

ENOUGH OF THIS MANURE: WHY THE EPA NEEDS TO DEFINE THE AGRICULTURAL STORMWATER EXEMPTION TO LIMIT THE “RUNOFF” FROM THE ALT COURT

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This Note challenges the Alt court’s restriction of the EPA’s authority to regulate Concentrated Animal Feeding Operations (CAFOs) and proposes that the EPA conduct a new rulemaking to address this issue. CAFOs pollute our nation’s waterways with contaminated manure, damaging our environment and injuring public health. Recognizing their potential to pollute, Congress included CAFOs within the statutory definition of a point source in the Clean Water Act in 1972. Fifteen years later, Congress amended the statute and exempted agricultural stormwater from the definition of a point source. Controversy surrounded the application of the agricultural stormwater exemption to CAFOs until 2003, when the EPA specified that the exemption only applied to precipitation-based discharges from the land application area of a CAFO when manure had been applied pursuant to prudent agricultural practices. Unfortunately, in Alt v. EPA, industry capitalized on the ambiguity in the Clean Water Act and secured a district court ruling expanding the agricultural stormwater exemption to include discharges outside the land application area, allowing CAFOs to further pollute our waterways. After providing the relevant history of CAFO regulation, this Note critiques the Alt decision—concluding that the court misinterpreted the agricultural stormwater exemption. Finally, it argues that the EPA should initiate a rulemaking and comprehensively define the agricultural stormwater exemption to prevent further environmental degradation and harm to human health.

INTRODUCTION	1188
I. CAFOs UNDER THE CLEAN WATER ACT: 1972–2013 ..	1194
A. <i>The EPA’s CAFO Regulations: 1972–1987</i>	1194
B. <i>The EPA’s CAFO Regulations: 1987–2003</i>	1197
C. <i>The EPA’s CAFO Regulations: 2003–2013</i>	1199
II. THE ALT CASE – WHERE THE COURT WENT WRONG ..	1202
A. <i>The Alt Case</i>	1202
B. <i>Where the Court Went Wrong</i>	1205

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- 1. *The EPA’s Interpretation of the 2003 CAFO Rule Deserved Chevron Deference* 1206
- 2. *The EPA Intended the Agricultural Stormwater Exemption to Apply Narrowly* 1209
- 3. *The Alt Discharges Were from the Production Area* 1212
- III. THE EPA SHOULD INSTITUTE A COMPREHENSIVE RULEMAKING 1214
 - A. *The EPA’s Authority Under the Clean Water Act Is Expansive* 1214
 - B. *Ensuring the Agricultural Stormwater Exemption Furthers an Agricultural and Environmental Purpose* 1216
 - 1. *The Importance of Limiting the Agricultural Stormwater Exemption to Situations Where It Furthers an Agricultural and Environmental Purpose* 1218
 - 2. *The EPA Should Establish Baseline Requirements to Prevent Water Pollution* 1220
 - 3. *The EPA Should Institute Monitoring Requirements to Improve Accountability* 1222
- CONCLUSION 1223

INTRODUCTION

The landscape of animal agriculture has changed dramatically over the past fifty years¹: Large, industrialized factory farms have replaced small, diversified family farms.² Instead of the bucolic red barn with animals dotting the hillside in the background, we see huge warehouse-type structures with animals packed in like sardines. These “farms,” aptly named Concentrated Animal Feeding Operations (CAFOs), strive to produce a high volume of cheap meat as quickly as possible. Originally touted for their efficiency, CAFOs use a combination of mechanized feeding and water practices, genetic selection, antibiotics, and growth hormones to produce more meat faster, using

¹ See Gail Feenstra et al., *What Is Sustainable Agriculture?*, SUSTAINABLE AGRIC. RES. & EDUC. PROGRAM, <http://asi.ucdavis.edu/programs/sarep/about/what-is-sustainable-agriculture> (last visited June 20, 2016) (describing the costs associated with the changes in agriculture since the end of World War II).

² In 2007, fifty-four percent of farm animals in the United States were concentrated on five percent of the remaining farms. ROLF U. HALDEN & KELLOG J. SCHWAB, PEW COMM’N ON INDUS. FARM ANIMAL PROD., ENVIRONMENTAL IMPACT OF INDUSTRIAL FARM ANIMAL PRODUCTION 1, http://www.bigcovecreekalliance.org/wp-content/uploads/2016/01/PewComissionReport212-4_envimpact_tc_final.pdf (last visited June 20, 2017).

less acreage and less human labor than traditional farms.³ But this “efficiency”⁴ comes at a price: CAFOs pollute our waterways.

While manure plays a vital role in the agricultural system, CAFOs produce more than they can dispose of in an environmentally friendly manner.⁵ Manure fertilizes crops—when applied properly, it improves soil quality and provides numerous environmental benefits.⁶ On traditional farms, which house fewer animals than CAFOs, animals graze outdoors where their manure is excreted onto the land and fertilizes the soil.⁷ Conversely, CAFOs confine their animals indoors or in small feedlots and often purchase feed instead of growing crops.⁸ The high concentration of animals, combined with the low field acreage, means many CAFOs produce more manure than they can appropriately apply to their crops.⁹ As food law scholar Mary Jane

³ See PEW COMM’N ON INDUS. FARM ANIMAL PROD., PUTTING MEAT ON THE TABLE: INDUSTRIAL FARM ANIMAL PRODUCTION IN AMERICA 5, http://www.pewtrusts.org/~media/legacy/uploadedfiles/phg/content_level_pages/reports/pcifapfinalpdf.pdf (last visited June 25, 2017) (discussing the production efficiencies in the modern industrial animal food system).

⁴ Michael Pollan, *Farmer in Chief*, N.Y. TIMES MAG. (Oct. 9, 2008), <http://michaelpollan.com/articles-archive/farmer-in-chief/> (discussing how CAFOs’ “efficiency” depends on government subsidies).

⁵ CAFOs produce 500 million tons of manure annually, three times more than the amount of sewage produced by humans in the United States. *Environmental Impact of Factory Farms*, SOCIALLY RESPONSIBLE AGRIC. PROJECT, <http://www.sraproject.org/environmental-impact-of-factory-farms> (last visited June 20, 2017).

⁶ Rick Koelsch & Ron Wiederholt, *Environmental Benefits of Manure Application*, EXTENSION (Dec. 20, 2016), <http://articles.extension.org/pages/14879/environmental-benefits-of-manure-application>. Specifically, the land application of manure can increase soil carbon and reduce atmospheric carbon levels, reduce soil erosion and runoff, reduce nitrate leaching, and reduce energy demands for certain fertilizers. *Id.*

⁷ See *Waste Management*, GRACE COMM. FOUND., <http://www.sustainabletable.org/906/waste-management> (last visited June 20, 2017) (“At farms where animals are allowed to graze on pasture, much—if not all—of their manure is excreted directly onto the land, serving as a fertilizer and recycling nutrients back into the soil.”).

⁸ See JAMES M. MACDONALD, USDA ECON. RESEARCH SERV., EIB-126, TECHNOLOGY, ORGANIZATION, AND FINANCIAL PERFORMANCE IN U.S. BROILER PRODUCTION 23 (2014) (“Nearly 40 percent of contract broiler growers have no cropland . . . and many others do not have enough to absorb all of the nutrients from poultry production.”); Pollan, *supra* note 4 (discussing how federal subsidies incentivize CAFOs to purchase feed rather than grow it).

⁹ See Mary Jane Angelo & Seth Hennes, *The Environmental Impacts of Industrial Fertilizers and Pesticides*, in MARY JANE ANGELO, JASON J. CZARNEZKI & WILLIAM S. EUBANKS II, FOOD, AGRICULTURE AND ENVIRONMENTAL LAW 38 (2013) (“Animal wastes, which once could be readily used as fertilizers for crops grown on the same farm as the animals that created the waste, now have no use, and the vast quantities of concentrated animal waste have become a serious source of water pollution.”); see also Elanor Starmer, *Environmental and Health Problems in Livestock Production: Pollution in the Food System*, THE AGRIBUSINESS ACCOUNTABILITY INITIATIVE 2, http://www.ase.tufts.edu/gdae/Pubs/rp/AAI_Issue_Brief_2_1.pdf (last visited June 20, 2017) (“While many traditional crop and livestock operations use manure as a fertilizer, letting animals roam on

Angelo states, “[w]hat once was a win-win situation—animal wastes fertilized the crops that fed the animals in a relatively ‘closed loop’ system with relatively insignificant pollution resulting—has become a substantial environmental problem.”¹⁰

CAFOs’ manure management techniques fail to prevent water pollution.¹¹ Most CAFOs store their manure in football field-sized lagoons until it can be applied to spray fields.¹² Spray fields, or in EPA parlance, land application areas, are crop fields or pastures where CAFO operators spray or inject their manure for fertilization or disposal purposes.¹³ CAFO manure routinely enters our waterways through surface runoff, erosion, leaching, and direct discharges.¹⁴ When manure is over-applied, or improperly applied, the soil cannot absorb all of the manure’s nutrients and surface runoff occurs.¹⁵

The contaminants in CAFO manure—pathogens, excessive nutrients, metals, hormones, and antibiotics—impair our nation’s water quality. Excessive nitrogen and phosphorous in CAFO manure disrupt aquatic ecosystems by stimulating the growth of algal blooms

land after harvest to build up organic matter, industrial operations have far too much waste (and far too little land) to use this method.”).

¹⁰ Angelo & Hennes, *supra* note 9, at 38; *see also* Halden & Schwab, *supra* note 2, at 2 (“Animal waste or manure, which traditionally has been regarded as a welcome source of nutrients for soil improvement . . . has turned into a liability and a problematic byproduct causing ecosystem degradation and public health concerns . . .”).

¹¹ See Elizabeth Grossman, *As Dairy Farms Grow Bigger, New Concerns About Pollution*, YALE ENV’T 360 (May 27, 2014), http://e360.yale.edu/features/as_dairy_farms_grow_bigger_new_concerns_about_pollution (discussing CAFO manure’s pollution of waterways).

¹² See Sara Kangas, *Water Pollution Concerns Surround CAFOs*, NAT’L FARMERS UNION (Oct. 30, 2015), <https://nfu.org/2015/10/30/water-pollution-concerns-surround-cafos> (“Most operations handle the demands of manure maintenance by applying manure to the soil of the property and by creating lagoon systems for liquid manure.”).

¹³ See ROBBIN MARKS, NRDC & CLEAN WATER NETWORK, CESSPOOLS OF SHAME: HOW FACTORY FARM LAGOONS AND SPRAYFIELDS THREATEN ENVIRONMENTAL AND PUBLIC HEALTH 49 (July 2001), <https://www.nrdc.org/sites/default/files/cesspools.pdf> (“Sprayfields constitute an integral feature of many lagoon systems, in which the waste is sprayed onto crops or pastureland.”).

¹⁴ See Michael Steeves, *The EPA’s Proposed CAFO Regulations Fall Short of Ensuring the Integrity of Our Nation’s Waters*, 22 J. LAND RESOURCES & ENVTL. L. 367, 369 (2002) (discussing the way CAFO manure enters waterways).

¹⁵ CARRIE HRIBAR, NAT’L ASS’N OF LOCAL BDS. OF HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES 3 (2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf (“When manure is applied too frequently or in too large a quantity to an area, nutrients overwhelm the absorptive capacity of the soil, and either run off or are leached into the groundwater.”). One common way CAFO operators improperly apply manure is by applying the manure during, or temporally close to, a rainstorm. Steeves, *supra* note 14, at 369.

through the eutrophication process.¹⁶ Algal blooms kill aquatic life by “blocking sun light, reducing dissolved oxygen, raising pH levels, and producing toxic microorganisms.”¹⁷ These toxic microorganisms are linked to huge fish kills¹⁸—in 1997, an outbreak of one such microorganism, *Pfiesteria piscicada*, killed 30,000 fish in the Chesapeake Bay.¹⁹

Algal blooms are tremendously troublesome for the neighboring communities. They impact tourism and devastate the livelihoods of fishermen, which can put tremendous stress on local economies.²⁰ Fishing industries struggle to survive in the wake of large fish kills.²¹ This is particularly true in the Gulf of Mexico and the Chesapeake Bay, where eutrophication has created areas where the oxygen levels are too low to support organism life.²² The Chesapeake Bay’s crab industry, previously worth roughly fifty-two million dollars, shrunk drastically due to the decline in water quality.²³

In addition to environmental harm, CAFO pollution is associated with serious public health issues, including human antibiotic resistance, exposure to pathogens and hormones, and even death. Baby blue syndrome, a potentially fatal condition that reduces the amount of oxygen in an infant’s blood, is linked to the consumption of excessive nitrates in drinking water.²⁴ In Wisconsin, an outbreak of a pathogen linked to runoff from a herd of dairy cows killed over 100 people

¹⁶ *Nutrient Pollution – Eutrophication*, NOAA OCEAN SERV. EDUC. (Mar. 25, 2008), http://oceanservice.noaa.gov/education/kits/estuaries/media/supp_estuar09b_eutro.html. Algal blooms are a “rapid increase in algae growth in an aquatic environment.” HRIBAR, *supra* note 15, at 4.

