPA's Classification of MPP Facilities that Use Land Application or Septic Tanks as "Zero-Dischargers" is Not Supported by the Record.

EPA's proposed regulation of the MPP category rests on the false assumption that all facilities that land apply and/or treat their wastes in septic tanks "do not discharge." This assumption is not only unexplained, but also expressly contradicted by record evidence showing that discharges from both land application and septic tank treatment of MPP and similar wastes can adversely impact water quality. EPA has provided no justification for allowing facilities using land application and septic tanks to operate without limits imposed by NPDES permits without even assessing the extent to which these subcategories are contributing to water quality impairments. The CWA requires EPA to establish effluent limit guidelines for the entire point source category. Accordingly, the agency cannot simply exclude nearly a quarter of the MPP industry from the guidelines without a reasoned explanation. Thus, we ask EPA to revisit its regulation of MPP facilities that land apply and/or treat waste in septic tanks, undertake the necessary factual inquiries, and make explicit and evidence-based determinations about these subcategories.

⁵⁹⁵ 33 U.S.C §§ 1311(b)(2)(A), 1342(p)(2)(B); see also NRDC v. Train, 396 F. Supp. 1393 (D.D.C. 1975), aff'd sub nom. NRDC, 568 F.2d at 1381 (holding that EPA could not exempt industrial stormwater from permitting because the CWA required permits for point sources like industrial stormwater).

⁵⁹⁶ See, e.g., Nat'l Wildlife Fed'n, 286 F.3d at 566–67; see also Sw. Elec. Power Co., 920 F.3d at 1021 (if "a lack of data prevented EPA from determining BAT for legacy wastewater ... EPA could have declined to set nationwide effluent guidelines for legacy wastewater and allowed BAT determinations to be made by each facility's permitting authority..."); 40 CFR §§ 125.3(a), (c)(2) ("Technology based treatment requirements may be imposed ... [o]n a case-by-case basis.").

⁵⁹⁷ 40 CFR §§ 122.26(b)(14)(i), (xi).

⁵⁹⁸ Proposed Rule at 4481 ("1,176 facilities do not discharge process wastewater.").

⁵⁹⁹ See 33 U.S.C. § 1314(b).

The proposed rule discloses that, of the 5,055 total MPP facilities, EPA classifies 1,176 of them as "zero discharge facilities." This category thus accounts for 23 percent of facilities in the industry. Of these professed non-dischargers, EPA's Environmental Assessment ("EA") discloses that approximately 441 facilities apply the over 16 billion gallons of wastewater they generate annually to agricultural land. Neither the proposed rule nor the EA explicitly discloses the number of facilities presumed not to discharge because they use septic tanks. By classifying facilities that land apply and/or use septic tanks as zero dischargers, EPA is proposing to exempt nearly a quarter of the MPP industry from their statutory obligations to reduce and ultimately eliminate discharges under the Clean Water Act's NPDES program. This egregious exemption cannot stand against ample evidence demonstrating that both land application and septic tanks are ineffective at preventing discharges. Thus, EPA's wholesale labeling of these facilities as zero dischargers is incorrect.

Allowing the approximately 23 percent of MPP facilities that land apply and/or treat their wastewater with septic tanks to operate without NPDES permits would require EPA to disregard readily available evidence showing these practices result in unregulated and often wholly undetected discharges that harm water quality. In fact, EPA need look no further than its own EA for evidence of discharges attributable to land application activities. One of the EA's first justifications for the rulemaking is a table summarizing damage caused by MPP facilities. One example in that table is an incident from a poultry facility in Delaware where "[t]he facility sprayed poultry waste contaminated with nitrates and bacteria onto nearby farm fields, where it subsequently seeped into the groundwater system."602 Traveling via groundwater, the pollutants soon reached drinking water wells, where they caused gastrointestinal illness in nearby residents, before ultimately making their way into rivers used by locals for recreation. 603 The EA further acknowledges that pollutants like nitrogen, phosphorus, and bacteria in land-applied MPP wastes can leach into hydrologically connected groundwater and contaminate nearby waterways. 604 Importantly, in the few states that have water quality criteria for nutrients, 605 average total nitrogen and total phosphorus concentrations in most sampled MPP effluents significantly exceeded those standards. 606

EPA's regulation of publicly-owned treatment works—an industry with a waste stream similar to the MPP industry's waste stream⁶⁰⁷— also belies EPA's claim that land applying MPP facilities do not discharge. As the Delaware example EPA cited in its EA demonstrates, pollutants in land-applied wastewater can seep through fissures in the land application areas and reach

⁶⁰⁰ Proposed Rule at 4497.

⁶⁰¹ See EA at 1-1.

⁶⁰² EA at 1-5, 6-2.

⁶⁰³ See id.

⁶⁰⁴ *Id.* at 2-2, 7-4.

⁶⁰⁵ *Id.* at 2-5 (explaining that state regulation of nutrients through water quality criteria is spotty at best).

⁶⁰⁷ See Proposed Rule at 4482 ("The pollutants in MPP wastewaters are similar to those in domestic wastewater.").

groundwater that is hydrologically connected to jurisdictional waters. ⁶⁰⁸ Further, courts have routinely found "that land application systems, spray head sprinklers, and trucks constitute point sources when used to spread treated wastewater and manure on land." ⁶⁰⁹ Recognizing these discharge risks, EPA's sewage sludge regulations require facilities to land apply at agronomic rates and ensure pollutant levels in land-applied sludge do not exceed established standards. ⁶¹⁰ The regulations also prohibit land-applying sewage sludge within ten meters of a jurisdictional water. ⁶¹¹ These precautions would not be necessary if land application was truly a zero-discharge method of disposal.

Despite EPA's own admissions that MPP land application activities discharge to jurisdictional waters, the agency somehow maintains that land-applying facilities are zero dischargers for purposes of the effluent limitation guidelines. This position ignores both the facts and the law, running directly counter to recent judicial precedent in which the Supreme Court held an unpermitted discharge through groundwater was subject to Clean Water Act regulation. As the Court explained in 2020, "EPA itself for many years has applied the permitting provision to pollution discharges from point sources that reached navigable waters only after traveling through groundwater." Yet, in the MPP context, EPA has, without explanation, presumed these discharges either do not exist, even "in areas of porous soil or significant rainfall" where the agency admits discharges may occur. If EPA intends to comply with its obligations under the Clean Water Act, the agency must reconcile these inconsistencies between the record and the proposed regulatory scheme.

