

REGULATION OF CONTAINED ANIMAL FEEDING OPERATIONS THROUGH THE
CLEAN WATER ACT; *Waterkeeper Alliance, Inc. v. United States EPA*, 399 F.3d 486
(2005)

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I. Introduction

With the advent of Concentrated Animal Feeding Operations (CAFOs) the structure of agriculture in the United States has changed vastly over the last three decades.¹ The trend in livestock production toward an overall reduction in the number of farms and the increase in the size of farms has changed the industry dramatically in the last half of century.²

The impact of these changes is widespread. Economically, concentrating agricultural operations removes a higher percentage of money from rural communities, resulting in a community-wide economic downturn.³ Regarding physical health, at least 25% of confinement workers experience respiratory ailments through the course of their employment.⁴ Environmentally, the air quality can affect residents living in the CAFO vicinity due to high concentrations of hydrogen sulfide, inhalable particulate matter, ammonia and endotoxin.⁵ Regulation of CAFOs is difficult because agricultural activities are generally not subject to environmental law.⁶

However, there is a way in which these facilities can be regulated, and that is through release of waste from animal feedlots to surface water, groundwater, and soil. This is an area where it is permissible for the Environmental Protection Agency

¹ Kelley J. Donham; *Community Health and Socioeconomic Issues Surrounding Concentrated Animal Feeding Operations*, Environmental Health Perspectives, November 14, 2006

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ *Id.*

⁶ Claudia Copeland; *Animal Waste and Water Quality, EPA Regulation of CAFOs*, Congressional Research Service, February 16, 2010.

(EPA) to regulate because this release discharges waste into the navigable waters of the United States and is therefore subject to regulation under the Clean Water Act (CWA).⁷ This has effectively served as the only way to regulate an industry that has lasting negative environmental impacts and is known for the mistreatment and abuse of the animals in its charge.

II. Reporting

Scientific research illuminates the mostly understated but vastly important premise that factory farming has a negative environmental impact. The case *Waterkeeper Alliance, Inc. v. United States EPA*, 399 F.3d 486 (2005) (“Waterkeeper”) provides the legal framework for violations of the CWA⁸ caused by factory farms. The Court here reviewed various challenges to the Controlled Animal Feeding Operation (“CAFO”) Rule⁹, promulgated under the CWA. These challenges, brought by environmental group and farmer’s groups, sought review of the CAFO Rule alleging that the CAFO Rule violated the CWA.

The CAFO rule, promulgated by the EPA, was enacted to regulate the emission of water pollutants by animal feeding operations.¹⁰ The CWA formally prohibits “the discharge of a pollutant by any person from any point source to navigable waters except when authorized by a permit issued under the National Pollutant Discharge Elimination System (NPDES).¹¹ Practically speaking, this means that the EPA is responsible for advancing CWA objectives to include the reduction,

⁷ 33 U.S.C.S. §1251.

⁸ *Id.*

⁹ 40 C.F.R. pts. 9, 122, 123, 412.

¹⁰ *Id.*

¹¹ § 1251.

and gradual elimination of water pollution. These NPDES permits are required by statute to set forth effluent limitations, which are restrictions on the “quantities, rates, and concentrations of chemical, physical, biological, and any other constituents which are discharged from a point source into navigable waters.”¹²

The CAFO Rule requires all owners or operators of controlled animal feeding operations to apply for an individual NPDES permits or submit a notice of intent for coverage under a general NPDES permit.¹³ There is an exception for owners of Large CAFOs that secure a determination from the director of the relevant permitting authority indicating that CAFO has “no potential to discharge” of manure, litter or process wastewater.¹⁴ The effluent limitations guidelines of the CWA also require that each Large CAFO develop and implement a nutrient management plan that includes a waste application rate that minimizes phosphorus and nitrogen transport from the field to surface waters.¹⁵ According to the CAFO Rule, all land application discharges are subject to NPDES requirements.¹⁶ The exception is when the CAFOs land-apply waste in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients of that waste and subsequent precipitation related discharge is considered “agricultural storm water discharge” and therefore exempt from regulation under the CWA.¹⁷

Here, two sets of petitioners challenged the CAFO Rule, Environmental Petitioners (Waterkeeper Alliance, Sierra Club, Natural Resource Defense Council,

¹² *Id.*

¹³ 40 C.F.R. §122.23(d)(1).