¹⁷ Steeves, *supra* note 14, at 370.

¹⁸ See HRIBAR, *supra* note 15, at 5 (“Some algal blooms can contain toxic algae and other microorganisms, including *Pfiesteria*, which has caused large fish kills in North Carolina, Maryland, and the Chesapeake Bay area.”).

¹⁹ Steeves, *supra* note 14, at 370.

²⁰ See *Nutrient Pollution – Eutrophication*, *supra* note 16 (discussing how algal blooms’ foul smell and horrid appearance disrupt tourism and impact the fishing industry).

²¹ See *id.* (discussing adverse impacts on the fishing industry).

²² See DOUG GURIAN-SHERMAN, UNION OF CONCERNED SCIENTISTS, CAFOs UNCOVERED: THE UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS 52 (2008) (“Eutrophication has led to hypoxia (oxygen deficiency) in extensive areas of the Gulf of Mexico and Chesapeake Bay [T]he levels of oxygen found there are too low to support many types of animals.”). These areas are known as “dead zones.” *Id.*

²³ *Id.* at 4. Over the past two decades the crab population is estimated to have fallen by seventy percent. Ian Urbina, *In Maryland, Focus on Poultry Industry Pollution*, N.Y. TIMES (Nov. 28, 2008), <http://www.nytimes.com/2008/11/29/us/29poultry.html?page-wanted=all>.

²⁴ Theresa Heil, *Agricultural Nonpoint Source Runoff – The Effects Both on and off the Farm: An Analysis of Federal and State Regulation of Agricultural Nonpoint Source Pollutants*, 5 WIS. ENVTL. L.J. 43, 45 (1998).

and made more than 400,000 sick.²⁵ Drinking water with high levels of arsenic, one of the carcinogenic metals found in CAFO manure, is linked to higher incidences of skin and organ cancer.²⁶ Finally, people who ingest water contaminated with antibiotic-laden manure may develop antibiotic resistance.²⁷ Acquisition of MRSA, a life threatening antibiotic-resistant bacteria, is linked to living in close proximity to spray fields.²⁸

Recognizing the harms of CAFO pollution, the Clean Water Act (CWA) of 1972 designated CAFOs as “point sources” of pollution, providing the EPA with the statutory authority to regulate them through a permit process.²⁹ Permits ensure water quality standards are met by limiting the pollutants a point source may discharge.³⁰ Fifteen years after the CWA was enacted, Congress exempted “agricultural stormwater” from the definition of point source and therefore from CWA permitting requirements.³¹ It was unclear whether CAFOs were eligible for this exemption given their designation as a point source.³² In 2003, the EPA promulgated a CAFO Rule clarifying that the agricultural stormwater exemption only applies to precipitation-related discharges from a CAFO’s land application area when the manure has been applied in accordance with prudent agricultural practices.³³ In

²⁵ *Id.* at 45.

²⁶ Steeves, *supra* note 14, at 372.

²⁷ HRIBAR, *supra* note 15, at 10. To prevent illness and promote growth, factory farmers feed their animals low levels of antibiotics daily. *Id.* Animals often do not fully metabolize the antibiotics, leaving antibiotics present in their manure and therefore in contaminated waterways. *Id.*

²⁸ See *When Manure Is Not Manure*, JEFFERSON CTY. FARMERS & NEIGHBORS, INC., http://www.jfaniowa.org/hog_waste.aspx (last visited June 25, 2017) (“In a 2013 study, researchers from Johns Hopkins School of Public Health found that 11% of community acquired MRSA and soft tissue infections in individuals could be attributed to living next to fields with applied manure.”).

²⁹ See 33 U.S.C. § 1362(14) (2012) (defining point sources); *id.* § 1342 (describing permitting program). Under this system, the EPA requires point sources of pollution to obtain permits, which specify the pollutants that they may discharge. See *infra* notes 41–42 and accompanying text (discussing the NPDES program).

³⁰ NPDES *Wastewater & Stormwater Permits*, EPA, <https://www3.epa.gov/region9/water/npdes/> (last visited June 25, 2017).

³¹ 33 U.S.C. § 1362(14) (“The term ‘point source’ means any discernible, confined and discrete conveyance, including but not limited to any . . . concentrated animal feeding operation . . . from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges.”).

³² See Steeves, *supra* note 14, at 386 (“The confusion and complexity surrounding this issue results from the explicit inclusion of CAFOs within the definition of point source, and a seemingly contradictory agricultural stormwater exception excluding some activities from falling within the point source definition.”).

³³ See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feed Operations (CAFOs), 68 Fed. Reg. 7176, 7267 (Feb. 12, 2003) [hereinafter 2003 CAFO Rule]

other words, manure runoff from CAFO fields was considered agricultural stormwater, exempt from permitting requirements, if the manure was applied appropriately and precipitation caused the discharge.

Unhappy with the EPA's interpretation of the exemption and the 2003 Rule generally, CAFO operators brought lawsuits challenging the Rule.³⁴ A recent West Virginia district court decision undermined the EPA's ability to limit water pollution from CAFOs by expanding the scope of the agricultural stormwater exemption. Lois Alt, a factory farmer, filed suit challenging the EPA's authority under the CWA to issue her an administrative order for discharging pollutants without a permit.³⁵ Alt argued that the litter, feathers, and manure found outside her poultry barns were exempt agricultural stormwater.³⁶ The court agreed, extending the exemption to encompass discharges from areas outside the land application area.³⁷ Although the court's interpretation is only binding in the Northern District of West Virginia, this decision highlights the inherent ambiguity in the agricultural stormwater exemption. It also provides the Farm Bureau, the lobbying arm of industrial agriculture,³⁸ with precedent to expand the exemption's scope for factory farms in other jurisdictions, enabling further pollution of our waterways.³⁹

This Note argues that the *Alt* court misunderstood the agricultural stormwater exemption and that the EPA should institute a rulemaking to narrow the broad exemption created by the *Alt* court to prevent further environmental degradation and harm to human health. Part I summarizes the history of the EPA's regulation of water pollution from CAFOs since the enactment of the CWA. Part II discusses the *Alt* case and three reasons that the court misinterpreted the agricultural stormwater exemption. Part III argues that the EPA should initiate a rulemaking and comprehensively define the agricul-

("[W]here the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients . . . precipitation-related discharge[s] of manure, litter, or process wastewater . . . is an agricultural stormwater discharge.").

³⁴ See, e.g., *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 497 (2d Cir. 2005); *Alt v. EPA*, 979 F. Supp. 2d 701, 705 (N.D. W. Va. 2013).

³⁵ *Alt*, 979 F. Supp. 2d at 703–05.

³⁶ *Id.*

³⁷ See *id.* at 715 (concluding that discharges from the "farmyard" were exempt agricultural stormwater).

³⁸ See Ian Shearn, *Whose Side Is the Farm Bureau On?*, FOOD & ENV'T REPORTING NETWORK (July 17, 2012), <https://thefern.org/2012/07/whose-side-is-the-farm-bureau-on> (describing how the Farm Bureau "positions itself as the voice of the [family] farmer" but actually represents industrial agriculture interests).

³⁹ See *infra* note 99 and accompanying text (describing the Farm Bureau's use of *Alt* in its argument before a North Carolina district court).

tural stormwater exemption to improve environmental outcomes and promote sound agricultural practices.

I

CAFOs UNDER THE CLEAN WATER ACT: 1972–2013

To provide context for the *Alt* case, this part of the Note divides the history of the EPA’s regulatory framework into three time periods. Section A discusses the CWA’s enactment and the EPA’s first forays into CAFO regulation. Section B examines the confusion the agricultural stormwater exemption created. Section C details the EPA’s attempt to define the exemption in the 2003 CAFO Rule and provides a brief overview of the 2008 CAFO Rule.

A. *The EPA’s CAFO Regulations: 1972–1987*

The CWA’s statutory objective is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”⁴⁰ Congress had an ambitious goal for the Act: to eliminate the discharge of all pollutants into the waters of the United States by 1985.⁴¹ To meet this lofty goal, the CWA established the National Pollution Discharge Elimination System (NPDES).⁴² Under this system, point sources of pollution cannot legally discharge unless an NPDES permit authorizes the discharge.⁴³ Permits contain effluent limitations that “specify the quantity . . . of specific pollutants that may be discharged from the point source.”⁴⁴

Recognizing the threat CAFOs posed to our nation’s water quality, Congress designated CAFOs as a point source in the statutory definition.⁴⁵ Specifically, a point source is defined as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, [or] . . . *concentrated animal feeding operation* . . . from which pollutants are or may be dis-

⁴⁰ 33 U.S.C. § 1251(a) (2012).

⁴¹ *Id.* § 1251(a)(1).

⁴² *See id.* § 1342 (describing NPDES permitting program).

⁴³ *See Heil, supra* note 24, at 46–47 (“Pollutants introduced into waters ‘from discrete, confined conveyances,’ are deemed ‘point sources, [and are] prohibited unless the discharger obtains a permit for the discharge.’”) (alteration in original).

⁴⁴ Jeffrey M. Gaba, *Generally Illegal: NPDES General Permits Under the Clean Water Act*, 31 HARV. ENVTL. L. REV. 409, 415 (2007).

⁴⁵ *See* S. REP. NO. 92-414, at 100 (1971), *as reprinted in* 1972 U.S.C.C.A.N. 3668, 3761 (recording Senator Bob Dole discussing water pollution created by CAFOs).

charged.”⁴⁶ Notably, CAFOs are the *only* industry explicitly recognized in the statutory definition.⁴⁷

Two years later, the EPA promulgated its first regulations governing water pollution from CAFOs and other agricultural activities. Attempting to balance their pollution control goals with the administrative burden permitting created,⁴⁸ the Agency excluded certain activities from NPDES permitting requirements because the pollution generated was too minimal to justify the additional permitting work.⁴⁹ Recognizing that Congress designated CAFOs as a point source to ensure that their pollution would be regulated, the EPA concluded that excluding CAFOs from permitting requirements entirely would be improper.⁵⁰ Instead, certain smaller factory farms along with other agricultural activities were exempted because there were too many facilities for the EPA to realistically administer permits to all of them.⁵¹

In response to a challenge to the regulations, the court in *NRDC v. Costle* ordered the EPA to issue new regulations that did not exempt certain categories of point sources from regulation.⁵² The Agency promulgated two new regulations: a rule governing CAFOs, which remained the primary CAFO regulation until 2003, and one governing agricultural activities.⁵³

⁴⁶ 33 U.S.C. § 1362(14) (2012) (emphasis added).

⁴⁷ See *id.* (“The term ‘point source’ means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”).

⁴⁸ See Pollutant Discharge Elimination: Form and Guidelines Regarding Agricultural and Silvicultural Activities, 38 Fed. Reg. 18,000, 18,000 (July 5, 1973) (discussing exclusion of certain agricultural activities because the resources required to permit these farms would be “disproportionate to the water quality benefits obtained”).

⁴⁹ *Id.* (“The basis for the exclusions is that the pollution problems caused by the excluded categories of point sources are minor in relation to the administrative problem of processing vast numbers of agricultural discharge application forms.”).

⁵⁰ The EPA knew that the “build-up of solid and liquid wastes . . . [from CAFOs] represent[ed] a significant source of pollution.” *Id.*

⁵¹ See *id.* (describing activities that were excluded from permitting requirements).

⁵² See *NRDC v. Costle*, 568 F.2d 1369, 1383 (D.C. Cir. 1977) (“We find a plain Congressional intent to require permits in any situation of pollution from point sources.”).

⁵³ See State Program Elements Necessary for Participation in the National Pollutant Discharge Elimination System: Concentrated Animal Feeding Operations, 41 Fed. Reg. 11,458 (Mar. 18, 1976) [hereinafter State Program Elements Necessary for Participation in the NPDES: CAFOs] (final rule governing CAFOs); State Program Elements Necessary for Participation in the National Pollutant Discharge Elimination System: Application of Permit Program to Agricultural Activities, 41 Fed. Reg. 28,493 (July 12, 1976) [hereinafter State Program Elements Necessary for Participation in the NPDES: Application of Permit Program to Agricultural Activities] (final rule governing all other agricultural activities).

