CAFOs: Plaguing North Carolina Communities of Color

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1. Introduction

Grocery shopping has become a foraging expedition through a market of lies. The coolers are stocked with milk cartons boasting pastoral scenes of cows grazing on verdant hills. Egg cartons are stamped “all-natural.” Sausage is neatly packaged in a tube and emblazoned with a red barn. But the origins of most meat and dairy products are far divorced from these depictions of traditional farming. In stark contrast, animal products are overwhelmingly produced in Concentrated Animal Feeding Operations (CAFOs),¹ otherwise known as “factory farms.”²

The Environmental Protection Agency (EPA) defines CAFOs as particular types of Animal Feeding Operations (AFOs).³ AFOs are facilities where animals are confined together in a small area, along with “feed, manure and urine, dead animals, and production operations.”⁴ In AFOs, food is brought to the animals rather than the animals grazing in pastures.⁵ AFOs are designated as CAFOs under two circumstances: (1) where the AFO is a “significant contributor of pollutants to waters of the United States,”⁶ or (2) where the AFO “stables or confines” a minimum number of animals.⁷

Today, about ten billion animals are raised and slaughtered in the United States every year.⁸ More than 99% of those animals are raised and slaughtered in CAFOs.⁹ American meat consumption has nearly doubled over the last century,¹⁰ and the USDA projects this consumption will further swell over the next decade.¹¹ With this level of consumption, it comes as no surprise that animal products are cheap. Meat and dairy prices have been steadily dropping in the United States for over a century, in part due to the advent of CAFOs in the 1950s.¹² But while the price Americans pay for animal products at the grocery store may seem low in dollars, the true price is staggeringly high.

CAFOs are deleterious to human and nonhuman animals alike. In addition to causing unquantifiable animal suffering,¹³ CAFOs put independent family farmers out of business,¹⁴ and they create deplorable working conditions for employees.¹⁵ CAFOs also create massive externalities in the form of environmental destruction while they ravage their vulnerable host communities and trample civil rights.¹⁶ Section II examines some of these communities, located on the North Carolina Coastal Plain, which are home to many African American, Latino, Native American, and economically disadvantaged people.¹⁷ This Section also describes the significant environmental damage that CAFOs deal to these vulnerable communities, which in turn causes plummeting property values and endangers health.¹⁸ Section III explores relevant law and how it fails to protect these vulnerable communities, creating the enforcement gap.¹⁹ Section IV explains how the idea of farming is America’s sacred cow, spurred by rosy visions of wholesome white farmers and their families living out the rugged individualism that our country has worshipped for centuries. Big Agribusiness (“Big Ag”)²⁰ eagerly and effectively exploits this idea, raking in immense profit (including subsidies from misinformed tax payers) and power.²¹ With this power, Big Ag purchases politicians. Those politicians twist the law into an instrument of oppression by carving out the enforcement gap. The enforcement gap invites CAFOs to exploit vulnerable communities. Section V reckons that North Carolina presents a potential blueprint for the way forward.²² Though federal environmental and civil rights laws face further weakening (and perhaps even extinction) under the Trump administration and a Republican-controlled Congress, these vulnerable communities in North Carolina can fight CAFOs at the state level.

II. North Carolina: A Case Study in How CAFOs Plague Vulnerable Communities of Color

The “Black Belt,” a “crescent-shaped band throughout the South where slaves worked on plantations,” runs squarely through eastern North Carolina.²³ This part of the country has historically been defined as those places with a “black population majority at the time of the Civil War.”²⁴ After the Civil War and emancipation, many African Americans remained in the Black Belt and worked as sharecroppers and tenant farmers.²⁵ But African American farmers in the Black Belt were systematically deprived of farmland, largely due to discrimination in land sales and lending:

By the turn of the century, many of the black farm operators in the South managed to acquire farmland. Thereafter, however, black farm ownership and control of land, and other resources such as capital, have been severely limited due to systematic discrimination in land sales and farm credit, reported in both historical and contemporary sources. This was particularly the case in the lack of access to credit . . . from the [Farmers Home Administration (FmHA)] which was established in the 1930s to service the credit needs of farmers who failed to meet the lending criteria of other lending institutions.²⁶

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Today, the communities in the Black Belt suffer from economic oppression in the form of high unemployment and poverty, low levels of education, low quality healthcare, and substandard housing. CAFOs descended on these vulnerable communities like a plague, beginning in the mid-1980s. Because communities of color and low-income communities often lack the political power of affluent white communities, CAFOs disproportionately occupy them. Indeed, the proportion of African American, Hispanic, and Native American people living within three miles of a North Carolina pig CAFO are 1.54, 1.39, and 2.18 times higher, respectively. Communities of color and low-income communities also lack the resources to leave compromised areas, where they are trapped by decreasing property values and a plummeting quality of life.

There are 9.5 million pigs in North Carolina—the other victims of the state’s $3 billion pork industry. The pigs are spread across approximately 2,100 different operations and produce a total of ten billion gallons of waste each year, which is “enough to fill more than 15,000 Olympic-size swimming pools.” The pigs are confined to large indoor facilities with slatted floors, and their waste is pumped outdoors to what the pork industry calls a “lagoon.” Lagoons are vast open-air cesspools filled with untreated manure, urine, and afterbirth. Some lagoons are as large as seven-and-a-half acres and hold 20 to 45 million gallons of waste. There are more than 4,000 lagoons in North Carolina. These lagoons “have broken, failed, or overflowed, leading to major fish kills and other pollution incidents.” When the lagoons become full, CAFO operators manage volume by spraying the waste through sprinkler systems onto “sprayfields” in large quantities. “Operators have sprayed waste in windy and wet weather, on frozen ground, or on land already saturated with manure,” causing runoff and leaks into aquifers.