¹⁴ *Id.*

¹⁵ § 412.4(c)(2).

¹⁶ § 122.23(e).

¹⁷ 33 U.S.C.S. §1362(14).

Inc. and The American Littoral Society) and Agricultural Interest Groups (American Farm Bureau Federation, National Chicken Council, and the National Pork Producers Council).¹⁸ There are three issues for consideration, mostly brought by the environmental petitioners: (1) challenges to the permitting scheme established by the CAFO Rule, (2) challenges to the types of discharge regulation under the CAFO Rule, and (3) challenges to the effluent limitations guidelines established by the CAFO Rule.¹⁹

The majority opinion vacated the provisions of the CAFO Rule that (1) allowed permitting authorities to issue permits without reviewing terms of the nutrient management plan, (2) allowed permitting authorities to issue permits that do not include nutrient management plans and do not provide for adequate public participation, and (3) required CAFOs to apply for NPDES permits or otherwise demonstrate they have no potential discharge.²⁰ The Court also directed the EPA to set a Best Control Technology (BCT) standard for pathogen reduction and clarify through public process the statutory and evidentiary basis for allowing CAFOs to comply with new source performance standards.²¹ A CAFO could accomplish this by either devising production areas that could contain manure, wastewater and litter (to include precipitation runoff), or complying with alternative standards that allow production area discharges.²² The discharges, however, had to be offset by an equal

¹⁸ *Waterkeeper Alliance* at 497.

¹⁹ *Id.*

²⁰ *Id.* at 524.

²¹ *Id.*

²² *Id.*

or greater reduction in the quantity of pollutants released by other media.²³ Lastly, the Court directed the EPA provide clarification for (1) the statutory and evidentiary basis for failing to promulgate water quality based effluent limitations for discharges other than agricultural storm water drainages, and (2) whether states may take it upon themselves to develop water quality standards.²⁴

Central to the Second Circuit's rationale regarding nutrient management plans was the belief that the terms of these plans constitute effluent limitations, and the CAFO Rule's failure to require that the terms of these plans be included in NPDES permits violates the CWA and is otherwise arbitrary and capricious in violation of the Administrative Procedures Act (APA).²⁵ Further, nutrient management plans are the very "heart" of the CAFO Rule, as they are a "critical and indispensable feature of the plan in order to regulate Large CAFO land application discharges."²⁶

As for regulation of potential discharges, the Second Circuit stipulates that the CWA authorizes the EPA to regulate the discharge of pollutants through the issue of NPDES permits.²⁷ According to the CWA, unless there is a discharge pollutant, there is no violation of the CWA, and point sources are not required to comply with EPA regulations for point source discharges nor apply for a NPDES permit.²⁸ If a CAFO can prove it has no potential discharge, it cannot be regulated by the EPA or required to obtain an NPDES permit. The CAFO Rule violates the

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.* at 497.

²⁶ 33 U.S.C.S. § 1251(e).

²⁷ *Waterkeeper* at 494.

²⁸ § 1251.

statutory scheme of the CWA because imposes obligations on CAFO regardless whether they have discharged any pollutants.²⁹

Insofar as the EPA's directed objectives as provided by the Second Circuit, the Court's rationale in the directive of BCT-based effluent guidelines for at least one pathogen, namely fecal coliform (a conventional pollutant subject to regulation) lies in the CWA's requirement for the promulgation of BCT standards for pollutants.³⁰ Here, the Court held that the CAFO Rule was in violation of the CWA because the EPA did not make an affirmative finding that the BCT-guidelines adopted in the CAFO Rule represent the best conventional pollutant control technology for reducing pathogens.³¹

Regarding public participation, the Second Circuit holds that Congress clearly intended to guarantee the public a meaningful role in the participation of the CWA, as the CWA specifically calls for public participation in regulatory development and of its effluent limitation rules.³² The CWA further provides an "opportunity for public hearing" before issuing NPDES permits, as well as a copy of the permit application as well as the permit issued made available to the public.³³

The Court also directed the EPA to provide evidence that CAFO's are complying with New Source Performance Standards (NSPS) particularly because the EPA failed to include groundwater related requirements.³⁴ Further the Court directed the EPA to be clear on Water Quality Based Effluent Limitations (WQBELs),

²⁹ *Id.* at 498.