The CAFO regulation defined the term CAFO and established the governing effluent limitations.⁵⁴ Facilities were classified as animal feeding operations if they met two criteria. First, the animals at the facility were confined for at least forty-five days out of a twelve-month year.⁵⁵ Second, the facility did not grow crops on its premises during the normal growing season.⁵⁶ Essentially, an animal feeding operation is a facility that “congregates a large amount of animals in a confined area and brings them food, rather than allowing the animals to graze . . . in pastures.”⁵⁷ Qualifying facilities were then classified as CAFOs based on the number of animals at their farm.⁵⁸ CAFOs had to obtain an NPDES permit unless they did not discharge any pollutants.⁵⁹ The rule’s preamble clarified that discharges from *any* part of a CAFO, including the land application area, were subject to NPDES permitting requirements.⁶⁰

The EPA’s agricultural regulations again exempted water pollution from certain agricultural activities, including runoff from orchards, cultivated crops, and pastures, from NPDES permitting requirements.⁶¹ CAFO-related discharges were not eligible for this exemption,⁶² illustrating that CAFOs were not synonymous with the term agriculture. In summary, at this time CAFOs were more tightly regulated than other forms of agriculture. All non-CAFO agricultural activities and small CAFOs were exempt from NPDES permitting if runoff was their only discharge, but large CAFOs were never exempt unless they had zero discharge. These regulations remained the heart of the CAFO regulatory scheme until 2003.

⁵⁴ See State Program Elements Necessary for Participation in the NPDES: CAFOs, *supra* note 53, at 11,460 (laying out requirements for facilities to be classified as CAFOs).

⁵⁵ *Id.* (codified at 40 C.F.R. § 124.82(a)(1)(i) (1976)).

⁵⁶ *Id.* (codified at 40 C.F.R. § 124.82(a)(1)(ii) (1976)).

⁵⁷ Kate Celender, *The Impact of Feedlot Waste on Water Pollution Under the National Pollutant Discharge Elimination System (NPDES)*, 33 WM. & MARY ENVTL. L. & POL’Y REV. 947, 951 (2009).

⁵⁸ See State Program Elements Necessary for Participation in the NPDES: CAFOs, *supra* note 53, at 11,460 (codified at 40 C.F.R. § 124.82(a)(2)(i)(a)–(l) (1976)). Some examples of the animal threshold include: 1000 slaughter and feeder cattle, 700 mature dairy cattle, 2500 swine weighing over fifty-five pounds, 100,000 laying hens or broilers, etc. *Id.*

⁵⁹ See *id.* at 11,458–59 (“Before a permit is required there must be a ‘discharge of a pollutant’ from the point source to ‘navigable waters.’”).

⁶⁰ *Id.* at 11,459 (noting that a permit was not required for operations which “recycle all pollutants to the land Thus any feedlot owner or operator who uses alternate management techniques and prevents *all* discharges from reaching navigable waters would not have to obtain a permit.” (emphasis added)).

⁶¹ State Program Elements Necessary for Participation in the NPDES: Application of Permit Program to Agricultural Activities, *supra* note 53, at 28,496.

⁶² *Id.*

B. *The EPA's CAFO Regulations: 1987–2003*

In 1987, fifteen years after the inception of the Clean Water Act, Congress amended the CWA to exempt “agricultural stormwater discharges” from the statutory definition of a point source.⁶³ As a result, agricultural stormwater discharges did not require an NPDES permit.⁶⁴ No other changes were made to the statutory definition and CAFOs were still included within the definition. Given their classification as a point source, it was unclear whether CAFOs were eligible for this exemption.⁶⁵ Some stakeholders concluded that CAFOs were exempt from NPDES permitting requirements altogether if precipitation caused the discharge, while others believed CAFOs were never eligible for the exemption.⁶⁶ The limited legislative history exacerbated confusion.⁶⁷ Nevertheless, there is a strong argument that the agricultural stormwater exemption was never intended to apply to CAFOs. Under the rule of continuity, the lack of legislative history speaks volumes about Congressional intent because there is an assumption that Congress does not change legal obligations without some clear indication.⁶⁸

⁶³ 33 U.S.C. § 1362(14) (2012) (“The term ‘point source’ means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, . . . container, rolling stock, [or] concentrated animal feeding operation, . . . from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.”).

⁶⁴ Terence J. Centner, *Clarifying NPDES Requirements for Concentrated Animal Feeding Operations*, 14 PA. ST. ENVTL. L. REV. 361, 373 (2006) (“[A]gricultural stormwater discharges resulting from precipitation-related events are not discharges from a point source, and thus are not subject to the NPDES permitting requirements.”).

⁶⁵ See Scott Jerger, *EPA's New CAFO Land Application Requirements: An Exercise in Unsupervised Self-Monitoring*, 23 STAN. ENVTL. L.J. 91, 101 (2004) (“[C]onsiderable uncertainty surrounds the question of whether discharges from a CAFO WAF should be regulated as a point source discharge or exempt from CWA regulation as nonpoint source agricultural storm water.”).

⁶⁶ See Centner, *supra* note 64, at 373 (“A major source of disagreement between environmental and industry groups has been the meaning of the agricultural stormwater discharge exemption.”); Jerger, *supra* note 65, at 96 (“The position of the agriculture industry is that pollutant runoff from CAFOs is an agricultural storm water discharge, which is explicitly excluded from the point source definition in the CWA, and is therefore considered nonpoint source runoff that cannot be regulated through the NPDES permitting regime.”).

⁶⁷ See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960, 3029 (proposed Jan. 12, 2001) (to be codified at 40 C.F.R. pts. 122 & 412) [hereinafter 2001 Proposed CAFO Rule] (“There is limited legislative history for this provision . . .”); see also *infra* note 177 and accompanying text (discussing lack of legislative history).

⁶⁸ *Finley v. United States*, 490 U.S. 545, 554 (1989) (“Under established canons of statutory construction, ‘it will not be inferred that Congress, in revising and consolidating the laws, intended to change their effect unless such intention is clearly expressed.’”);

As discussed above, the regulatory scheme at this point provided no exemptions for large CAFOs.⁶⁹ The EPA also did not promulgate any rules to implement this statutory amendment. Furthermore, the 1987 Amendments “mandated comprehensive regulations of certain forms of industrial and municipal stormwater run-off.”⁷⁰ This led the Second Circuit to infer that the agricultural stormwater exemption was added to “remove ‘agricultural stormwater’ from the new [industrial and municipal] stormwater permitting requirements, not to carve an exception out of the term ‘concentrated animal feeding operation.’”⁷¹

CAFO eligibility for the agricultural stormwater exemption remained unclear for fifteen years, as the EPA stayed silent on this issue until the 2003 CAFO Rule. In the interim, courts wrestled with the exemption’s meaning and came to different conclusions. Courts considered this question in the context of the land application area, but the specific issue in *Alt*, whether the agricultural stormwater exemption applies anywhere outside the land application area, was never squarely addressed. The Second Circuit suggested that discharges from the land application area of a CAFO could qualify for the exemption if precipitation, not the over-application of manure, caused the discharge.⁷² However, the court in *Smithfield Foods, Inc.* pointed in the other direction, implying that CAFOs were never eligible for the exemption.⁷³ The court rejected the argument that the spray fields were not point sources as “nonsensical” because “[e]xcluding parts of the waste management system from the definition of a CAFO . . . would compromise the goals of the CWA by

Russell E. Carparelli, *The Rehnquist Court’s Canons of Statutory Construction*, NAT’L CONFERENCE OF STATE LEGISLATURES 4 (Sept. 2005), http://www.ncsl.org/documents/lss/2013PDS/Rehnquist_Court_Canons_citations.pdf.

⁶⁹ See *supra* note 59 and accompanying text.

⁷⁰ *Concerned Area Residents for the Env’t v. Southview Farm*, 34 F.3d 114, 120 (2d Cir. 1994).

⁷¹ United States’ Memorandum in Support of Its Cross-Motion for Summary Judgment at 21 n.17, *Alt v. EPA*, 979 F. Supp. 2d 701 (N.D. W. Va. 2013) (No. 2:12-CV-00042-JPB), 2013 WL 4078750 (discussing *Concerned Area Residents* case); see also *Concerned Area Residents*, 34 F.3d at 120 (“Because Congress mandated comprehensive regulations of certain forms of industrial and municipal stormwater runoff under 33 U.S.C. § 1342(p), one can infer that Congress wanted to make it clear that agriculture was not included in this new program.”).

⁷² *Concerned Area Residents*, 34 F.3d at 120–21 (determining that “there can be no escape from liability for agricultural pollution simply because it occurs on rainy days” and that “the real issue is . . . whether the discharges were the result of precipitation.”).

⁷³ See *Water Keeper All., Inc. v. Smithfield Foods, Inc.*, No. 4:01-CV-27-H(3), 2001 WL 1715730, at *3–4 (E.D.N.C. Sept. 20, 2001) (concluding that discharges from the spray fields were not eligible for the agricultural stormwater exemption, without indicating that any authority previously held otherwise).

allowing widespread pollution by industrial feedlots pumping waste into other areas of their farms.”⁷⁴ The court found the subsidiary argument that spray fields were within the agricultural stormwater exemption “unpersuasive” because spray fields are point sources and point sources are not eligible for the exemption.⁷⁵

C. *The EPA’s CAFO Regulations: 2003–2013*

In 2003, the EPA promulgated its first comprehensive CAFO Rule.⁷⁶ Of particular importance, the Rule clarified that CAFO-related discharges were eligible for the agricultural stormwater exemption under certain circumstances.⁷⁷ Essentially, any precipitation-related discharges from the land application area were considered agricultural stormwater if the CAFO applied its manure in accordance with prudent site-specific agricultural practices. More precisely, and consistent with the Second Circuit, exempt agricultural stormwater was defined as “precipitation-related discharge of manure, litter or process wastewater from land areas under the control of a CAFO” if “the manure, litter or process wastewater ha[d] been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater.”⁷⁸

To the EPA, this interpretation was “necessary” to reconcile the “inclusion of CAFOs as point sources and the agricultural storm water exclusion consistently.”⁷⁹ The agency thought the land application of manure played an important agricultural role when manure was applied in a manner “designed to ensure appropriate agricultural utilization of nutrients.”⁸⁰ The exemption did not apply to discharges from the CAFO’s production area because “they involve[d] the type of industrial activity that originally led Congress to single out CAFOs as point sources.”⁸¹ The production area was defined as “the animal confinement area, the manure storage area, the raw materials storage

⁷⁴ *Id.* at *3.

⁷⁵ *Id.* at *4 (“First, this court has concluded that sprayfields can qualify as point sources when they are part of CAFOs. It is clear that point sources are not subject to the storm water exemption.”).

⁷⁶ 2003 CAFO Rule, *supra* note 33, at 7176.

⁷⁷ See 40 C.F.R. § 122.23(e) (2003) (describing which discharges are eligible for the exemption).

⁷⁸ *Id.*

⁷⁹ 2003 CAFO Rule, *supra* note 33, at 7197.

⁸⁰ *Id.*

⁸¹ *Id.* at 7198.

area, and the waste containment areas.”⁸² Effectively, it included all areas of the CAFO besides the land application area.

The rule appeared to settle the long-standing question—CAFO-related discharges qualified for the agricultural stormwater exemption, but only if they were precipitation-related discharges from the land application area and the manure had been applied appropriately. The EPA did not include a definition of agricultural stormwater in the rule because “the amended regulatory text . . . in combination with th[e] preamble discussion, adequately clarifie[d] the distinction between regulated point source discharges and non-regulated agricultural storm water discharges from the land application area of a CAFO.”⁸³ However, as discussed later in this Note, the Farm Bureau successfully convinced a district court in West Virginia to expand the exemption in the *Alt* case because the rule did not explicitly state which areas of the CAFO were eligible for the exemption.⁸⁴

The most contested change to the CAFO regulatory scheme was the creation of the “duty to apply” for a permit. The 2003 Rule required *all* CAFOs to get an NPDES permit unless they could affirmatively demonstrate that they had “no potential to discharge.”⁸⁵ NPDES permits require CAFOs to develop and implement a Nutrient Management Plan, which at a bare minimum includes the best management practices necessary to achieve the effluent limitations.⁸⁶

Environmental organizations and CAFO industry groups immediately challenged several provisions of the 2003 CAFO Rule.⁸⁷ In response, the Second Circuit vacated certain aspects of the Rule, including the duty to apply, and remanded additional aspects of the Rule.⁸⁸ However, the court upheld the EPA’s interpretation of the

⁸² *Id.* at 7266. The rule went on to define each of the areas listed above. *Id.*

⁸³ *Id.* at 7198.

⁸⁴ See *infra* notes 100–26 and accompanying text (providing overview of the *Alt* opinion).