Similarly, the unregulated use of septic tanks at MPP facilities poses serious discharge risks. The EA's Executive Summary cites "leaking septic systems" among the activities that contribute to nutrient pollution, ⁶¹⁵ and EPA's website on septic systems acknowledges that "[i]mproperly treated sewage poses the risk of contaminating nearby surface waters, and potentially cause various infectious diseases in swimmers, from eye and ear infections to acute gastrointestinal illness and hepatitis." ⁶¹⁶ "Malfunctioning septic systems release bacteria, viruses, and chemicals toxic to local waterways. When these pollutants are released into the ground, they eventually enter streams, rivers, lakes, and more, harming local ecosystems by killing native

⁶⁰⁸ See EA at 1-5, 6-2; see also id. at 6-3 ("Effects are not limited to the property on which waste is disposed because contaminants can percolate into groundwater. . . .").

⁶⁰⁹ Parris v. 3M Co., 595 F. Supp. 3d 1288, 1322 (N.D. Ga. 2022) (collecting cases).

⁶¹⁰ See 40 C.F.R. §§ 503.14(d); 503.13(a)(2).

⁶¹¹ *Id.* § 503.14(c).

⁶¹² See Cty. of Maui v. Hawaii Wildlife Fund, 140 S. Ct. 1462, 1476–77 (2020) (establishing a non-exhaustive list of factors to consider in evaluating subsurface discharges via groundwater).

⁶¹³ *Id.* at 1472 (collecting cases); *see also Parris*, 595 F. Supp. at 1322 ("Courts routinely find that land application systems, spray head sprinklers, and trucks constitute point sources when used to spread treated wastewater and manure on land.").

⁶¹⁴ EA at 7-4.

⁶¹⁵ *Id.* at ES-2.

⁶¹⁶ EPA, Why Maintain Your Septic System, https://www.epa.gov/septic/why-maintain-your-septic-system (accessed Mar. 15, 2024).

plants, fish, and shellfish."⁶¹⁷ Further, according to the Niche Meat Processor Assistance Network, "[a] typical septic system will probably not work for most meat processing plants because of the high levels of BOD, TSS, and FOG in the wastewater."⁶¹⁸ With ample evidence indicating septic systems threaten nearby jurisdictional waters, EPA's characterization of MPP facilities with septic tanks as zero dischargers is illogical.

As evinced in the attached fact sheet, regulation of land application and underground treatment structures (such as lagoons or septic systems) is necessary to protect water quality from uncontrolled discharges. The fact sheet, prepared by the Maryland Department of the Environment to evaluate a poultry processing plant's application to renew and modify its discharge permit, describes groundwater pollution from "spray irrigation fields and leaking lagoons." The Department noted that nitrate levels in the plant's groundwater monitoring wells had dropped significantly in the years after contamination forced the plant to stop spray irrigating and line its lagoons. As EPA is well aware through its experience with land application in the CAFO industry, spray irrigation can lead to runoff and contamination of nearby surface waters. Malfunctioning or improperly operated irrigation equipment is also known to spray into waterways. And, even when facility operators manage to keep wastewater on the target fields, wastes are not necessarily applied at agronomic rates—let alone at rates that prevent

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⁶¹⁷ *Id*.

⁶¹⁸ Niche Meat Processor Assistance Network, *Wastewater Treatment for Meat Processors*, https://www.nichemeatprocessing.org/wastewater-treatment-for-meat-processors/ (updated Sept. 9, 2015). https://www.nichemeatprocessing.org/wastewater-treatment-for-meat-processors/ (updated Sept. 9, 2015). https://www.nichemeatprocessing.org/wastewater-treatment-for-meat-processors/ (updated Sept. 9, 2015). https://www.nichemeatprocessing.org/wastewater-treatment-for-meat-processors/ (updated Sept. 9, 2015).

⁶²⁰ Id

⁶²¹ See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960, 2980 (Jan. 12, 2001); see also National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176, 7237 (Feb. 12, 2003).

⁶²² See 66 Fed. Reg. at 2979; see also 68 Fed. Reg. at 7236–37.

the discharge of pollutants into waterways. 623 That is why EPA has explicit regulatory requirements for CAFOs that land apply their wastewater. 624

EPA's failure to adequately explain its decision to effectively exclude MPP facilities that land apply and/or use septic tanks to treat wastewater from the rulemaking is contrary to both the text and spirit of the Clean Water Act. In developing effluent limitation guidelines for point source categories under sections 304 and 306 of the Act, EPA must "fully explicate its course of inquiry, its analysis, and its reasoning." As discussed above, MPP facilities using septic tanks and land application are not necessarily zero dischargers because these practices can include collecting and channeling surface runoff and adding pollutants to jurisdictional waters through irrigation equipment and hydrologically connected groundwater. EPA must fully explicate how MPP facilities using land application and septic tanks do or do not discharge pollutants and develop standards as necessary to control any discharges.

The existing record is inadequate to support EPA's proposed approach. For example, EPA's assertion in its Technical Development Document that most MPP facilities treat their wastewater before land applying, is not a sufficient justification to avoid the ordinary effluent limitation guideline process for the land applying subcategory of MPP facilities. ⁶²⁸ Such pretreatment is not mandatory, and the treatments listed are not equally effective at removing

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^{623 68} Fed. Reg. at 7208 ("EPA believes that improper storage, as well as improper land application rates that exceed appropriate agricultural utilization of nutrients, has contributed to water quality problems, especially in areas with large concentrations of poultry production."); see also, e.g., Garrison v. New Fashion Pork LLP, No. 18-CV-3073-CJW-MAR, 2020 WL 1811373, at *4, *8 (N.D. Iowa Jan. 9, 2020) (describing land application above agronomic rates at CAFO that resulted in a point source discharge); Flint Riverkeeper, Inc. v. S. Mills, Inc., 276 F. Supp. 3d 1359, 1369 (M.D. Ga. 2017) (explaining that spray fields on which a land application system is permitted may become "overburdened and oversaturated" with "polluted industrial wastewater," causing stormwater to wash the polluted wastewater from the spray fields overland into navigable waters, and holding that unpermitted discharges from spray fields violated the facility's NPDES permit); EPA, Transport and Fate of Nutrients and Indicator Microorganisms at a Dairy Lagoon Water Application Site: An Assessment of Nutrient Management Plans 8, 66 (Mar. 2011) (explaining the idiosyncrasies that make NMPs difficult to implement and ultimately ineffective at protecting hydrologically connected waters).