³⁰ 33 U.S.C.S. § 1311(b)(2)(E)

³¹ *Waterkeeper* at 500.

³² *Id.* at 502.

³³ *Id.*

³⁴ *Id.* at 519.

because the CWA specifies these be established either by the EPA or the states where discharge pollutants form a point source would interfere with the attainment or maintenance of water quality in a particular portion of navigable water.³⁵ The EPA is currently in violation of the CWA for failing to justify the lack of WQBELs for CAFO discharges other than agricultural storm water runoff.³⁶

III. History

Concentrated Animal Feeding Operation (CAFO) law is relatively new and an outgrowth of the Clean Water Act (CWA). Since the passage of the CWA in 1972, the United States has been successful in decreasing water pollution mostly because of National Pollutant Discharge Elimination System (NPDES) permitting regime under the CWA.³⁷ The agricultural industry, however, is a leading contributor of pollutants to navigable waters of the United States.³⁸ This is largely due to lax regulation of CAFOs.³⁹ These NPDES permits are required by statute to set forth effluent limitations, which are restrictions on the “quantities, rates, and concentrations of chemical, physical, biological, and any other constituents which are discharged from a point source into navigable waters.”⁴⁰

CAFOs are the concentration of a large number of animals on agricultural land. The runoff from these feedlots contributes to sixteen percent to of the water

³⁵ § 1312(a); § 1314(l)

³⁶ Waterkeeper at 520.

³⁷ Scott Jerger; New CAFO Land Application Requirements: An Exercise in Unsupervised Self-Monitoring, *Stan. Envtl. L.J.* 91, January 2004.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

impairment in the United States.⁴¹ CAFOs have taken over as mainstream farming practice today, driving out the independent family farmer. CAFOs (also called ‘factory farms’) are characterized by heightened animal confinement, integrated production systems controlled by large processing companies, and the conglomeration of small farms into large corporations.⁴² In the United States, a little over two percent of farms produce fifty percent of agricultural product sales, with ninety-eight percent of poultry bread, owned, slaughtered, and marketed by the top three corporations.⁴³

Large CAFOs that house hundreds to thousands of animals on a concentrated area of land generate enormous quantity of manure. It is estimated that in the United States the amount of animal waste is produced is 130 times the amount of human waste produced.⁴⁴ The manure is used by the CAFO as fertilizer, as the nutrients can help build and maintain soil quality when used in the appropriate ratio.⁴⁵ However, there is too much manure for the CAFO to re-integrate properly as fertilizer.⁴⁶ The resulting issue is that the excess nitrogen and phosphorus nutrients in the manure are exported runoff through watersheds leading to an overgrowth of plant life and algae known as eutrophication.⁴⁷ Eutrophication is the main cause of impaired surface water quality and is linked to significant human health problems.⁴⁸

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.* at 93.

⁴⁶ *Id.*

⁴⁷ *Id.* at 94.

⁴⁸ *Id.*

Problems arose when the agricultural industry began characterizing the pollutant runoff from CAFOs as agricultural storm water discharge, which does not require an NPDES permit.⁴⁹ This issue was first addressed in 1994, when the Second Circuit held that liquid manure spreading operations of large CAFOs were considered a point source under the CWA.⁵⁰ Here, on appeal, the Court found that the defendant farmers discharged manure pollutant from a point source into navigable waters, and that the agricultural storm water exemption did not apply.⁵¹

In 2003, the EPA promulgated new CAFO rules under the CWA.⁵² Specifically relevant was the rule that provided that the areas where manure was applied to fertilize land (Waste Application Fields) fell under NPDES permitting requirements.⁵³ If, however, the CAFO instituted a site-specific nutrient management plan, theoretically to ensure appropriate utilization of nutrients in land applied waste, the discharge could be characterized agricultural storm water, and not subject to NPDES permitting.⁵⁴ The new rule allows states to approve CAFO nutrient management plans based on the state-approved technical standards for nutrient management.⁵⁵ This made the nutrient management themselves subjective and variable from state to state.