⁸⁵ See 2003 CAFO Rule, *supra* note 33, at 7200 (“Today’s rule requires all CAFO owners or operators to seek coverage under an NPDES permit, except in very limited circumstances where they make an affirmative demonstration of ‘no potential to discharge.’”) (codified at 40 C.F.R. § 122.23(d)(1) (2003), *invalidated by* *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 505 (2d Cir. 2005)).

⁸⁶ See 40 C.F.R. § 122.42(e)(1) (2016) (outlining requirements of Nutrient Management Plans).

⁸⁷ See *Waterkeeper*, 399 F.3d at 497 (“Two sets of petitioners bring challenges to the CAFO Rule: the ‘Environmental Petitioners’ (Waterkeeper Alliance, Inc., Sierra Club, Natural Resources Defense Council, Inc., and the American Littoral Society) and the ‘Farm Petitioners’ (American Farm Bureau Federation, National Chicken Council, and the National Pork Producers Council).”).

⁸⁸ See *id.* at 524 (describing vacated and remanded portions of the rule).

agricultural stormwater exemption after finding that it was based on a permissible construction of the CWA.⁸⁹

In 2008, the EPA promulgated a new CAFO Rule.⁹⁰ It too was challenged by environmental and farm groups.⁹¹ The 2008 Rule replaced the “potential to discharge” standard with a “propose to discharge” standard and required CAFOs to apply for an NPDES permit if they discharged or proposed to discharge.⁹² After reasoning that it would apply to CAFOs who did not discharge, and were therefore outside the EPA’s statutory authority, the Fifth Circuit struck down the “propose to discharge” standard.⁹³

As a result of these decisions, “unpermitted CAFOs enjoy freedom from required permitting unless [the] EPA can show that they are discharging into the nation’s waters.”⁹⁴ Many CAFOs remain unpermitted⁹⁵ because they would rather risk apprehension than pay the permitting fees.⁹⁶ Permitted CAFOs must implement a Nutrient Management Plan as a part of their NPDES permit and, to be eligible for the agricultural stormwater exemption, their permit must include “site-specific nutrient management practices” for their land applica-

⁸⁹ See *id.* at 509 (“[W]e reject the Environmental Petitioners’ challenge to the CAFO Rule’s exemption for agricultural stormwater discharges because we believe that the exemption is premised on a permissible construction of the Act.”).

⁹⁰ Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the Waterkeeper Decision, 73 Fed. Reg. 70,418 (Nov. 20, 2008) [hereinafter 2008 CAFO Rule] (final rule).

⁹¹ See *Nat’l Pork Producers Council v. EPA*, 635 F.3d 738, 741 (5th Cir. 2011) (describing Farm Petitioners seeking review and environmental groups filing a motion to intervene). The petitions for review were consolidated into one case. *Id.*

⁹² 2008 CAFO Rule, *supra* note 90, at 70,423 (“This rule . . . replac[es] the ‘duty to apply’ requirement of the 2003 rule with a requirement that a CAFO that ‘discharges or proposes to discharge’ must seek authorization to discharge under an NPDES permit.”) (codified at 40 C.F.R. § 122.23(d)(1), *invalidated by Nat’l Pork Producers Council*, 635 F.3d at 756).

⁹³ See *Nat’l Pork Producers Council*, 635 F.3d at 750–51 (“This definition thus requires CAFO operators whose facilities are not discharging to apply for a permit Accordingly, we conclude that the EPA’s requirement that CAFOs that ‘propose’ to discharge apply for an NPDES permit is *ultra vires* and cannot be upheld.”).

⁹⁴ William M. McLaren, *The Death of the Duty to Apply: Limitations to CAFO Oversight Following Waterkeeper & National Pork Producers*, 11 J. ANIMAL & NAT. RESOURCE L. 87, 106 (2015).

⁹⁵ See Centner, *supra* note 64, at 362 (“Although CAFOs have been regulated for years, many have not secured permits, and there is evidence that a lack of permits has contributed to the impairment of our nation’s waters.”); *The EPA’s Failure to Track Factory Farms*, FOOD & WATER WATCH (Aug. 2013), https://www.foodandwaterwatch.org/sites/default/files/EPA%20Factory%20Farms%20IB%20Aug%202013_0.pdf (“As of 2011, the EPA estimated that only 41 percent of NPDES-defined CAFOs actually had NPDES permits.”).

⁹⁶ See McLaren, *supra* note 94, at 109 (discussing the choice between operating without a permit and paying for a permit).

tion area.⁹⁷ Unpermitted CAFOs do not have to institute a Nutrient Management Plan. Instead their discharges from the land application area are eligible for the agricultural stormwater exemption if the manure, litter, or process wastewater has been applied “in accordance with site-specific nutrient management practices.”⁹⁸

These cases undermined the EPA’s diligent attempts in 2003 and 2008 to create a regulatory scheme limiting water pollution from CAFOs. A subsequent case, *Alt v. EPA*, further weakened the EPA’s regulatory authority by expanding the scope of the agricultural stormwater exemption. The next part of this Note provides an overview and critique of the *Alt* opinion.

II

THE *ALT* CASE – WHERE THE COURT WENT WRONG

The *Alt* precedent allows CAFOs to further pollute our waterways by utilizing the agricultural stormwater exemption to avoid permitting requirements for discharges from the farmyard. Although the EPA is only bound by the court’s ruling in the Northern District of West Virginia, it is important for the EPA to institute a rulemaking to properly define the exemption because the Farm Bureau has already relied on the *Alt* case to argue that similar discharges from a CAFO in another jurisdiction were exempt agricultural stormwater.⁹⁹

A. *The Alt Case*

The 2003 CAFO Rule clarified that certain CAFO-related discharges are eligible for the agricultural stormwater exemption.¹⁰⁰ It also appeared to determine which areas of the CAFO were eligible for the exemption—the land application area was eligible in certain circumstances, the production area was not.¹⁰¹ However, the Rule did

⁹⁷ See 2008 CAFO Rule, *supra* note 90, at 70,434 (describing requirements for permitted CAFOs to qualify for the exemption).

⁹⁸ *Id.* at 70,435 (codified at 40 C.F.R. § 122.23(e)(1) (2016)).

⁹⁹ See Brief for American Farm Bureau Federation & United Egg Producers as Amici Curiae Supporting Plaintiff at 3, *Rose Acre Farms, Inc. v. N.C. Dep’t of Env’t & Nat. Res.*, 131 F. Supp. 3d 496 (E.D.N.C. 2015) (No. 5:14-CV-147-D), 2015 WL 5720135 (“Rose Acre should not be vulnerable to such enforcement actions for discharges of stormwater containing dust and particles emitted through its ventilation fans because such discharges are excluded from the definition of ‘point source’ by the Act’s agricultural storm water exemption.”).

¹⁰⁰ See 2003 CAFO Rule, *supra* note 33, at 7198 (“There is nothing in the text of the point source definition . . . that indicates that Congress intended the agricultural storm water discharge exclusion not to apply to CAFOs.”).

¹⁰¹ See *id.* (“[D]ischarges from the production area at the CAFO (e.g., the feedlot and lagoons) are not eligible for the agricultural stormwater exemption at all . . .”).

not explicitly define the agricultural stormwater exemption. Enter Lois Alt.

In 2011, EPA employees inspected the Alt farm pursuant to their authority under the CWA.¹⁰² Alt's farm houses 200,000 broiler chickens in eight poultry barns.¹⁰³ Man-made ditches surround the barns and flow into nearby Mudlick Run.¹⁰⁴ Outside the barns, the EPA inspectors observed manure, dust, dander, and feathers that escaped the poultry barns via their ventilation fans.¹⁰⁵ Because these substances are pollutants under the CWA and rain carried them into Mudlick Run, the EPA issued a "Findings of Violation and Order for Compliance,"¹⁰⁶ requiring Alt to apply for an NPDES permit and potentially face a civil enforcement action.¹⁰⁷ Rather than applying for an NPDES permit, Alt, backed by the American Farm Bureau and West Virginia Farm Bureau, filed suit seeking a declaratory judgment that the precipitation-related discharges from her farmyard were exempt as agricultural stormwater.¹⁰⁸

Narrowly, the pertinent issue before the court was whether the discharges detailed above were exempt from the CWA because they constituted agricultural stormwater.¹⁰⁹ The broader issue was the scope of the agricultural stormwater exemption, specifically whether it applied to any part of the CAFO besides the land application area. The EPA argued that the agricultural stormwater exemption was inapplicable because it only applied to precipitation-caused discharges from land application areas and these discharges were from the production area.¹¹⁰

When an agency's interpretation of a statute is challenged, the *Chevron* doctrine provides that a court shall defer to an agency's interpretation as long as the interpretation is reasonable and the

¹⁰² See United States' Memorandum in Support of Its Cross-Motion for Summary Judgment at 4, *Alt v. EPA*, 979 F. Supp. 2d 701 (N.D. W. Va. 2013) (No. 2:12-CV-00042-JPB), 2013 WL 4078750 (providing an overview of the case's factual background).

¹⁰³ *Id.* at 5.

¹⁰⁴ *Id.*

¹⁰⁵ *Alt*, 979 F. Supp. 2d at 704.

¹⁰⁶ See *id.* at 705 ("EPA asserted its regulatory authority over stormwater runoff from Lois Alt's farmyard by issuing its November 14, 2011, Findings of Violation and Order for Compliance . . .").

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.* at 706 ("The central issue . . . is whether the litter found on Ms. Alt's farmyard that could be picked up by rainwater, washed two hundred yards across a grassy cow pasture, and discharged into a creek named Mudlick Run is exempted from liability under the agricultural stormwater exception.").

¹¹⁰ *Id.* at 710–11 (discussing meaning of the agricultural stormwater exemption).

statute has not clearly addressed the issue.¹¹¹ The court did not grant the EPA's interpretation of the exemption *Chevron* deference for two reasons.¹¹² First, the court thought the 2003 regulations did not define the entire universe of discharges that were eligible for the agricultural stormwater exemption.¹¹³ Instead, to the court, the 2003 regulations only defined which discharges from the land application area were eligible for the exemption and did not attempt to determine whether discharges from other areas of the CAFO could also qualify.¹¹⁴ Specifically, the court found that the regulations did not address whether runoff from the "farmyard" was eligible for the exemption.¹¹⁵ Citing to precedent establishing that *Chevron* deference is only accorded to agency interpretations issued through notice and comment rulemaking, the court declined to grant the EPA *Chevron* deference because the agency had "not promulgated any regulations covering the topic."¹¹⁶

Second, the court interpreted one sentence in the Rule's preamble as an explicit pronouncement that the Rule did not comprehensively define all of the potential discharges that could qualify for the exemption.¹¹⁷ Therefore, the EPA's current interpretation that the Rule was comprehensive was a "change of position," which, according to recent Supreme Court decisions, "militate[d] against deference."¹¹⁸

As a result, the court set out to construe the meaning of "agricultural stormwater" in accordance with common sense and plain English. The court looked to prior case law to aid in this determina-

¹¹¹ See William N. Eskridge, Jr. & Lauren E. Baer, *The Continuum of Deference: Supreme Court Treatment of Agency Statutory Interpretations from Chevron to Hamdan*, 96 GEO. L.J. 1083, 1098 (2008) (outlining *Chevron* deference as "the famous two-step approach that permits reasonable agency interpretations so long as the statute has not clearly spoken to the issue").

¹¹² See *Alt*, 979 F. Supp. 2d at 712 (determining that the EPA's regulation was not entitled to *Chevron* deference).

¹¹³ See *id.* at 713 ("[T]his Court must conclude that there is more to the agricultural stormwater exemption than as set forth in the 2003 land application area regulations.").

¹¹⁴ See *id.* at 712 ("The EPA, however, has not promulgated any regulations defining the term other than the land application regulations, which was and is an expansion of the preexisting exemption.").

¹¹⁵ See *id.* at 710, 713 ("Because neither the Act nor EPA's implementing regulations has defined 'agricultural stormwater discharges' within the context of CAFO farmyard runoff, it falls to this Court to interpret this statutory term."). Despite the fact that there is no basis in the statute or the regulations for the term "farmyard," the court named the area around the Alt barns, where the discharges were found, the "farmyard." *Id.* at 713.

¹¹⁶ *Id.* at 712 ("The EPA regulations are not entitled to deference under *Chevron* . . . since the EPA has not promulgated any regulations covering the topic.").

¹¹⁷ See *id.* (discussing the sentence in 2003 Rule's preamble).