⁶²⁴ See 40 C.F.R. §§ 122.42(e), 412.4. Importantly, though these regulations exist, they too are inadequate. See also Food & Water Watch, et al., Petition to Revise the Clean Water Act Regulations for Concentrated Animal Feeding Operations at 33-57 (2017) (describing problematic provisions and their adverse impacts on human health and the environment).

⁶²⁵ Ass'n of Pacific Fisheries v. EPA, 615 F.2d 794, 820 (9th Cir. 1980) (quoting Tanners Council v. Train, 540 F.2d 1188, 1191 (4th Cir. 1976)).

⁶²⁶ See 40 C.F.R. § 122.2 (defining "discharge" under the Clean Water Act); see also Maui, 140 S. Ct. at 1476–77.

⁶²⁷ See 33 U.S.C. §§ 1314(b), 1316(b) (requiring effluent limit guidelines for classes and categories of point sources, including the meat and poultry product category); see also Proposed Rule at 4744 ("The [EPA] is proposing a regulation to revise the [ELGs] for the meat and poultry products (MPP) point source category.") (emphasis added).

⁶²⁸ See TDD at 74–75.

harmful pollutants. 629 The Clean Water Act mandates that EPA make a determination about which of these treatments satisfies the applicable technological standard, and set effluent limits based on that technology. 630 Here, EPA has not complied with that mandate, opting instead to leave almost a quarter of the MPP industry unregulated and leave the public in the dark about the impacts of those facilities' pollution. 631 To the extent EPA believes a particular land application or septic system *is* the best available control technology economically achievable best available demonstrated control technology, or any of the Clean Water Act's other technological standards, EPA must affirmatively say so. 632 This will require EPA to address industry evidence indicating septic tanks are not designed to handle most MPP facilities' waste. If EPA concludes, after fully considering the problem, that septic tanks can achieve zero discharge, EPA must set the effluent limit at zero. For the reasons explained above, merely labeling septic tanks zero discharge will not suffice.

In short, simply assuming—against the weight of the evidence disclosed—that MPP facilities that land apply and/or treat wastewater with septic tanks never discharge undermines the structure and purpose of the Clean Water Act. 633 The zero discharger label impedes permitting authority, preventing permit writers from setting conditions that are necessary to protect water quality as the Act contemplates in sections 301 and 302. 634 Moreover, unpermitted plants cannot be subject to best management practices that are necessary to ensure sludge and wastewater are only transferred to third parties who agree to store and land apply those wastes in accordance with the limits that are applicable to the permitted entity. 635 Such best management practices are crucial to prevent MPP facilities from circumventing the EPA's guidelines by transferring wastewater to offsite fields where pollution control limits do not apply. Inadequate permit coverage also prolongs the dearth of representative monitoring data, further hampering the development of sufficient permit conditions and the transparent flow of information about MPP facilities' contributions to the nation's pollution problems. This lack of monitoring data also prevents enforcement of section 301's unpermitted discharge prohibition, obstructs the right of citizens to enforce permits against industrial polluters, and interferes with the development of total maximum daily loads that are necessary to protect water quality. 636

⁶²⁹ *Id*.

⁶³⁰ See 33 U.S.C. §§ 1311(b), 1314, 1316(b).

⁶³¹ See EA at 6-3, n.46 ("EPA was not able to model environmental impacts of changes in land application rates as the location and rates of land application can vary by facilities and over time.").

⁶³² See Waterkeeper Alliance v. EPA, 399 F.3d 486, 519 (2d Cir. 2005) (faulting EPA for failing to make an affirmative decision that effluent limits did in fact represent the best conventional pollutant control technology for reducing pathogens).

⁶³³ See 33 U.S.C. § 1251.

⁶³⁴ *Id.* §§ 1311, 1312.

⁶³⁵ See 33 U.S.C. § 1314(e) (authorizing EPA to develop BMPs to, inter alia, sludge and waste disposal). ⁶³⁶ Id. §§ 1311(a), 1365, 1313(d); see also 66 Fed. Reg. 2at 3030 (EPA describing identical concerns in the CAFO context.

IX. EPA Should Adopt Appropriately Stringent Pollution Reduction Standards to Advance Environmental Justice.

In analyzing the Proposed Rule's effects on environmental justice, EPA correctly found that MPP pollution disproportionately harms low-income communities and communities of color, and thus, these communities will experience the most significant benefits from more stringent pollution control standards. However, EPA did not properly weigh these environmental justice findings in selecting its preferred regulatory option. Neither did EPA properly consider cumulative impacts. When properly weighed and considered, the environmental justice effects of this rulemaking support the selection of Option 3, strengthened as recommended in these comments.

There can be no question that pollution from slaughterhouses and rendering facilities worsens environmental injustice. As documented in EPA's environmental justice literature review, a growing body of scientific evidence demonstrates that MPP facilities are often located in rural, low-income communities. EPA's environmental justice analysis confirms that communities (a) within one mile of a MPP facility, (b) within one mile of a surface waterbody downstream of a MPP wastewater discharge, (c) receiving drinking water from a potentially impacted service area, or (d) potentially relying on subsistence fishing from surface waters downstream of MPP wastewater outfalls all have greater proportions of low-income individuals and "racial/ethnic minorities" than the nation as a whole. 639

Nonetheless, EPA expressly ignored its environmental justice findings, ⁶⁴⁰ even though the Agency has the authority—and obligation—to take those findings into account. Executive Order 12,898 directs EPA and other federal agencies, "to the greatest extent practicable and permitted by law," to identify and address "disproportionately high and adverse human health or environmental effects of [agency] programs, policies, and activities on minority populations and low-income populations." Executive Order 14,096 reaffirms the federal government's commitment to advancing environmental justice, including by enforcing environmental laws and preventing pollution. ⁶⁴² "[I]f an executive agency . . . may lawfully implement [an] Executive Order, then it must do so." ⁶⁴³

The CWA expressly allows EPA to consider appropriate "other factors" when setting water pollution control standards, ⁶⁴⁴ so long as those factors are consistent with the statute's

⁶³⁹ See Proposed Rule at 4512.

⁶³⁷ Proposed Rule at 4512.

 $^{^{638}}$ EA at 7-2-7-6.