⁴⁹ *Id.*

⁵⁰ Concerned Area Residents for the Env't v. Southview Farm, 34 F.3d 114 at 115 (2d Cir. 1994).

⁵¹ *Id.* at 116.

⁵² Jerger at 96.

⁵³ *Id.*

⁵⁴ *Id.* at 97.

⁵⁵ *Id.* at 98.

To further confuse matters, the CWA defines the CAFO itself a point source, but not agricultural storm water discharges.⁵⁶ In regard to the Waste Application Fields (WAF), it is not clear from statutory language whether their runoff is considered to be a point source discharge or agricultural storm runoff.⁵⁷ This is an important determination because the former is subject to NPDES permitting under the CWA and the latter is not. The CWA. However, does not discuss nonpoint source discharge regulation; regulation in this area is usually left to state discretion.⁵⁸

In 2002, the Ninth Circuit upheld the district court's findings that a dairy farm's history of repeated discharge violations resulted in an increased likelihood of intermittent discharges into navigable waters.⁵⁹ Here, the court held that CAFOs, by their very nature, pose a large threat to the quality of U.S. waters.⁶⁰ The court here went a step further, claiming that Congress gave the EPA power to regulate CAFOs as a point source.⁶¹ That is, the kind of waste generated by a CAFO had many of the characteristics contemplated by the EPA when it instituted the NPDES permit program.⁶² Previous to this, the Wisconsin Court of Appeals similarly held that land spreading of manure results in the release of pollutants into groundwater, and if applied near streams or on fields with drainage tile systems, the runoff of pollutants

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.* at 100.

⁵⁹ *Cnty. Ass'n for Restoration of the Env't v. Henry Bosma Dairy*, 305 F.3d 943 at 954 (9th Cir. 2002).

⁶⁰ *Id.* at 955.

⁶¹ *Id.*

⁶² *Id.*

into surface water is likely.⁶³ Here, the Wisconsin Court of Appeals went further to include in its definition of a CAFO not only the land to which the animals were confined, but also the WAFs, even if they are outside of what is technically considered the CAFO confinement area.⁶⁴ This effectively expands what is considered a point source for the purpose of NPDES application.

Also in 2001, the Eastern District of North Carolina rejected the argument of North Carolina food producers that they were not a CAFO and even if they were, WAFs are not a point source.⁶⁵ In its opinion, the Court pointed out that the word Operation in the CAFO acronym encompasses the WAFs because these spray fields are a vital part of the CAFO operation.⁶⁶ Because of this, the WAFs were not subject to the agricultural drain water exemption.

Waterkeeper Alliance, Inc., Smithfield Foods, Inc., and Boesma Dairy all stand for the proposition that the agricultural storm water exception never applied to WAFs, because WAFs are part and parcel of the CAFO and thereby considered a point source. The agricultural industry bemoaned this premise on the notion that when WAFs are included as part of the CAFO operation, the discharge of any pollutant from a WAF is considered illegal.⁶⁷ The EPA attempted to remedy this with a land management rule that examines the nutrient management practices of

⁶³ Maple Leaf Farms, Inc. v. State Dep't of Nat. Res., 2001 WI App 170, 247 Wis. 2d 96, at 100, 633 N.W.2d 720.

⁶⁴ *Id.*

⁶⁵ *Water Keeper All., Inc. v. Smithfield Foods, Inc.*, 2001 U.S. Dist. LEXIS 21314 at 10 (E.D.N.C. Sep. 20, 2001).

⁶⁶ *Id.* at 9.