¹¹⁸ *Id.* ("[T]he fact that the EPA's present position concerning the exclusivity of the land application area regulations represents a change of position from prior to 2003, militates against deference.").

tion. To ascertain the meaning of “agricultural,” the Second Circuit in *Waterkeeper* consulted Webster’s Dictionary, which defines “agriculture” as the “work of cultivating the soil, producing crops, and raising livestock.”¹¹⁹ The *Alt* court determined that Lois Alt’s operation was clearly agricultural because she was raising poultry.¹²⁰ Next the court drew from the *Concerned Area Residents* case, which held that discharges must be “the result of precipitation” to constitute agricultural stormwater.¹²¹ The court concluded that the Alt discharges were agricultural stormwater because the discharges were caused by precipitation from an agricultural operation.¹²²

In addition to rejecting the EPA’s argument about the exemption’s scope, the court discarded the argument that the Alt discharges were from the production area, an area ineligible for the exemption, because the “farmyard” was not part of the production area.¹²³ The EPA also argued that even if the discharges were in an area outside the production area, they were still ineligible for the agricultural stormwater exemption because they *originated* in the poultry houses, a quintessential part of the production area, and therefore ineligible for the exemption.¹²⁴ The court rejected this argument because the manure and litter would not become “discharges of a pollutant” until stormwater carried them into “navigable waters.”¹²⁵ In reaching this conclusion, the court relied on language from the *Waterkeeper* court, which stated, “agricultural stormwater discharges are exempt from regulation ‘even when those discharges came from what would otherwise be point sources.’”¹²⁶

B. Where the Court Went Wrong

The court’s conclusion in *Alt* is wrong for three reasons. First, the EPA’s interpretation of the agricultural stormwater exemption deserved *Chevron* deference. Second, the court’s broad interpretation of the agricultural stormwater exemption cannot be reconciled with

¹¹⁹ See *id.* at 710–11 (“The terms ‘agricultural’ and ‘stormwater’ should be given their ordinary meaning in accordance with common usage.”).

¹²⁰ *Id.* at 711.

¹²¹ *Id.* at 711–12.

¹²² See *id.* at 711 (“Common sense and plain English lead to the inescapable conclusion that Ms. Alt’s poultry operation is ‘agricultural’ in nature and that the precipitation-caused runoff from her farmyard is ‘stormwater.’”).

¹²³ See *id.* at 713 (“The EPA argues that the production area of a CAFO is ineligible for the agricultural storm water discharge exemption. This Court is not concerned with whether this assertion is valid, since the Alt ‘farmyard’ is not a ‘production area.’”).

¹²⁴ *Id.* at 714.

¹²⁵ *Id.*

¹²⁶ *Id.* (quoting *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 507 (2d Cir. 2005)).

the EPA's intent to create a narrow exemption. Finally, the reasoning behind the court's determination that the discharges were not from the production area is faulty.

1. *The EPA's Interpretation of the 2003 CAFO Rule Deserved Chevron Deference*

Contrary to the *Alt* court's opinion, the EPA's interpretation of the agricultural stormwater exemption deserved *Chevron* deference because the 2003 regulations comprehensively defined the eligible discharges and the EPA's interpretation of the exemption's scope remained consistent. A close read of the 2003 CAFO Rule, along with the relevant history, reveal that the Rule was designed to be comprehensive. Additionally, the court misunderstood the sentence they relied on to conclude that the EPA's current position differed from its 2003 position.

The 2003 Rule only specified that the exemption applied to the land application area but not the production area;¹²⁷ this is reasonable given that the EPA was interpreting the exemption in the context of a statute that explicitly designates CAFOs as point sources.¹²⁸ Additionally, the EPA likely thought the production area and the land application area comprised the entirety of a CAFO.¹²⁹ Furthermore, the EPA may not have anticipated this issue because case law addressing the question only discussed the exemption in the context of the land application area.¹³⁰

When concluding that the EPA knew that the 2003 regulation was not comprehensive,¹³¹ the *Alt* court focused on, and misinterpreted, one sentence in the Rule's preamble. After stating that the EPA had not "promulgated any regulations defining the [agricultural stormwater exemption] other than the land application area regulations" the court wrote:

¹²⁷ See 2003 CAFO Rule, *supra* note 33, at 7198 ("EPA is clarifying in today's rule that discharges of manure, litter, and process wastewaters from the land application areas of a CAFO are agricultural stormwater discharges [D]ischarges from the production area at the CAFO . . . are not eligible for the agricultural storm water exemption at all.").

¹²⁸ 33 U.S.C. § 1362(14) (2012).

¹²⁹ See 2001 Proposed CAFO Rule, *supra* note 67, at 3030 ("EPA is proposing that the *entire CAFO operation* (e.g. the feedlot/production area and the land application areas . . .) is subject to the revised effluent limitations guideline and the revised NPDES permitting regulation." (emphasis added)).

¹³⁰ See *supra* notes 70–75 and accompanying text (discussing *Concerned Area Residents and Smithfield Foods*).

¹³¹ See *Alt*, 979 F. Supp. 2d at 712 ("The EPA, however, has not promulgated any regulations defining the term other than the land application regulations, which was and is an expansion of the preexisting exemption.").

In fact, in the preamble to the 2003 Rule, the EPA stated that ‘EPA does not intend its discussion of how the scope of point source discharges from a CAFO is limited by the agricultural storm water exemption to apply to discharges that do not occur as a result of land application of manure, litter, or process wastewater by a CAFO to land areas under its control.’¹³²

To the *Alt* court, this statement explicitly acknowledged that the rule was incomprehensive—it only defined which discharges from the land application area were exemption eligible and made no attempt to address whether discharges from other areas of the CAFO could also qualify.¹³³

Rather than focusing on the words “land application,” the court should have focused on the words “manure, litter, or process wastewater.”¹³⁴ This sentence did not state that the regulation only defined the discharges from the land application area that were eligible for the exemption. Instead, it explained that the rule regulated manure and process wastewater discharges from the land application area and *not* other pollutants like pesticides.¹³⁵ In other words, the sentence clarified that if manure was applied appropriately, discharges from the land application area were eligible for the exemption regardless of other requirements to control runoff from “the application of pesticides or other agricultural practices.”¹³⁶ As a result, the EPA’s interpretation of the exemption’s scope in *Alt* did not differ from its position in 2003.

The sentence’s true meaning is clear from the evolution of the 2001 proposed rule to the final 2003 Rule. Unlike the 2003 Rule, the rule proposed in 2001 included the land application area within the definition of a CAFO.¹³⁷ During the comment period for the 2001 proposed rule, concerned stakeholders commented that if the definition of a CAFO included the land application area, EPA inspectors

¹³² *Id.* at 712.

¹³³ *See id.* (concluding that EPA acknowledged that it was not defining the entire universe of discharges that were eligible for the exemption).

¹³⁴ *See supra* note 132 and accompanying text (discussing sentence relied on by the court).

¹³⁵ *See* 2003 CAFO Rule, *supra* note 33, at 7197 (“Also, as noted, today’s land application rule provisions apply *only* to the application of manure, litter, and process wastewaters at the CAFO, and not to other pollutants that may exist at the operation.” (emphasis added)).

¹³⁶ *See id.* at 7198 (“EPA does not intend that the applicability of the agricultural storm water exemption to discharges from land application areas of a CAFO be constrained by requirements to control runoff resulting from the application of pesticides or other agricultural practices.”).

¹³⁷ *See id.* at 7197 (noting that in 2001, the “EPA proposed to amend the AFO definition to include the land application areas at the facility as well as the animal production areas”).

would incorrectly conclude that the NPDES permit had to include terms and conditions on *any* pollutants running off the land, not just manure and process wastewater.¹³⁸ As a result, the EPA did not include the land application area in the final 2003 CAFO definition.¹³⁹ Instead, the EPA included the provision about the agricultural stormwater exemption and a long preamble to fully explain which pollutants the agency was regulating.¹⁴⁰

The sentence the court seized on resides in a preamble paragraph geared towards alleviating this concern. The paragraph generally explains that the agricultural stormwater exemption sets a “floor” for CAFOs—any CAFO that applies their manure in accordance with prudent agricultural practices is not subject to further effluent limitations to ensure compliance with water quality standards.¹⁴¹ The paragraph ends by explicitly stating that if CAFOs apply manure and process wastewater appropriately, discharges from the land application area are eligible for the agricultural stormwater exemption, regardless of other requirements to control runoff from pesticide use or other agricultural practices.¹⁴²

The 2003 Rule was comprehensive and defined the entire universe of exemption-eligible CAFO-related discharges. Additionally, the EPA’s position in the *Alt* case regarding the Rule’s comprehensiveness was the same as their position in the 2003 Rule. As a result, the EPA’s interpretation deserved *Chevron* deference because the interpretation was promulgated through notice and comment rulemaking and remained consistent.

¹³⁸ *See id.* (“Following the proposal, however, concerns were raised that this language could be misconstrued to mean that CAFO permits must include terms and conditions on any pollutants running off the operation’s land application areas (for example, runoff of pesticides).”). Including the production area in the definition did not raise this concern because pesticides are not used in production areas.

¹³⁹ *See id.* (“Therefore, EPA has chosen not to include the land application areas at an animal feeding operation within the definition of an AFO or CAFO in the final regulations.”).

¹⁴⁰ *See id.* (“Instead, EPA has added section 122.23(e), entitled ‘Land application discharges from a CAFO are subject to NPDES requirements.’”). As discussed previously in this Note, this provision states that discharges from the land application area are subject to the NPDES permit requirement unless they are agricultural stormwater. 40 C.F.R. § 122.23(e) (2016). It goes on to explain the meaning of exempt agricultural stormwater. *Id.* § 122.23(e)(1). The preamble to the 2003 Rule addresses the stakeholders’ concerns by stating: “The focus of this rulemaking is on the CAFO manure and process wastewaters that may be discharged by the CAFO.” 2003 CAFO Rule, *supra* note 33, at 7197.

¹⁴¹ *Id.* at 7198.

¹⁴² *Id.*

2. *The EPA Intended the Agricultural Stormwater Exemption to Apply Narrowly*

The EPA intended to create a narrow exemption in the 2003 Rule that furthered agricultural activities while limiting water pollution. This intention is evident from the 2001 proposed rule, the 2003 Rule, and the subsequent actions of the EPA and the Fifth Circuit after the 2003 Rule's promulgation. The *Alt* court's broad interpretation, which deems discharges from the "farmyard" eligible for the exemption, is inconsistent with this because it does not further an agricultural purpose. Unlike manure that is spread on the land application area, the discharges outside of Lois Alt's poultry barns do not fertilize crops. They are "simply waste."¹⁴³

As discussed above, Congress signaled its intent to regulate this industry by declaring CAFOs a point source in the statute. This principle always guided EPA's rulemakings,¹⁴⁴ particularly in the 2001 proposed rule, when the EPA considered four approaches under which a CAFO would *never* be eligible for the agricultural stormwater exemption.¹⁴⁵ The EPA noted that, "[b]y singling out '[CAFO]s,' a far more specific conveyance reference compared to the other, more general, terms in the definition of 'point source' . . . Congress may have intended the addition of pollutants to the waters of the U.S. to be considered 'industrial' and not 'agricultural' discharges."¹⁴⁶

The final approach in the 2001 proposed rule allowed CAFOs to qualify for the agricultural stormwater exemption, but *only* in the land application area, and *only* if the manure had been applied in accordance with proper agricultural practices.¹⁴⁷ By applying the exemption to the land application area, the EPA struck a balance between two objectives: furthering legitimate agricultural needs and improving

¹⁴³ United States' Memorandum in Support of Its Cross-Motion for Summary Judgment at 32, *Alt v. EPA*, 979 F. Supp. 2d 701 (N.D. W. Va. 2013) (No. 2:12-CV-00042-JPB), 2013 WL 4079750.

¹⁴⁴ See 2003 CAFO Rule, *supra* note 33, at 7196 ("EPA believes that, in explicitly including CAFOs in the definition of a point source . . . Congress intended that discharges of manure and process wastewater from a CAFO to waters of the U.S. should be regulated through the NPDES permit program."); Form and Guidelines Regarding Agricultural and Silvicultural Activities, 38 Fed. Reg. 18,000, 18,000 (July 5, 1973) ("By the inclusion of the term 'concentrated animal feeding operations' in section 502(14) of the Act, Congress indicated its intent that these sources of agricultural pollution be controlled through the NPDES permit program.").

¹⁴⁵ See 2001 Proposed CAFO Rule, *supra* note 67, at 3031 ("EPA is soliciting comments on four additional approaches under which the agricultural storm water exemption would not apply to CAFOs.").