⁶⁴⁰ EA 7-1 (stating that EPA's environmental justice analysis "does not form a basis or rationale for any of the actions EPA is proposing in this rulemaking").

⁶⁴¹ Exec. Order No. 12,898 § 1-101 (1994).

⁶⁴² Exec. Order No. 14,096 § 3(vi) (2023).

⁶⁴³ Bldg. & Constr. Trades Dep't v. Allbaugh, 295 F.3d 28, 33 (D.C. Cir. 2002); see Sherley v. Sebelius, 689 F.3d 776, 784–85 (D.C. Cir. 2012).

⁶⁴⁴ See 33 U.S.C. §§ 1314(b)(1)(B), 1314(b)(2)(B) & 1314(b)(4)(B).

other provisions, as well as its "structure and its public safety purpose." Addressing the environmental justice impact of industrial water pollution, in accordance with relevant executive orders, clearly aligns with the structure and public safety purpose of the CWA. Thus, EPA can and must consider environmental justice as a factor in this rulemaking.

In addition, EPA should more fully consider cumulative impacts. EPA's environmental justice analysis found that communities surrounded by multiple MPP facilities are often overburdened, underserved, and particularly vulnerable to Clean Water Act violations. ⁶⁴⁶ But EPA failed to properly consider that MPP facilities are often clustered together with industrial meat-, dairy-, and egg-production facilities, also known as concentrated animal feeding operations or CAFOs. ⁶⁴⁷ CAFOs discharge many of the same pollutants as MPP facilities to many of the same waterways, ⁶⁴⁸ amplifying the human health and environmental harms suffered by environmental justice communities. ⁶⁴⁹ EPA should more fully consider cumulative impacts from MPP and CAFO clusters, including by analyzing and reporting on the EJSCREEN waste and water indicators, ⁶⁵⁰ which are particularly relevant when assessing impacts on drinking water and subsistence fishing.

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⁶⁴⁵ Sw. Elec. Power Co., 920 F.3d at 1028.

⁶⁴⁶ See EA at 7-4 (citing Leah Baskin-Graves et al., Rapid Health Impact Assessment of a Proposed Poultry Processing Plant in Millsboro, Delaware, 16 Int'l J. of Env't Rsch. & Pub. Health (2019)) ⁶⁴⁷ For example, in Duplin County, North Carolina, the Co-Founder and Executive Director of the Rural Empowerment Association for Community Help lives and works within 3 miles of at least 41 CAFOs, within 20 miles of at least four slaughterhouses and rendering facilities, and less than an hour and a half away from the world's largest pork slaughterhouse. See Decl. of Devon Hall ¶ 5 (sworn to on Sept. 29, 2022), attached as Ex. 3.

GAFO effects on water quality" in most watersheds. See Stephen L. Harden, Surface-Water Quality in Agricultural Watersheds of the North Carolina Plain Associated with Concentrated Animal Feeding Operations 50 (2015), https://pubs.usgs.gov/sir/2015/5080/pdf/sir2015-5080.pdf. The researchers concluded that "it is apparent that land-applications of waste manure at swine CAFOs" caused ion and nutrient pollution in the watersheds. Id. at 51.

German Distribution of Concentrated Animal Feeding Operations in Ohio, 6 Env't Just.133 (2013); see also Arbor J.L. Quist et al., Disparities of Industrial Animal Operations in California, Iowa, and North Carolina 5 (2022), https://earthjustice.org/wp-content/uploads/quistreport_cafopetition_oct2022.pdf; Ji-Young Son et al., Distribution of Environmental Justice Metrics for Exposure to CAFOs in North Carolina, USA, 195 Env't Rsch. 110862, 110862 (2021); Sacoby M. Wilson et al., Environmental Injustice and the Mississippi Hog Industry, 110 Env't Health Persps. 195, 199 (2002); Steve Wing et al., Environmental Injustice in North Carolina's Hog Industry, 108 Env't Health Persps. 225, 229 (2000); Julia Kravchenko et al., Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations, 79 N.C. Med. J. 278 (2018); Arbor J.L. Quist et al., Exposure to Industrial Hog Operations and Gastrointestinal Illness in North Carolina, USA, 830 Sci. Total Env't 154823 (2022).

⁶⁵⁰ See EPA, Overview of Environmental Indicators in EJScreen, https://www.epa.gov/ejscreen/overview-environmental-indicators-ejscreen.

EPA's environmental justice findings and likely cumulative impacts both weigh heavily in favor of adopting a strengthened version of Option 3. As explained above, EPA concluded that all three regulatory options will improve drinking water and fishing areas, and those improvements will benefit "minority and/or low-income populations." But, as compared with Option 1, Option 3 goes further to address environmental injustice by reducing nutrient pollution for more than 20 million *additional* people—disproportionately low-income, Black, Asian, and Hispanic—living downstream of MPP wastewater outfalls. The changes advocated for in these comments will further reduce the disproportionate harm currently experienced by environmental justice communities.

X. <u>EPA Should Establish Monitoring, Testing, and Reporting Requirements for the ELGs and Pretreatment Standards.</u>

MPP facilities must comply with applicable ELGs and pretreatment standards at all times. However, EPA's proposed rule does not include monitoring, testing, and reporting requirements that ensure compliance with the ELGs and pretreatment standards. These requirements are critical to establish an ongoing record of a facility's compliance status and hold facilities that violate ELGs and pretreatment standards accountable under the law. Without this information, EPA, state agencies, and the public have no way of confirming that a facility is continuously complying with the Clean Water Act.

As information in the record demonstrates, discharge rates and loadings at a specific facility may vary over the course of a month such that infrequent monitoring may not accurately represent daily maximum and monthly average concentrations of pollutants. The frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. 654 EPA's regulations require permit writers to include monitoring requirements in NPDES permits, "including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring."655 Without specific monitoring requirements in ELGs and pretreatment standards, these important monitoring decisions are left up to permit writers in various regions across the country without sufficient guidance. For example, the permit for a Tyson Farms Inc. poultry slaughtering and processing facility in Tennessee only requires monitoring for BOD twice per week, TN once per week, TSS monthly, and O&G semiannually – despite maximum daily and monthly average limits for all pollutants. 656 The permit for a Tyson Poultry Inc. Poultry First and Poultry Further facility in Arkansas only requires monitoring for TSS and TN once a month, O&G twice per month, and ammonia once every two months. 657 At a minimum, EPA has the authority to, and should, include monitoring requirements in the final rule that ensure compliance with the ELGs and pretreatment standards.