⁶⁷ Jerger at 108.

the CAFO to ensure the appropriate utilization of beneficial agricultural nutrients.⁶⁸ To avoid NPDES permitting for WAFs under the EPA new regulation, land applicants can now devise Nutrient Management Plans (NMPs) that comply with the best management practices spelled out in the rule.⁶⁹

Though the legal framework exists for including WAFs as part of a CAFO, there are still ways for land applicators to get around the NPDES permit, namely by preparing a NMP. The questions regarding these NMPs, however, are numerous and the issues cumbersome, particularly regarding implementation and best management practice guidelines. What remains the most important consideration is whether the mere creation of an NMP will protect the water supply from dangerous WAF runoff.

IV. Analysis

The issue here revolves around the relationship between the CAFO Rule and the CWA. The Second Circuit held in *Waterkeeper* that several provisions of the CAFO Rule violated the CWA. The Court was correct in much of its assessment. However, regarding potential discharge, the Court failed to include inevitable discharges of pollutants in its determination of discharge pollutants.

Waste from CAFOs has been a persistent worry with respect to contamination of the water supply, particularly in the area of nutrient pollution. The CAFO Rule was promulgated to ensure that land-applied waste was adequately handled at concentrated animal feeding operation sites. The Second Circuit was correct in its assessment of the first component of its holding, specifically that

⁶⁸ *Id.* at 109.

⁶⁹ *Id.* at 111.

nutrient management plans were endemic to the CAFO Rule. These plans essentially ensured the land's ability to absorb the waste from the feeding operations. If the land the nutrient management plan indicated that CAFO waste could be appropriately absorbed, any additional water runoff from that land would be characterized as agricultural runoff and therefore not require an NPDES permit. This is important because nutrient contaminants pose health risks for humans and wildlife.

The second component of the Second Circuit's holding, as to whether the CAFO Rule could effectively regulate potential discharges is more convoluted. While it is true that under the CWA point sources are not required to comply with EPA regulations until an actual discharge occurs, there is the argument that CAFOs should be treated differently. In fact the Ninth Circuit held as early as 2002 that CAFOs by their very nature pose a threat to national water quality. It is for this reason that CWA point source regulatory rules may need to be applied differently to CAFOs.

It is a precarious situation because the CWA indicated the need for a discharge of a pollutant before a point source, such as a CAFO can be regulated. However, if CAFOs nutrient management plans indicate that their proposed waste discharge will not be appropriately absorbed by the land, there needs to be an effective way to obtain an NPDES permit at that time. In a real life scenario, a CAFO would submit a nutrient management plan, if the plan indicated that the waste could not be adequately absorbed by the land, the CAFO would apply for an NPDES permit immediately. This procedure is premised on the near-guarantee that waste

generation will occur at these facilities. In this case, the nutrient management plan would indicate that the land could not absorb the waste, and pollutants will be dispelled into navigable waters of the United States. The discharge would be inevitable. Therefore the Second Circuit should have realized these discharges, though technically “potential” were absolutely going to occur.

Here, the Second Circuit lost sight of the CWA’s goals. Managing and reducing pollution to navigable waters of the United States is what the statute was enacted to do. Broad interpretation of the CWA, regarding a known source of criteria pollutants is required, and it must include NPDES permit assessment. Because of the nature of CAFO operations all CAFOs should have to apply for an NPDES permit unless they receive a no potential discharge determination from the EPA.

CAFO programs are traditionally administered by state EPA as part of the delegation agreement for the entire NPDES.⁷⁰ CAFO Rules were revised by the EPA due to the growing need to address the runoff manure from all sectors of the livestock industry.⁷¹ CAFO rules also address structural changes that have within the agriculture industry since the CWA was drafted in the 1970s.⁷² These rules target management practices of CAFOs to improve the effectiveness of regulations.⁷³

On March 5, 2011, the Fifth Circuit followed the Second Circuit’s rationale when it vacated portions of a 2008 EPA rule that required CAFOs to obtain NPDES

⁷⁰ *Concentrated Animal Feeding Operations*, Illinois EPA.