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 3029.

water quality.¹⁴⁸ To the EPA, using manure as fertilizer was the type of agricultural activity Congress intended to exempt from permitting requirements.¹⁴⁹ Distinguishing between beneficial agricultural activities and industrial activities is in line with the EPA's CAFO regulations dating back to the 1970s.¹⁵⁰ Additionally, it is in accordance with the agency's earlier concern about the hassle of permitting, as it is easier to regulate a discrete conveyance like the ditch flowing into Mudlick Run than the diffuse runoff from a field.¹⁵¹

The 2003 Rule followed the same reasoning, focusing on promoting beneficial agricultural inputs while minimizing harm to water quality. The preamble emphasized that the distinction between agricultural stormwater and regulated point sources is whether the manure "has been applied in accordance with site specific nutrient management practices that ensure *appropriate agricultural utilization of the nutrients*."¹⁵² This exemption was not designed to allow CAFO owners to dispose of manure without regard to the environment.¹⁵³

Furthermore, the EPA clarified the exemption's logic—when manure is applied in an agronomic manner it fulfills an important agricultural purpose and reduces the potential for future discharges.¹⁵⁴ That logic does not apply to the discharges in the *Alt* case—leaving manure, feathers, and dander on the ground outside of the barn does not provide any agricultural benefit. No fertilization occurs. The EPA also noted that accidental spills from poultry operations, like the discharges at issue in *Alt*, contaminate surface waters after coming into contact with rainfall.¹⁵⁵ Why would the EPA intend to exempt these

¹⁴⁸ See *id.* at 3030 ("EPA believes that its proposed definition of proper agricultural practices strikes the proper balance between these objectives.").

¹⁴⁹ See *id.* at 3029 ("EPA interprets the statute to reflect Congress' intent not to regulate additions of manure or wastewater that are truly agricultural because they occur despite the use of proper agricultural practices.").

¹⁵⁰ See *supra* notes 61–62 and accompanying text (discussing exclusion of CAFOs from agricultural regulations).

¹⁵¹ See *supra* notes 48–51 and accompanying text (excluding certain activities from permitting requirements because minimal pollution generated did not justify hassle of permitting).

¹⁵² 2003 CAFO Rule, *supra* note 33, at 7197 (emphasis added).

¹⁵³ See *id.* at 7198 ("Further, if manure or process wastewater were applied so thickly that it ran off into surface waters even during dry weather, this would not be consistent with practices designed to ensure appropriate agricultural utilization of nutrients.").

¹⁵⁴ See *id.* at 7197 ("When manure or process is applied in accordance with practices designed to ensure appropriate agricultural utilization of nutrients, it is a beneficial agricultural production input. This fulfills an important production purpose, . . . fertilization of crops, . . . [and] minimizes the potential for a subsequent discharge of pollutants.").

¹⁵⁵ See *id.* at 7208 ("Nutrients from large poultry operations continue to contaminate surface waters because of rainfall coming in contact with dry manure that is stacked in exposed areas, accidental spills, etc.").

discharges while simultaneously acknowledging that they are a serious source of pollution that serve no agricultural purpose?

Both the EPA and the Fifth Circuit's actions after the promulgation of the 2008 Rule further bolster the argument that the exemption was intended to apply narrowly to the land application area. After the promulgation of the 2008 Rule, the EPA distributed several guidance letters stating that the "litter released through confinement ventilation fans" was a pollutant under the CWA and that the agricultural stormwater exemption only applied to precipitation-related discharges from the land application area.¹⁵⁶ Farm groups challenged the letters, arguing this was a substantive rule because it created new legal consequences and therefore required notice and comment rulemaking.¹⁵⁷ In *National Pork Producers* the Fifth Circuit held that the agency letters did not constitute reviewable final agency action because they failed the second prong of the *Bennett* test—they did not "create new legal consequences nor affect their rights or obligations."¹⁵⁸ The court understood that pollutants from this area of the CAFO had never been eligible for the agricultural stormwater exemption.¹⁵⁹ These actions, along with the 2001 proposed rule and the 2003 Rule, demonstrate that the EPA intended to create a narrow exemption that would reduce water pollution while promoting sound agricultural practices.¹⁶⁰ The *Alt* court's interpretation creates a broad exemption that increases water pollution and fails to further any agricultural need.

¹⁵⁶ *Nat'l Pork Producers Council v. EPA*, 635 F.3d 738, 748 (5th Cir. 2011). The agency action must be final for the court to have jurisdiction. *See id.* at 755. In order to constitute final agency action under the *Bennett* test, "the action must mark the consummation of the agency's decision-making process" and "be one by which 'rights or obligations have been determined' or from which 'legal consequences will flow.'" *Id.* (quoting *Bennett v. Spear*, 520 U.S. 154, 177–78 (1997)).

¹⁵⁷ *See id.* at 755. The Administrative Procedure Act requires agencies to engage in notice and comment rulemaking when promulgating a substantive rule. *See* 5 U.S.C. § 553(b) (explaining notice requirements and exemptions for "interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice").

¹⁵⁸ *See Nat'l Pork Producers Council*, 635 F.3d at 755–57 (finding that guidance letters "merely restate section 1342's prohibition against discharging pollutants without an NPDES permit").

¹⁵⁹ Additionally, numerous scholars, and the *Waterkeeper* court, took the EPA's definition of the agricultural stormwater exemption at face value and never questioned the fact that it only applied in the context of the land application of manure. *See, e.g.,* Terence J. Centner, *Nutrient Pollution from Land Applications of Manure: Discerning a Remedy for Pollution*, 21 STAN. L. & POL'Y REV. 213, 221–22 (2010) (describing the four factors that distinguish agricultural stormwater discharges).

¹⁶⁰ We must remember that the 2003 Rule also proposed to regulate any CAFOs with a "potential to discharge." *See supra* note 33 (discussing creation of the "potential to discharge" standard). As a result, EPA intended to be regulating the entire industry very tightly.

3. *The Alt Discharges Were from the Production Area*

The *Alt* court incorrectly rejected the EPA's argument that the "farmyard" was part of the production area.¹⁶¹ The court determined that the area between the poultry houses, where the *Alt* discharges were found, was not within the regulatory definition of the production area.¹⁶² The regulation defines the production area as "the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas."¹⁶³ The court paused to contemplate whether the area between the poultry houses might be considered the animal confinement area, but ultimately concluded that the animal confinement area is limited to "areas where animals may be kept or raised."¹⁶⁴

This conclusion is questionable for two reasons. The regulation states that the animal confinement area "includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables."¹⁶⁵ First, the wording "includes *but is not limited to*"¹⁶⁶ suggests a broad definition. Second, the court is incorrect in asserting that all of the described animal confinement areas are places where animals are housed. Merriam-Webster's Dictionary defines a barnyard as "an area of ground near a barn that usually has a fence around it."¹⁶⁷ It does not specify that animals have to be kept within that area. Furthermore, the Oxford Dictionary defines a milk room as "a room . . . in which milk is stored."¹⁶⁸ In fact, EPA regulations previously defined a milk room as "milk storage and cooling rooms."¹⁶⁹ The inclusion of these two areas within the definition of the animal confinement area undermines the conclusion that this only includes areas where animals are housed.

¹⁶¹ See *Alt v. EPA*, 979 F. Supp. 2d 701, 713 (N.D. W. Va. 2013) ("This Court is not concerned with whether this assertion is valid, since the *Alt* 'farmyard' is not a 'production area.'").

¹⁶² See *id.* at 713 ("What is described as a farmyard is not an area where animals are confined and therefore not a production area.").

¹⁶³ 40 C.F.R. § 122.23(b)(8) (2016).

¹⁶⁴ *Alt*, 979 F. Supp. 2d at 713.

¹⁶⁵ 40 C.F.R. § 122.23(b)(8) (2016).

¹⁶⁶ *Id.* (emphasis added).

¹⁶⁷ *Barnyard*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/barnyard> (last visited June 29, 2016).

¹⁶⁸ *Milk Room*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/american_english/milk-room (last visited June 29, 2016).

¹⁶⁹ Feedlots Point Source Category: Effluent Guidelines and Standards, 39 Fed. Reg. 5704, 5707 (Feb. 14, 1974).

Alternatively, the EPA argued that the discharges were ineligible for the agricultural stormwater exemption because they *originated* in the production area, the poultry barns.¹⁷⁰ The court rejected this by relying on the following part of a sentence in the *Waterkeeper* case: “The court added that agricultural stormwater discharges are exempt from regulation ‘even when those discharges came from what would otherwise be point sources.’”¹⁷¹ Seizing on this sentence, the *Alt* court concluded that while the manure and litter originally came from a point source—the poultry barns—they were exempt agricultural stormwater discharges because they would not have entered navigable waters without the assistance of stormwater.¹⁷²

However, the *Alt* court took the *Waterkeeper* statement completely out of context. The *Waterkeeper* court determined that precipitation-related discharges are agricultural stormwater “*only* where CAFOs have otherwise applied ‘manure, litter, or process wastewater . . . in accordance with site specific nutrient management practices that ensure appropriate *agricultural* utilization.’”¹⁷³ Thus, the *Waterkeeper* court recognized that the agricultural stormwater exemption applies *only* in the context of the land application of manure.

Therefore, the sentence the *Alt* court cherry-picked is narrower than their interpretation. All the *Waterkeeper* court meant was that if the manure was applied appropriately, any precipitation-related discharges from the *land application area* were considered exempt agricultural stormwater, despite the fact that the *land application area* was a point source. The court was not saying that manure spilling out of the production area, an area ineligible for the agricultural stormwater exemption, is agricultural stormwater if it is moved by precipitation. As a result, the *Alt* court’s determination that the *Alt* discharges were not from the production area is incorrect.

By expanding the scope of the agricultural stormwater exemption, this decision allows CAFOs to evade permitting requirements and pollute our waterways with toxic manure that destroys our environment and endangers public health. To prevent further water pollution, the EPA should promulgate a rule clarifying the exemption.

¹⁷⁰ See *Alt v. EPA*, 979 F. Supp. 2d 701, 714 (N.D. W. Va. 2013) (“The EPA argues that the litter and manure that may be in the farmyard would have originally come from the production area, rendering it ineligible for the storm-water exemption.”).

¹⁷¹ *Id.* (quoting *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 507 (2d Cir. 2005)).

¹⁷² See *id.* (“The manure and litter in the farmyard would remain in place and not become discharges of a pollutant unless and until stormwater conveyed the particles to navigable waters.”).

¹⁷³ *Waterkeeper*, 399 F.3d at 509 (quoting 40 C.F.R. § 122.23(e)) (emphasis added).

III THE EPA SHOULD INSTITUTE A COMPREHENSIVE RULEMAKING

The *Alt* case demonstrates that the 2003 Rule inadequately clarified the scope of the notoriously ambiguous agricultural stormwater exemption.¹⁷⁴ To bring clarity to the regulatory scheme, narrow the expansive exemption created by the *Alt* court, and prevent the Farm Bureau from relying on this precedent to degrade our waterways, the EPA should institute notice and comment rulemaking to explicitly define the exemption. Rulemaking is the most promising remedy because it is more likely to be successful than a legislative amendment¹⁷⁵ and, unlike an interpretive rule or agency guidance, it will carry the force of law.¹⁷⁶ The next part of this Note will discuss the scope of the EPA's authority and some factors the EPA should consider when defining the exemption.

A. *The EPA's Authority Under the Clean Water Act Is Expansive*

Before discussing the contours of the EPA's rulemaking, we must determine the scope of the EPA's authority and whether the Clean Water Act's text and/or relevant precedent limit the agency. The CWA does not define the agricultural stormwater exemption and the legislative history is scarce. As one court put it, "[t]he legislative history is both sparse and unhelpful, stating only the obvious: that the new language 'amends Section 502(14), of the Act, by providing that Agricultural Stormwater Discharges are not defined as a point source.'"¹⁷⁷

However, the legislative history from the Act's enactment and the inclusion of CAFOs as a point source suggest that the EPA has expansive authority. As indicated above, the designation of CAFOs

¹⁷⁴ See Allison Tungate, *Hogtied to Precedent: The Need for a Statutory Definition of "Agricultural Stormwater Discharge" in the Clean Water Act*, 21 J. ENVTL. & SUSTAINABILITY L. 456, 481 (2015) ("*Alt* illuminates the growing need for the EPA to issue an implementing regulation that further clarifies, if not unambiguously defines, the scope of the exemption.").

¹⁷⁵ See John Lauritsen, *Good Question: Why Is It So Hard to Pass a Law?*, CBS MINN. (June 23, 2016, 10:56 PM), <http://minnesota.cbslocal.com/2016/06/23/good-question-passing-bills> (discussing difficulty of passing legislation in Congress).

¹⁷⁶ See *United States v. Mead Corp.*, 533 U.S. 218, 226–27 (2001) ("We hold that administrative implementation of a particular statutory provision qualifies for *Chevron* deference when it appears that Congress delegated authority to the agency generally to make rules carrying the force of law, and that the agency interpretation claiming deference was promulgated in the exercise of that authority.").