⁶⁵¹ See Proposed Rule at 4514.

⁶⁵² See EA at 7-10.

⁶⁵³ 33 U.S.C. 1311(a) ("Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful."). ⁶⁵⁴ 40 C.F.R. § 122.45.

⁶⁵⁵ Id

⁶⁵⁶ See Tennessee Dept. of Envt. And Conservation, TN0073563 (Dec. 15, 2015). Attached as Ex. 16.

⁶⁵⁷ See Arkansas Dept. of Envtl. Quality, AR00041734 (Feb. 4, 2019). Attached as Ex. 17.

XI. EPA Must Require Compliance with ELGs and Pretreatment Standards No Later Than Three Years from the Final Rule.

EPA is finally taking action to curb nutrient and other harmful water pollution from slaughterhouses and rendering facilities, but EPA has failed to propose a firm deadline for compliance with the new and revised ELGs and pretreatment standards. The Clean Water Act mandates compliance with revised ELGs and pretreatment standards no later than three years from the date the revisions are finalized. EPA's failure to propose a firm deadline for compliance is unjustified and does not comply with the Clean Water Act.

For direct discharging facilities, EPA's proposal sets no compliance deadline for the revised ELGs, leaving the implementation timeline of those limits entirely to permitting authorities' discretion. Regarding pretreatment standards for nitrogen and phosphorus removal under Options 2 and 3, EPA solicits comments on "compliance flexibilities" such as phased implementation based on facility size "that would allow for additional time beyond the three-year statutory timeframe in CWA section 307(b) (33 U.S.C. 1317(b))[.]" EPA points to the number of indirect dischargers that would finally be required to comply with nitrogen and phosphorus limits under Options 2 and 3, and supposed "ongoing supply chain issues[.]" Yet the CWA does not leave room for "compliance flexibilities."

Further, as a practical matter, facilities can comply with revised ELGs and pretreatment standards within this statutory time frame, and there is no excuse for further delay. Based on the requirements of the CWA and administrative record, EPA must require compliance with the ELGs and pretreatment standards by no later than three years after the effective date of the final rule.

A. EPA Must Require Compliance with Revised ELGs no Later Than Three Years from the Date the Revisions are Finalized.

The CWA requires compliance with ELGs no later than three years after the limitations are promulgated. 662 Therefore, EPA's proposal violates the CWA by not setting any compliance deadline for the revised ELGs.

⁶⁵⁸ 33 U.S.C. §§ 1311(b)(2)(C)-(D); *id* at § 1317(b)).

⁶⁵⁹ Proposed Rule at 4515 ("Once promulgated, those permits or control mechanisms issued after this rule's effective date would be required to incorporate the effluent limitations guidelines and standards, as applicable.").

⁶⁶⁰ Id. at 4493.

⁶⁶¹ *Id*.

⁶⁶² 33 U.S.C. § 1311(b)(2)(F) (requiring "compliance with [BAT] effluent limitations . . . as expeditiously as practicable but in no case later than 3 years after the date such limitations are established. . . , and in no case later than March 31, 1989"). Subsection (E) is also applicable and includes language requiring that compliance with effluent limitations based on best conventional pollutant control technology (BCT) be

As EPA acknowledges, "[t]he legislative history of CWA Section 304(b) (33 U.S.C. 1314(b)), which is the heart of the effluent guidelines program, describes the need to press toward higher levels of control through research and development of new processes, modifications, replacement of obsolete plants and processes, and other improvements in technology, taking into account the cost of controls." The CWA's three-year compliance mandate is critical to achieving this technology-forcing goal.

EPA may claim that the three-year deadline for ELG compliance only applies to the first set of BAT limitations EPA promulgates for an industry. EPA's prior rationale for this argument has relied on the fact that the compliance deadline provision in Section 301(b)(2)(F) of the Act also states that compliance must be achieved "in no case later than March 31, 1989." Although the U.S. Court of Appeals for the Fifth Circuit in litigation over EPA's rule delaying the compliance dates of the 2015 ELGs for the Steam Electric Generation Point Source Category accepted this interpretation in that case, ⁶⁶⁴ the decision is inconsistent with the CWA and, even if it were correctly decided on the law, does not apply to the facts of the present regulation.

The plain text of Section 301(b)(2)(F) of the CWA specifies that compliance must be achieved no later than three years following the promulgation of BAT limitations for nonconventional pollutants and there is nothing ambiguous about that language. This section should be read in a manner that avoids rendering other provisions superfluous or unnecessary. The fact that section 301(b)(2)(F) also contains a provision – establishing March 1989 as the presumptive outside date for initial limitations – does not render the otherwise-applicable three-year language (or, for that matter, the otherwise-applicable "as expeditiously as practicable" language) meaningless. To the contrary, it underscores that Congress viewed compliance with

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achieved within three years after such limitations are established. Congress initially set a March 31, 1989 deadline for compliance with BAT effluent limitations, Pub. L. No. 100–4, 101 Stat 7 (1987), with the intention that EPA would promulgate ELGs setting forth those BAT limits before the deadline. Additionally, Congress amended 33 U.S.C. § 1319 to allow EPA to address issues involving compliance with BAT limits through enforcement discretion. See 33 U.S.C. § 1319(a)(5)(A) ("Any [enforcement] order issued . . . shall specify a time for compliance . . . not to exceed a time the Administrator determines to be reasonable in the case of a violation of a final deadline, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements."); H.R. Conf. Rep. No. 1004, 99th Cong., 2d Sess. 115 (1986) ("If dischargers in an entire category are unable to meet the March 31, 1989, deadline provided in the conference substitute as a result of the Administrator's failure to promulgate effluent limitations in sufficient time to allow for compliance by such date, non-compliance resulting from the Administrator's delay can be dealt with under EPA's current post-1984 deadline enforcement policy."). Based on this legislative history, courts have held that EPA lacks discretion to extend compliance deadlines for BAT limits beyond what the statute requires. See Chem. Mfrs. Ass'n, 870 F.2d at 242; see also Rybachek v. EPA, 904 F.2d 1276, 1300-1301 (9th Cir. 1990).

⁶⁶³ Proposed Rule at 4478-79.