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

permits for potential discharges.⁷⁴ On March 29, 2011, however, the Michigan Court of Appeals upheld Michigan's CAFO Rule, which regulated potential discharges.⁷⁵ This effectually required CAFOs in the state of Michigan to apply for NPDES permits when the discharge of pollutants was imminent.

Since the inception of CAFOs, courts have effectively charted new territory. Because animals on CAFOs are concentrated in a small area, the EPA and state programs have tried to ascertain and anticipate the impacts of manure runoff and address them accordingly. First, the EPA had to characterize CAFOs as point sources, which the Second Circuit did in 1994. Next the EPA's 2003 CAFO rules required CAFOs to implement and disclose nutrient management plans. It became evident quickly, however, that these nutrient management plans could be "worked around" by farmers trying to avoid NPDES permitting. While CAFOs were considered a point source, it was very easy for CAFO management to either not complete nutrient management plans, or not comply with the ones they had. This left the EPA and states to virtually throw their hands up as to how to manage CAFO compliance.

The Ninth Circuit provided us with the broadest conceptual analysis of the tension between the CWA and CAFO when it proclaimed that CAFOs by their very nature pose a large threat to water quality in the *Boesma Dairy* ruling. The Court's rationale here, was just because it certain regulatory provisions were not explicit in

⁷⁴ Liza C. Moore; *Fifth Circuit Rules EPA Cannot Require Clean Water Permits for Livestock Farmers Unless Discharging into U.S. Waters*, Foster Smith Agricultural Law Update, May 2011.

⁷⁵ *Id.*

the 1970s-era CWA, did not mean they could not be interpreted “in the spirit” of the CWAs intentions.

Historically, CAFO owners and operators spend millions of dollars on technologies that produce massive quantities animal products, but not in technologies that properly treat the wastes that are by-products of their industry.⁷⁶ CAFO owners contend that the waste produced by livestock produce nutrients that offset the use of synthetic fertilizers.⁷⁷ In reality, however, the massive amount of waste produced overwhelms the land’s ability to absorb it. This not only yields dangerous runoff, but contaminates groundwater as well.

The CWA was drafted long before the proliferation of CAFOs. Therefore, CAFO Rules can and should take a more stringent interpretation of NPDES permitting pertaining to discharges. While the CWA does theoretically provide for regulation of CAFOs, the interpretations of those requirements have been and continue to be extensively litigated. State agencies and the EPA should play the leading role in establishing CAFO standards. In some states, NPDES permits are the only permits CAFOs are required to have.⁷⁸ Without an NPDES permit, CAFOs are potentially not regulated at all.

The goal of the CWA is to limit potentially hazardous discharge into navigable waters of the United States. Courts that continue to feel compelled to comply with CWA regulatory provisions when ascertaining CAFO violations need to keep this in mind. The only way to provide for systematic regulation of efficient water pollution

⁷⁶ *Why are CAFOs Bad?*, Sierra Club, Michigan Chapter 2017.

⁷⁷ *Id.*

⁷⁸ *Id.*

management is for imminent CAFO discharge to be regulated under the NPDES permitting scheme.

V. Conclusion

The take away from the NPDES permitting scheme under the CAFO Rule is just how much power the courts have regarding the tenuous relationship between environmental groups who want CWA enforced and CAFO operators who do not. The CAFO Rule serves as a loophole to undermine the premise of the CWA. The goal of all environmental legislation is to set and enforce environmental guidelines. The “Chevron Doctrine” indicates the court will defer to agency interpretation if the law is ambiguous or legislative history is silent regarding the issue.⁷⁹ The current EPA seems ambivalent at best regarding enforcement of environmental regulations that curtail or impede business operations. While the Supreme Court is reluctant to grant certiorari to these types of cases, it is imperative that a CAFO/NPDES related go before the Court while there are still Justices that will come down on the side of the environment.

CAFOs or “factory farms” are toxic to the environment, public health and safety, the economies of indigent rural communities, and the animals being confined. Currently, the only hope for any type of regulation is through NPDES permitting. Because of this, permitting requirements need to be stringently enforced and always with the goal of the legislation at the forefront.

⁷⁹ *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 104 S. Ct. 2778 (1984) .