¹⁷⁷ *Concerned Area Residents for the Env't v. Southview Farm*, 834 F. Supp. 1422, 1427 (W.D.N.Y. 1993) (quoting Section-by-Section Analysis, 133 CONG. REC. H131 (Jan. 7, 1987), as reprinted in 1987 U.S.C.C.A.N. 5, 41).

within the statutory definition of a point source evinces a strong Congressional intent to regulate CAFOs. Senator Dole's statement during deliberations, the only legislative history that exists, lends credence to this view.

Animal and poultry waste, until recent years, has not been considered a major pollutant. Until the past ten or fifteen years few problems existed, because animals were relatively wide-spread on pasture and rangeland and their manure was deposited on the ground to be naturally recycled through the soil and plant cover. . . . The picture has changed dramatically, however, as development of intensive livestock and poultry production on feedlots and in modern buildings has created massive concentrations of manure in small areas. The recycling capacity of the soil and plant cover to recycle has been surpassed. . . . Precipitation runoff from these areas picks up high concentrations of pollutants, which reduce oxygen levels in receiving streams and lakes and accelerate the eutrophication process. The present situation and the outlook for future developments in livestock and poultry production show that waste management systems are required to prevent wastes generated in concentrated production areas from causing serious harm to surface and ground waters.¹⁷⁸

Senator Dole's conversation with Senator Muskie, a primary sponsor of the bill, is further evidence that Congress granted the EPA significant power to regulate point source pollution.

Mr. DOLE. [T]o what sources of guidance are we to look for further clarification of the terms 'point source' and 'nonpoint source'—especially as related to agriculture?

Mr. MUSKIE. Guidance with respect to the identification of 'point sources' and 'nonpoint sources,' especially as related to agriculture, will be provided in regulations and guidelines of the Administrator¹⁷⁹

Case law supports this conclusion. The D.C. Circuit in *NRDC v. Costle* found "that the power to define point . . . sources is vested in [the] EPA."¹⁸⁰

The *Alt* court's interpretation of the agricultural stormwater exemption does not limit the EPA in future rulemakings. The Supreme Court has established that "[a] court's prior judicial construction of a statute trumps an agency construction otherwise entitled to *Chevron* deference only if the prior court decision holds that its

¹⁷⁸ S. REP. NO. 92-414, at 100 (1972), as reprinted in 1972 U.S.C.C.A.N. 3668, 3761.

¹⁷⁹ 117 CONG. REC. 38816 (1971).

¹⁸⁰ 568 F.2d 1369, 1382 (D.C. Cir. 1977) (quoting *NRDC v. Train*, 396 F. Supp. 1393, 1396 (D.D.C. 1975)).

construction follows from the unambiguous terms of the statute and thus leaves no room for agency discretion.”¹⁸¹ To determine if judicial precedent limits an agency’s future rulemaking, two questions must be answered: (1) “[D]id the earlier court assert that its construction of a statutory provision was the only reasonable one?,” and (2) “[W]as this assertion a holding?”¹⁸² Prior case law only binds the agency if both questions yield a positive answer.¹⁸³

While the *Alt* court did not grant the EPA’s interpretation *Chevron* deference, it was not because the court’s construction of the exemption was the only reasonable one. Instead, it was because the EPA had not promulgated comprehensive regulations.¹⁸⁴ Therefore, this precedent does not limit the EPA in future rulemakings. Additionally, the *Waterkeeper* decision does not constrict the EPA because the court granted the EPA’s interpretation *Chevron* deference¹⁸⁵ and explicitly stated that the CWA was ambiguous about CAFOs eligibility for the agricultural stormwater exemption.¹⁸⁶ As a result, the EPA has ample authority to define the exemption.

B. *Ensuring the Agricultural Stormwater Exemption Furthers an Agricultural and Environmental Purpose*

While the EPA felt it was unnecessary to define agricultural stormwater in the 2003 Rule, the result in the *Alt* case demonstrates that a definition is necessary to provide clarity and prevent further environmental degradation. Given the harmful substances present in CAFO waste, a rule entirely excluding CAFOs from the agricultural stormwater exemption may be the best policy option, and, as discussed above, there is a strong argument that the EPA has the authority to exclude CAFOs from the exemption because it was never

¹⁸¹ *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 982 (2005).

¹⁸² *Implementing Brand X: What Counts as a Step One Holding?*, 119 HARV. L. REV. 1532, 1532 (2006).

¹⁸³ *See id.* (“Positive answers to both questions yield a ‘Step One holding,’ a binding judicial decision that a particular interpretation is the only reasonable one.”).

¹⁸⁴ *Alt v. EPA*, 979 F. Supp. 2d 701, 712 (N.D. W. Va. 2013). The court acknowledged that the statute was silent on the meaning of agricultural stormwater. *See id.* at 710 (“The term ‘agricultural stormwater discharge’ was not and has not been defined in the statute.”).

¹⁸⁵ *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 507 (2d Cir. 2005) (“[T]he . . . question . . . becomes, pursuant to *Chevron*, whether the CAFO Rule’s exemption for ‘precipitation-related’ land application discharges is grounded in a ‘permissible construction’ of the [CWA]. . . . We think this is a reasonable construction in light of the legislative purpose of the agricultural stormwater exemption.”).

¹⁸⁶ *See id.* (“[W]e find that this provision is self-evidently ambiguous as to whether CAFO discharges can ever constitute agricultural stormwater.”).

intended to apply to CAFOs.¹⁸⁷ However, given the EPA's reluctance to regulate CAFOs,¹⁸⁸ and the intense opposition that such a proposal would face,¹⁸⁹ a more realistic option is to limit the exemption to the land application area, as it was pre-*Alt*, and craft additional requirements to ensure the exemption furthers an agricultural purpose while limiting pollution.

When re-crafting the rule, the EPA should strike a balance between agricultural necessity and environmental interests, while promoting technological innovation to further these interests. Senator Dole's statement, while discussing a hypothetical twenty-four-hour storm event, signals a Congressional intent to use technology to reduce pollution while recognizing the practicalities and difficulties of an industry at the whim of the weather:

[T]he agricultural sector . . . has made substantial progress in adapting technology to the reduction of pollution. Commercial cattle feeding operations . . . have made outstanding progress in reducing the environmental impact resulting from the operation of their facilities; however, it is felt that while progress has been made there are some limits on what can be achieved within the bounds of reason and practicality. This point is of considerable importance . . . because, while normal precipitation conditions can be anticipated and guarded against, it is extremely difficult if not impossible, to construct an absolutely fail-safe system for the prevention of feedlot runoff.¹⁹⁰

The EPA justified the inclusion of CAFOs within the agricultural stormwater exemption, despite their designation as a statutory point

¹⁸⁷ See *supra* notes 68–71 and accompanying text (arguing that the agricultural stormwater exemption was never supposed to apply to CAFOs); Steeves, *supra* note 14, at 385 (“[T]here is considerable doubt, looking to both the structure of the CWA and the courts’ interpretations of it, that the stormwater exemption is even applicable to CAFOs.”).

¹⁸⁸ See Laura Beans, *EPA Sued for Abandoning Critical Factory Farm Rule Under Clean Water Act*, ECOWATCH, <http://www.ecowatch.com/epa-sued-for-abandoning-critical-factory-farm-rule-under-clean-water-a-1881792266.html> (last visited June 30, 2017) (discussing lawsuit challenging EPA's withdrawal of rule to regulate CAFOs); *Coalition Sues EPA for Failing to Address Factory Farm Air Pollution*, HUMANE SOC'Y OF THE U.S. (Jan. 28, 2015), http://www.humanesociety.org/news/press_releases/2015/01/epa-lawsuit-ff-air-pollution-012815.html (detailing lawsuit challenging EPA's failure to regulate air pollution from CAFOs).

¹⁸⁹ As mentioned above, in 2001 the EPA discussed several potential interpretations that entirely excluded CAFOs from the agricultural stormwater exemption. See 2001 Proposed CAFO Rule, *supra* note 67, at 3031–32 (discussing four approaches). These proposals were criticized heavily by industry. See, e.g., ContiBeef LLC, Comment Letter on Proposed CAFO Rule Comments 4–523 (unpublished comments) (on file with author) (“Land application areas are considered non-point sources and should remain eligible for the agricultural stormwater exemption.”).

¹⁹⁰ 117 CONG. REC. 38816 (1971).

source, because Congress wanted to distinguish between industrial and agricultural activities.¹⁹¹ The agency deemed the land application of manure an agricultural activity because manure is a valuable agricultural input when applied at agronomic rates.¹⁹² This principle of agricultural necessity should ground any new regulations the agency crafts with regard to the exemption.

1. *The Importance of Limiting the Agricultural Stormwater Exemption to Situations Where It Furthers an Agricultural and Environmental Purpose*

Limiting the agricultural stormwater exemption to ensure that it actually furthers agricultural pursuits is crucial because CAFO operators are incentivized to abuse the exemption in environmentally destructive ways. CAFOs over-apply manure to their fields for disposal,¹⁹³ rather than agricultural purposes, because their manure production vastly exceeds their fertilization needs¹⁹⁴ and manure is expensive to transport.¹⁹⁵ The concentration of CAFOs in certain regions compounds this problem.¹⁹⁶ To dispose of manure as quickly and cheaply as possible, CAFOs over-apply manure to their fields.¹⁹⁷

¹⁹¹ See 2003 CAFO Rule, *supra* note 33, at 7198 (“[D]ischarges from the production area at the CAFO . . . are not eligible for the agricultural stormwater exemption at all, because they involve the type of industrial activity that originally led Congress to single out CAFOs as point sources.”).

¹⁹² See *id.* at 7197 (“When manure or process wastewater is applied in accordance with practices designed to ensure appropriate agricultural utilization of nutrients, it is a beneficial agricultural production input.”); see also *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 509 (2d Cir. 2005) (“[E]ven the CAFO Rule’s application of the agricultural stormwater exemption is expressly tethered to agricultural endeavors.”).

¹⁹³ Jerger, *supra* note 65, at 95 (“CAFO owners and operators often over-apply animal waste to their waste application fields. . . .”).

¹⁹⁴ See Alison Peck, *The Aftermath of Alt v. EPA: Unresolved Tensions in Poultry Farm Pollution Control*, 118 W. VA. L. REV. 981, 984 (2016) (“‘Nearly 40 percent of contract broiler growers have no cropland,’ however, ‘and many others do not have enough to absorb all of the nutrients from’ the farm’s poultry manure production.”) (quoting MACDONALD, *supra* note 8, at 23).

¹⁹⁵ See Scott A. Bradford et al., *Reuse of Concentrated Animal Feeding Operation Wastewater on Agricultural Lands*, S-97 (2008), https://www.ars.usda.gov/sp2UserFiles/Place/20360500/pdf_pubs/P2194.pdf (“Transportation, storage, and treatment of manure and manure-contaminated water are costly Manure and wastewater are, therefore, usually land-applied within about 16 km of CAFO facilities.”).

¹⁹⁶ For example, 500 CAFOs are concentrated in Duplin County, North Carolina. Joel K. Bourne, Jr., *Harnessing the Power of Poo: Pig Waste Becomes Electricity*, NAT’L GEOGRAPHIC (July 13, 2016), <http://www.nationalgeographic.com/people-and-culture/food/the-plate/2016/07/pig-waste-energy-north-carolina>. It is estimated that these CAFOs produce two times as much waste daily as does New York City. *Id.*

¹⁹⁷ See MARCEL AILLERY ET AL., USDA ECON. RESEARCH SERV., ERR-9, MANAGING MANURE TO IMPROVE AIR AND WATER QUALITY 13 (2005), <https://wayback.archive-it.org/5923/20111129025925/http://www.ers.usda.gov/publications/err9/err9.pdf> (“Because

The over-application of manure to fields solely for disposal does not serve any valid agricultural purpose and wreaks havoc on the environment.¹⁹⁸

To ensure the exemption furthers an agricultural purpose, the EPA should limit its availability to situations where the manure is applied to crops that will be harvested and utilized for agronomic purposes.¹⁹⁹ This will force CAFO operators to internalize the costs of their manure production and ensure that it serves a valid agricultural purpose, rather than over-applying it without concern for the externalized repercussions.²⁰⁰ Cost internalization will incentivize CAFO owners to pursue new technology and reduce reliance on environmentally unsound disposal methods. Hoop houses and composting are two examples of more sustainable methods.²⁰¹ Additionally, spurring technological innovation effectuates Congressional intent.²⁰²

Second, as discussed throughout this paper, if the agricultural stormwater exemption applies to CAFOs, it should only apply to discharges from the land application area because that is the only place where it has the potential to serve an agricultural purpose. Applying manure to the land application area can improve the physical condition of the soil, reduce soil erosion and runoff, and increase the organic content of the soil.²⁰³ To remedy the textual ambiguity Lois

of the high cost of transporting manure relative to the value of the nutrients in the manure, farmers have an incentive to overapply manure to land located near their livestock facilities.”).