⁶⁶⁴ See Clean Water Action v. EPA, 936 F.3d 308, 316–17 (5th Cir. 2019) (accepting EPA argument that deadlines only apply to initial promulgation).

⁶⁶⁵ See Gade v. Nat'l Solid Wastes Mgmt. Ass'n, 505 U.S. 88, 100 (1992).

BAT limitations on nonconventional pollutants as an urgent priority, to be met quickly after such limitations were promulgated.

Moreover, Section 301(d) reinforces this approach, demanding that effluent limitations be reviewed and updated as appropriate every five years, "pursuant to the procedure established under" Section 301(b)(2). 666 Section 301(d) reveals Congressional intent to continually and promptly move industries toward better pollution controls. It would be inconsistent with this policy to interpret the three-year compliance deadline in Section 301(b)(2) as only applicable to initial BAT limitations. 667 It is a well-established principle of statutory interpretation that "[i]n ascertaining the plain meaning of [a] statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole." To achieve the CWA's goal of setting more stringent pollution limits over time, EPA's ongoing obligations to revise ELGs as technology improves must be paired with the three-year statutory compliance deadline that pushes facilities to implement advanced treatment technology.

Further, as discussed below, EPA acknowledges that technology-based pretreatment standards for indirect dischargers "shall specify a time for compliance not to exceed three years from the date of promulgation[.]"⁶⁶⁹ An interpretation of the comparable provision applicable to direct dischargers under Section 301(b)(2), therefore, should be consistent with this mandate. Congress intended to require revision and compliance with limits at regular intervals for both direct and indirect dischargers. To interpret section 301(b) as only imposing a deadline for compliance with initial promulgation of ELGs is contrary to the goals of the Clean Water Act and would allow direct dischargers in an industry to evade timely compliance with regulations that EPA must review and revise at regular intervals to ensure maximum reductions in effluent discharges on a mandatory schedule. ⁶⁷¹

Courts also look to the title of a statute or section to aid in resolving an ambiguity in the legislation's text.⁶⁷² The title of section 301(b) is "Timetable for achievement of objectives," and the first sentence of section 301(b) begins "In order to carry out the objective of this chapter..."

⁶⁶⁷ See Crandon v. United States, 494 U.S. 152, 158 (1990) ("In determining the meaning of the statute, we look not only to the particular statutory language, but to the design of the statute as a whole and to its object and policy").

^{666 33} U.S.C. § 1311(d).

⁶⁶⁸ McCarthy v. Bronson, 500 U.S. 136, 139 (1991) (quoting K Mart Corp. v. Cartier, Inc., 486 U.S. 281, 291 (1988); see also Crandon, 494 U.S. at 158 ("In determining the meaning of the statute, we look not only to the particular statutory language, but to the design of the statute as a whole and to its object and policy").

⁶⁶⁹ 33 U.S.C. § 1317(b)(1); Proposed Rule at 4515.

⁶⁷⁰ See Crandon, 494 U.S. at 158.

⁶⁷¹ See, e.g., Bronson, 500 U.S. at 139 ("In ascertaining the plain meaning of [a] statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole.") (quoting *K Mart Corp.* 486 U.S. at 291).

⁶⁷² INS v. National Center for Immigrants' Rights, 502 U.S. 183, 189-90 (1991) (citing Mead Corp. v. Tilley, 490 U.S. 714, 723 (1989)).

(i.e. Federal Water Pollution Control Act). ⁶⁷³ The title of section 301(b) is further support that Congress intended the compliance timetables to further all CWA objectives, including reductions in pollution discharges from the mandatory revision of, and compliance with, ELGs and effluent limitations at regular intervals. ⁶⁷⁴ In short, Congress' goal in enacting the Clean Water Act was to produce progressively cleaner waters—and ultimately eliminate all pollution—through the ratcheting down of effluent limits over time as technology advances. ⁶⁷⁵ Mandatory revisions to standards with no deadline for compliance with those standards would be meaningless. ⁶⁷⁶ Under the plain meaning of section 301(b)(2), the final rule must state that compliance with new ELG requirements must occur no later than three years from its effective date. ⁶⁷⁷

The proposed rule lacks a hard deadline by which the revised limits must be incorporated into MPP facilities' permits, and instead leaves the implementation timeline entirely to permitting authorities' discretion. Regarding BAT limitations for existing sources, EPA states that "[o]nce promulgated, those permits or control mechanisms issued after this rule's effective date would be required to incorporate the effluent limitations guidelines and standards, as applicable." However, EPA ignores the fact that state permitting agencies routinely fail to renew NPDES permits for slaughterhouses and rendering facilities in a timely manner even though the Clean Water Act requires discharge permits to be renewed every 5 years. 800

Contrary to EPA's statements, it is unlikely that all slaughterhouses and rendering facilities would have the rule's new BAT requirements incorporated into their permit no later than five years after the rule is finalized. In some cases, discharge permits for slaughterhouses and rendering facilities are administratively extended – and many for several years or more. Based on data available on EPA ECHO for 102 of the largest direct-dischargers in this industry and facilities EPA identified as part of its BAT analysis, at least 21 facilities are operating with administratively-continued permits and 7 are operating with expired permits. ⁶⁸¹ For example, the

⁶⁷³ 33 U.S.C § 1311(b).

⁶⁷⁴ 33 U.S.C. § 1311(d).

⁶⁷⁵ 33 U,S.C §§ 1251(a)(1), (2), (6).

⁶⁷⁶ See John Hancock Mut. Life Ins. Co. v. Harris Trust & Sav. Bank, 510 U.S. 86, 94-95 (1993) ("[W]e examine . . . the language of the governing statute, guided not by a single sentence or member of a sentence, but look[ing] to the provisions of the whole law, and to its object and policy.") (internal quotes removed).

⁶⁷⁷ Previous ELGs have set a firm date for compliance. *See e.g.*, Copper Forming Point Source Category; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards, 48 Fed. Reg. 36,942 (Aug. 15, 1983) (noting that "[t]he compliance date for the BAT regulations is as soon as possible, but in any event, no later than July 1, 1984.").

⁶⁷⁸ Proposed Rule at 4515.

⁶⁷⁹ *Id*.

⁶⁸⁰ 33 U.S.C. § 1342(b)(1)(B).