¹⁹⁸ See *An HSUS Report: The Impact of Industrialized Agriculture on the Environment*, THE HUMANE SOC’Y OF THE U.S. 2–3, <http://www.humanesociety.org/assets/pdfs/farm/hsus-the-impact-of-industrialized-animal-agriculture-on-the-environment.pdf> (last visited June 30, 2017) (“When applied to crops at a rate that the soil is able to absorb, animal waste serves as a useful fertilizer When . . . overapplied to land, thus exceeding the capacity of soil and crops to assimilate its nutrients, it can contaminate water supplies and emit harmful gases into the atmosphere.”).

¹⁹⁹ Potential purposes include using the crops for industrial uses like textiles and ethanol, or for animal consumption. *Crop*, NAT’L GEOGRAPHIC, <http://www.nationalgeographic.org/encyclopedia/crop/> (last visited June 30, 2017) (discussing various uses for crops).

²⁰⁰ See John Ikerd, *Who Pays the Cost of Water Pollution and Depletion?* (May 18, 2013), <http://web.missouri.edu/ikerdj/papers/Wisconsin%20-%20Water%20Pollution%20Depletion.htm> (discussing CAFO owners’ economic incentives to over-apply manure with little worry of liability).

²⁰¹ See Jerger, *supra* note 65, at 127 (discussing how the EPA’s 2003 Rule failed to incentivize CAFO operators to pursue sustainable agricultural methods like hoop houses or composting).

²⁰² See *supra* note 190 and accompanying text (discussing Senator Dole’s comments).

²⁰³ *Environmental Benefits of Manure Application*, EXTENSION (Dec. 20, 2016), <http://articles.extension.org/pages/14879/environmental-benefits-of-manure-application>. It is worth noting that the high concentrations of additional ingredients in CAFO manure—metal, antibiotics, etc.—do not further these beneficial purposes. See, e.g., *Industrial vs. Family Farms Comparison*, BEYOND FACTORY FARMING, <http://www.beyondfactory>

Alt capitalized on, the EPA should explicitly state that the agricultural stormwater exemption applies to the land application area (under the circumstances discussed below), but not to the production area or *any* other discharges associated with a CAFO.

2. *The EPA Should Establish Baseline Requirements to Prevent Water Pollution*

The EPA should also establish baseline requirements that CAFOs must comply with to avail themselves of the exemption. As mentioned above, permitted CAFOs must implement a Nutrient Management Plan as a part of their NPDES permit.²⁰⁴ The Nutrient Management Plans include technical standards and site-specific nutrient management practices that the CAFO must comply with to be eligible for the agricultural stormwater exemption.²⁰⁵ However, most CAFOs are unpermitted²⁰⁶ because they are not required to obtain a permit unless the EPA demonstrates that they are discharging.²⁰⁷ Therefore, many operate without a permit—either because they do not discharge, or because they are willing to take their chances given the limited enforcement.²⁰⁸ Unpermitted CAFOs are not required to have a Nutrient Management Plan; instead the precipitation-related discharges from their land application area are eligible for the agricultural stormwater exemption if the manure, litter, or process wastewater has been applied “in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients,” including certain “nutrient management practices.”²⁰⁹

This system fails to ensure that the agricultural stormwater exemption is furthering an agricultural purpose while limiting water

farmington.org/get-informed/industrial-vs-family-farms-comparison (last visited June 30, 2017) (explaining that “high concentrations of heavy metals can reduce the types of crops that will grow in soil”).

²⁰⁴ See *supra* note 86 and accompanying text.

²⁰⁵ 40 C.F.R. § 122.42(e)(1) (2016). See also 2008 CAFO Rule, *supra* note 90, at 70,434 (describing permits).

²⁰⁶ See *The EPA’s Failure to Track Factory Farms*, FOOD & WATER WATCH 1 (2013), https://www.foodandwaterwatch.org/sites/default/files/EPA%20Factory%20Farms%20IB%20Aug%202013_0.pdf (“As of 2011, the EPA estimated that only 41 percent of NPDES-defined CAFOs actually had NPDES permits.”).

²⁰⁷ See McLaren, *supra* note 94, at 112 (“On the other hand, CAFOs without NPDES permits but with inherent structural deficiencies or poor locations relative to waterways will enjoy unchecked discharge until a regulatory body finds occasion for testing and proving that effluent discharge is indeed taking place.”).

²⁰⁸ *Id.* at 109 (discussing the choice between operating without a permit and paying for the permit).

²⁰⁹ 2008 CAFO Rule, *supra* note 90, at 70,435 (codified at 40 C.F.R. § 122.23(e)(1) (2016)).

pollution for both permitted and unpermitted CAFOs. First, while the specific technical standards in the Nutrient Management Plan have the ability to effectively regulate permitted CAFOs, which reduces the potential for inappropriate use of the agricultural stormwater exemption, the EPA has largely delegated the standards' establishment to states and they vary by state.²¹⁰ For example, some states fail to enforce their permitting requirements, while others set their requirements below the federal level.²¹¹ Second, without the Nutrition Management Plan's technical standards, the "best practices" for unpermitted CAFOs fail to provide substantive standards for the permitting agency to review when determining whether the CAFO's discharge is eligible for the agricultural stormwater exemption. For example, one amorphous best practice is to "[i]dentify appropriate site specific conservation practices to be implemented."²¹²

Establishing three baseline requirements will help remedy both problems and ensure that the agricultural stormwater exemption furthers an agricultural purpose by providing tangible prerequisites for agricultural stormwater exemption eligibility. First, the EPA should expressly exclude discharges that result from manure application during the winter and early spring months. No fertilization occurs during these months and there is an increased potential for runoff because of snow's high water content and the dearth of crop growth to absorb the nutrients.²¹³ At least one state has explicitly banned the practice.²¹⁴ The EPA should explain that the agricultural stormwater exemption does not include discharges that occur during the winter and early spring months when there is snow cover because it does not

²¹⁰ See Celender, *supra* note 57, at 948, 956 (discussing the EPA's delegation to states and the states' race to the bottom); Terence J. Centner, *Enforcing Environmental Regulations: Concentrated Animal Feeding Operations*, 69 MO. L. REV. 697, 700, 710–11 (2004) (discussing the problems associated with EPA's delegation to states). While the Nutrient Management Plan is a separate issue from the agricultural stormwater exemption, if the Plan does not have adequate standards it is harder to determine whether the exemption is being abused.

²¹¹ *Id.* at 710–11.

²¹² 40 C.F.R. § 122.42(e)(1)(vi) (2016).

²¹³ See Karly Zande, *Raising a Stink: Why Michigan CAFO Regulations Fail to Protect the State's Air and Great Lakes and Are in Need of Revision*, 16 BUFF. ENVTL. L.J. 1, 51 (2009) ("Manure that is spread on snow-covered or frozen ground is not effective as a fertilizer because it cannot be absorbed, and it easily washes away into the waterways when the snow melts or the ground unfreezes."); J. Laporte, *Winter Application of Manure and Other Agricultural Source Materials*, MINISTRY OF AGRIC., FOOD & RURAL AFFAIRS (Sept. 2009), <http://www.omafra.gov.on.ca/english/engineer/facts/10-073.htm> ("The risk of runoff to surface water increases when applying on frozen or snow-covered ground.").

²¹⁴ See Ryan Patch, *Agency of Ag Issues Winter Reminder to Farmers*, VT. AGENCY OF AGRIC., FOOD & MKTS., <http://agriculture.vermont.gov/node/1177> (last visited June 30, 2016) (discussing Vermont's winter manure spreading ban).

serve a valid agricultural purpose, it just allows CAFO operators to dispose of their manure.

Next, the EPA should strengthen the distinction between precipitation-based and dry-weather discharges by prohibiting the land application of manure when precipitation is forecasted within a certain time frame. Under the 2003 Rule, only precipitation-caused discharges were eligible for the exemption. The new rule should maintain this distinction and provide that any discharge resulting from over-application, as opposed to precipitation, should not be considered an agricultural stormwater discharge, even if precipitation occurred at the time of the discharge.²¹⁵ Adding a provision prohibiting the land application of manure when precipitation is forecasted will provide clarity for CAFO operators and prevent pollution that can be easily avoided by planning ahead.

Finally, the EPA should institute setback requirements. Setbacks mandate that the land application area be “setback” a certain distance from water bodies or potential conduits²¹⁶ and reduce water pollution by increasing the distance a pollutant must travel from the land application area to reach a water body.²¹⁷ This is already a requirement for permitted CAFOs,²¹⁸ but it should also be required for unpermitted CAFOs before they can enjoy the exemption. These requirements will help the EPA combat water pollution while promoting innovative and sound agricultural practices.

3. *The EPA Should Institute Monitoring Requirements to Improve Accountability*

The EPA should impose additional monitoring requirements to improve accountability. Currently one “best practice” includes “[i]dentify[ing] protocols for appropriate testing of manure, litter, process wastewater, and soil.”²¹⁹ Instituting a pre-application manure testing requirement and an edge of field monitoring requirement will strengthen this best practice.

²¹⁵ The Second Circuit upheld this interpretation of the Clean Water Act in *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 509 (2d Cir. 2005) (“[A] CAFO . . . should not be held accountable for any discharge that is primarily the result of ‘precipitation.’”).

²¹⁶ See DEL. DEP’T OF AGRIC., DELAWARE TECHNICAL STANDARD: FIELD APPLICATION SETBACKS 1 (July 2010), http://dda.delaware.gov/nutrients/downloads/Draft_Tech_Standards/Field_Application_Setbacks.pdf (“Setbacks are defined as a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied.”).

²¹⁷ See 2003 CAFO Rule, *supra* note 33, at 7211 (explaining how a setback works).

²¹⁸ 40 C.F.R. § 412.4(c)(5) (2016) (“[M]anure, litter, and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters.”).

²¹⁹ 40 C.F.R. § 122.42(e)(1)(vii) (2016).

As discussed earlier, unlike manure from traditional farms, CAFO waste often contains worrisome ingredients like metals, pathogens, antibiotics, and hormones.²²⁰ These substances do not fertilize crops or serve any other beneficial agricultural purpose. The EPA should establish safe limits for these substances and require CAFO operators to test their manure before it is applied to the land application area. If the manure exceeds a safe level, the operator should be required to dilute it to an appropriate level before application.

Requiring CAFO operators to demonstrate water quality compliance through edge of field water monitoring will provide inspectors with the information necessary to determine whether CAFOs are eligible for the exemption. Edge of field monitoring is a technique that monitors “the amount . . . and relative quality of the water leaving agricultural fields during runoff events.”²²¹ Inspectors can determine whether the manure was applied in an agronomic manner by analyzing the nutrient and sediment levels in the water.²²² CAFO operators tend to resist government oversight,²²³ but in this instance monitoring is advantageous for them as well—once they know which nutrients leave the field via runoff, they can tailor their conservation practices to “avoid, control or trap nutrients.”²²⁴ Establishing these monitoring requirements furthers the purpose of the exemption by ensuring that manure is applied at an appropriate rate.

CONCLUSION

CAFOs are a major contributor to the environmental degradation of our water bodies. The precedent set by the *Alt* court broadens the agricultural stormwater exemption to allow further water pollution. As a result, the EPA must step up to the plate and close the loophole in the agricultural stormwater exemption. Limiting the agricultural stormwater exemption to the land application area and insti-

²²⁰ See *supra* notes 16–28 and accompanying text (discussing environmental, economic, and public health impacts of harmful contaminants present in CAFO manure).

²²¹ *Edge of Field Monitoring*, USDA NAT. RES. CONSERVATION SERV. N.Y., <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ny/programs/financial/eqip/?cid=nrcseprd958475> (last visited Jan. 2, 2017).

²²² See *id.* (“Researchers analyze the water samples and runoff data to determine the nutrient and sediment content of the runoff.”).

²²³ See, e.g., Bruce Hotchkiss, *Bill Would Require MDE to Monitor Large Poultry Operations*, AMERICANFARM.COM (Mar. 14, 2017), <http://www.americanfarm.com/publications/the-delmarva-farmer/3518-bill-would-require-mde-to-monitor-large-poultry-operations> (discussing the Maryland Farm Bureau’s objections to Maryland bill that would require a government agency to oversee emissions from poultry CAFOs).

²²⁴ Monica Day & Shelby Burlew, *Better Nutrient Management with Edge-of-Field Monitoring*, MICH. STATE UNIV. EXTENSION (July 19, 2015), http://msue.anr.msu.edu/news/better_nutrient_management_with_edge_of_field_monitoring.

tuting requirements that ensure it furthers an agricultural purpose while limiting water pollution will help the EPA to effectuate Congressional intent to restore the integrity of the Nation's waters.