⁶⁸¹ Permit status reflects the status reported in EPA ECHO and may not be fully up to date. ECHO data show 6 of the 7 expired permits expired in 2022 or later. Facilities include EPA's BAT candidates and MPP facilities highlighted in EIP's 2018 report. Analysis of EPA ICIS-NPDES database, Attached as Ex. 18, MPP NPDES Permits and Status, for detailed permit list. EPA, Evaluation of Technology Basis and

permit for the Fort Morgan Beef plant in Morgan City, Colorado has been administratively continued for over a decade – since 2013.⁶⁸² The permit for the JBS/Swift Pork Co. plant in Beardstown, Illinois has been administratively continued since 2018.⁶⁸³ Further, the permit for the Simmons Foods, Inc. plant in Southwest City, Missouri expired in 2011.⁶⁸⁴ Given past practice, EPA simply cannot rely on state permitting agencies to ensure BAT requirements are in place by a date certain without imposing a hard deadline in the final rule.

The Clean Water Act requires compliance within three years of the effective date of the final rule. The final rule must require compliance with the new BAT requirements "as soon as possible, but no later than three years from the effective date of the final rule."

B. Pushing Compliance Deadlines for Pretreatment Standards Past Three Years After the Rule's Finalization is Unlawful.

The CWA explicitly directs that pretreatment standards "shall specify a time for compliance not to exceed three years from the date of promulgation[.]"⁶⁸⁶ EPA acknowledges that this mandate applies to this rulemaking. Under EPA regulations, 40 C.F.R. 403.6(b), existing indirect dischargers subject to PSES have three years to comply with the standards, whereas new indirect dischargers, subject to PSNS, have ninety days to comply with the standards. have not of the standards.

Yet, in proposing the first-ever pretreatment standards for slaughterhouses and rendering facilities, EPA does not propose a firm compliance deadline under any of the regulatory options. Instead, EPA solicits comments on "compliance flexibilities," such as a phased implementation based on size thresholds for nitrogen and phosphorus pretreatment limits under Options 2 and 3,

Identification of BAT Facilities - DCN MP00304; The Environmental Integrity Project, Water Pollution from Slaughterhouses, Docket ID No. EPA-HQ-OW2021-0736-0494 (Oct. 11, 2018).

⁶⁸² EPA Enforcement and Compliance History Online (ECHO), Detailed Facility Report, "Fort Morgan Beef Plant," https://echo.epa.gov/detailed-facility-report?fid=CO0044270. Accessed March 21, 2024. ⁶⁸³ EPA ECHO, Detailed Facility Report, "JBS/Swift Pork Co," https://echo.epa.gov/detailed-facility-report?fid=IL0023914. Accessed March 21, 2024.

⁶⁸⁴ EPA ECHO, Detailed Facility Report, "Simmons Food Inc Southwest City," https://echo.epa.gov/detailed-facility-report?fid=MO0036773. Accessed March 21, 2024.

Notably, in setting industry-specific standards to control hazardous air pollution, the Clean Air Act also requires that EPA require implementation and compliance with new and revised standards "in no event later than 3 years after the effective date of such standard" with a limited 1-year extension permitted where "necessary for the installation of controls." 42 U.S.C. §§ 7412(i)(3)(A)-(B).

⁶⁸⁶ 33 U.S.C. § 1317(b)(1).

⁶⁸⁷ Proposed Rule at 4515.

⁶⁸⁸ "Compliance by existing sources with categorical Pretreatment Standards shall be within 3 years of the date the Standard is effective unless a shorter compliance time is specified in the appropriate subpart of 40 CFR chapter I, subchapter N . . . New Sources shall install and have in operating condition, and shall 'start-up' all pollution control equipment required to meet applicable Pretreatment Standards before beginning to Discharge. Within the shortest feasible time (not to exceed 90 days), New Sources must meet all applicable Pretreatment Standards." 40 C.F.R. Part 403.6(b).

to "allow for additional time beyond the three-year statutory timeframe in CWA section 307(b)[.]"689 EPA does not cite to any authority that would permit extension of a compliance deadline beyond the CWA's three-year mandate.

Like ELGs, the three-year compliance deadline for pretreatment standards furthers the CWA objectives of reducing pollution discharges from the mandatory revision of, and compliance with, pretreatment standards at regular intervals. In drafting the CWA, "Congress recognized that regulating only those sources that discharge effluents directly into the Nation's waters would not be sufficient to achieve the CWA's goals."690 The CWA therefore also ratchets down pollution from indirect dischargers as technology advances in order to produce progressively cleaner waters—and ultimately eliminate all pollution as Congress intended. 691

A final rule that does not impose a three-year outer bound on compliance with revisions of these limits is clearly contrary to the language and design of the CWA. The CWA precludes EPA from imposing any "compliance flexibilities" beyond the three-year compliance deadline. The final rule must require compliance with the new pretreatment requirements, including for nitrogen and phosphorus, "as soon as possible, but no later than three years from the effective date of the final rule."

C. The record does not support EPA's contention that some indirect sources may not be able to comply with nitrogen and phosphorus pretreatment requirements within three years.

EPA states "it is not clear whether [nutrient removal] technologies will be available in sufficient quantity to allow for installation within the three-year statutory timeframe for pretreatment standards under CWA Section 307(b) (33 U.S.C 1317(b))."692 The record does not demonstrate that indirect discharging facilities cannot comply with nitrogen and phosphorus limitations within three years of the effective date of a final rule. EPA is explicit that "these technologies are widely available and have been used in many industrial and municipal wastewater treatment facilities across the country to remove nutrients[.]"693

EPA raises concerns expressed by small entity representatives ("SERs") regarding hypothetical implementation delays of nutrient removal technologies by indirect dischargers

⁶⁸⁹ Proposed Rule at 4493.

⁶⁹⁰ Effluent Limitations Guidelines and New Source Performance Standards for the Meat and Poultry Products Point Source Category, 69 Fed. Reg. 54,476, 54,479 (Sept. 8, 2004).

⁶⁹¹ Congress directed EPA to establish pretreatment standards, then revise them "from time to time, as control technology, processes, operating methods, or other alternative change[.]" See 33 U.S.C. §§ 1317(b)(1)-(2).

⁶⁹² Proposed Rule at 4493. "EPA solicits additional information about production capacity for nutrient control technologies in the industry, given that the Nation is currently in the process of significant investments in water infrastructure as part of the Bipartisan Infrastructure Law." Id. ⁶⁹³ *Id*.

under Options 2 and 3.⁶⁹⁴ It is then stated that such potential implementation delays could lead to noncompliance with nutrient pretreatment standards or temporary facility closures "until they are able to get the new control technology in place." The SERs' rationale relates to "ongoing supply chain issues and labor shortages in the wastewater treatment industry" and also points to hypothetical supply impacts, without any data or market analysis in the record. Fee SERs point to the fact that some indirect-discharging facilities would finally be required to comply with national pretreatment standards to control nutrient pollution, which would drive those facilities to acquire sufficient treatment technology. Namely it is stated that:

The amount of a good supplied for a market can take time to adjust to a sudden large increase in demand. In addition, if there is a temporary spike in demand resulting from many facilities needing to come into compliance at the same time, there may not be an incentive for the companies that make and install these technologies to increase their long-term capacity. ⁶⁹⁸

The SBAR Panel Report further recommends a flexible compliance deadline to "allow facilities to acquire the necessary finances, plan for the costs, and draw out the spending to reduce costs each year . . . help facilities acquire necessary knowledge or personnel to install and operate wastewater treatment systems" as well as to help "small businesses [which] may not be able to adapt to changing regulations as quickly as large businesses." ⁶⁹⁹ Yet EPA has already determined that Options 2 and 3 "would not have a significant economic impact on a substantial number of small entities" ⁷⁰⁰ and "the primary economic burden of the rule is born by the large facilities and firms." ⁷⁰¹ EPA may not delay compliance with any final pretreatment standards beyond the mandatory three-year period for any of the above reasons.

Moreover, the record does not show that compliance within three years is not possible. The fact, in the absence of market shortages relating to wastewater treatment technologies, "three years is more than adequate time to design, permit, construct, complete startup/shakedown operations, and bring into full, routine operation the TN and TP treatment trains required by

⁶⁹⁴ *Id*.

⁶⁹⁵ *Id*.

⁶⁹⁶ *Id*.

⁶⁹⁷ *Id*.

⁶⁹⁸ IA

⁶⁹⁹ EPA, Final Report of the Small Business Advocacy Review Panel on EPA's Planned Proposed Meat and Poultry Products Effluent Limitations Guidelines Rulemaking - DCN MP00347A1, at 16; *see id* at 15.

⁷⁰⁰ Proposed Rule at 4519.

⁷⁰¹ *Id.* at 4501-02.

⁷⁰² See Shefftz Memo at 15.

Option 2 and Option 3, including for Indirect Dischargers with no existing process wastewater treatment facilities."⁷⁰³

In the event that hypothetical market shortages impact the capability of a facility to acquire a specific treatment technology, a variety of alternative technologies may be available to achieve compliance with pretreatment requirement within the statutory deadline. Pretreatment standards do not mandate that facilities install specific technology. Rather, once the limits are established, "dischargers may use any technology that meets the limitations and standards." ⁷⁰⁴

Further, in our dynamic market economy, existing suppliers are responsive to market incentives and potential industry entrants are looking for new opportunities. 705 In numerous environmental regulatory contexts, the "imposition of more stringent requirements has ultimately led to a lower cost of compliance as innovations provided for enhanced efficiency[.]"⁷⁰⁶

The potential impact of hypothetical market shortages on compliance with TN and TP pretreatment limitations within the three-year statutory deadline will vary dramatically based on factors that are specific to any given MPP facility. In some cases, for example, facilities may have the ability to lease treatment systems for short-term treatment needs. Any such impacts ought to be considered on a case-by-case basis as they arise. Control Authorities and POTWs responsible for enforcing categorical pretreatment standards can account for such conditions as part of their enforcement discretion. 707

D. Downstream communities should not be forced to wait any longer for clean

The meat and poultry products industry—the nation's largest discharger of phosphorus pollution and second-largest discharger of nitrogen pollution⁷⁰⁸—has effectively been given a free pass to pollute for decades, which has resulted in widespread damage to watersheds around the country and put downstream communities in harm's way. EPA is finally taking long overdue

⁷⁰³ CEA Engineers Report at 37, Ex. 10.

⁷⁰⁴ Proposed Rule at 4478.

⁷⁰⁵ See Shefftz Memo at 15.

⁷⁰⁷ See 40 CFR §§ 403.8(f)(1)(vi)(A)-(B); see also 33 U.S.C. § 1319(a)(5)(A) ("Any [enforcement] order issued . . . shall specify a time for compliance . . . not to exceed a time the Administrator determines to be reasonable in the case of a violation of a final deadline, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.").

⁷⁰⁸ In EPA's 2019 cross-industry review of 2015 DMR and TRI data on nutrient discharges from industrial sources, "[t]he MPP industry ranked as one of the highest in the analysis for total nitrogen and total phosphorus, leading EPA to focus on this industry[.]" Proposed Rule at 4480 (citing USEPA. 2019. EPA-HQ-OW-2019-0618)). "EPA found that the MPP industry discharges the highest phosphorus levels and second highest nitrogen levels of all industrial categories." Id. at 4480.

action to curb these dangerous discharges, and should not allow the industry to delay complying with new requirements beyond three years after finalization of this long-overdue revision.

Each year that EPA delays full compliance with the new requirements beyond the three-year statutory timeframe could result in the dumping of an additional 95.7 million pounds of nutrient pollution into U.S. waters under Option 3.⁷⁰⁹ The CWA mandates cleanup and there is no excuse for further delay.

For all of these reasons, EPA must require compliance with the requirements in the final rule as soon as possible, but no later than three years from the effective date of the final rule.

CONCLUSION

Inadequately controlled water pollution from slaughterhouses and rendering facilities can make water unsafe for drinking, unfit for outdoor recreation, and uninhabitable for aquatic life, posing serious risks to human health and the environment, especially in vulnerable and underresourced communities. After more than two decades, EPA finally has begun the process of strengthening water pollution control standards for these facilities, and the Agency now proposes to adopt the weakest of three regulatory options. EPA's preferred option is inconsistent with the CWA and other federal laws. For the reasons set forth above, EPA must select and strengthen the most protective option—Option 3.

Sincerely,

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⁷⁰⁹ See TDD at 109–110.

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Los Angeles Waterkeeper, Lake Erie Waterkeeper,

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Seneca Lake Guardian,

Snake River Waterkeeper,

Socially Responsible Agriculture Project,

Southern Environmental Law Center,

Spring Creek Coalition,

Tennessee Riverkeeper,

Tualatin Riverkeepers,

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