This waste management system fails to protect surrounding communities from the environmental impacts of the industry. Instead, CAFOs heap further injustice on surrounding North Carolina communities by polluting their water and air, harming their health, and depressing their property values.

**A. Polluted Water**

CAFOs pollute surface water and groundwater in several different ways, including lagoon breaches, catastrophic flooding, and runoff. Potential contaminants include nitrates and pathogens as well as ammonium, phosphate, dissolved solids, metals and metalloids, pharmaceutical chemicals, and natural and synthetic hormones. “Pathogens are parasites, bacterium, or viruses that are capable of causing disease or infection in animals or humans . . . . There are over 150 pathogens in manure that could impact human health.” Metals and metalloids include copper, zinc, arsenic, nickel, and selenium. Pharmaceutical chemicals include antibiotics, and hormones include estrogen. The consequences of lagoon breaches are severe, endangering the water supply and aquatic life. In 1995, an eight-acre lagoon breached and spilled “25 million gallons of animal waste into the New River. The spill killed 10 million fish and closed 364,000 acres of coastal wetlands to shellfishing.” Lagoon compromises are more likely during hurricane season. Hurricane Floyd pummeled the North Carolina coast in 1999 and compromised fifty-two lagoons, releasing uncontrolled waste into the floodwaters. “Sampling conducted after Hurricane Floyd in 1999 found dangerous levels of E. Coli and Clostridium perfringens in water, even after floodwaters had receded.” In 2016, it happened again. Hurricane Matthew dumped eighteen inches of rain on the North Carolina Coastal Plain, causing flooding so extensive that it was visible from space. “[T]he flood partially submerged [ten] industrial pig farms with [thirty-nine] barns . . . . and [fourteen] open-air pits holding millions of gallons of liquid hog manure.” Once more, uncontrolled waste flowed freely from lagoons into the floodwaters. Sprayfields saturated with lagoon waste are also submerged following such major flooding events.

Even during normal weather conditions, sprayfield runoff threatens North Carolina lakes, rivers, streams, other surface waters, and groundwater. Nonetheless, in this area of North Carolina, “[m]ost hog operations . . . are located in areas with high dependence on well-water for drinking.” Those that do rely on wells for drinking water are at higher risk for water contamination because the Black Belt is located on the North Carolina Coastal Plain, which has high water tables and wells that are unlined and shallow. For these reasons, some residents have stopped using their wells.

Contaminants can enter ground water from a variety of CAFO sources, including leaking lagoons, breaches in piping or barn infrastructure, and land application of liquid and solid wastes. There are guidelines for design and construction of barns, infrastructure piping, and lagoons that in theory would preclude leakage to ground water, but in practice these events do occur. In fact, even when properly constructed, slow leakage from lagoons over time can release large amounts of contaminants such as ammonium.

Contaminated groundwater leads to contaminated drinking water in rural areas like the Black Belt. Indeed, rural populations have elevated rates of reliance upon wells for drinking water. Nonetheless, in this area of North Carolina, “[m]ost hog operations . . . are located in areas with high dependence on well-water for drinking.” Those that do rely on wells for drinking water are at higher risk for water contamination because the Black Belt is located on the North Carolina Coastal Plain, which has high water tables and wells that are unlined and shallow. For these reasons, some residents have stopped using their wells.

The health impacts of polluted water are serious, particularly for those community members who have weakened immune systems. Symptoms of illnesses caused by contaminated water include “nausea, vomiting, fever, diarrhea, muscle pain, death,” and kidney failure. People at high risk of illness or death constitute approximately 20% of the United States population, and they include the elderly, infants, young children, and those who are pregnant, HIV positive, on chemotherapy, or are otherwise immunosuppressed.
In addition to pathogen-driven illnesses, there is also the threat of new viruses. Indeed, there is speculation that H1N1 may have spawned in pig CAFOs in Mexico. But despite this risk, CAFOs are not required to test for new viruses because they are not on the list of mandatory reportable illnesses to the World Organization for Animal Health.

Finally, there are often antibiotics in CAFOs’ animal feed. Seventy percent of all antibiotics used in the United States are administered to animals as additives in their feed. The goal of administering these antibiotics is to promote animal growth, and therefore profitability. The Center for Disease Control has recommended that the use of antibiotics in “food animals” be “phased out.” These antibiotics are dangerous because “[t]he antibiotics often are not fully metabolized by animals, and can be present in their manure. If manure pollutes a water supply, antibiotics can also leech into groundwater or surface water.” The risk to the community is high because this exposure causes antibiotics to be less effective for humans while also leading to the development of antibiotic-resistant microbes.

B. Polluted Air

CAFOs produce emissions that fuel climate change and diminish ambient air quality. Indeed, between the animals themselves and the degrading waste in lagoons and on sprayfields, CAFOs cause asthma, acid rain, and climate change by releasing the following into the air: 400 volatile organic compounds (VOC), particulate matter, methane, ammonia, hydrogen sulfide, ozone, endotoxins, and noxious odors. CAFOs produce nearly 75% of the United States’ ammonia air pollution.

These emissions are so concentrated that it can be dangerous even to approach a lagoon—particularly in hot summer months. “The oxygen-deficient, toxic, and/or explosive atmosphere which can develop in a manure pit has claimed many lives.” There are multiple tales of farm workers who entered lagoons to make repairs and succumbed to the emissions. Some died from hydrogen sulfide poisoning, while others asphyxiated in the oxygen-starved air. Others died after collapsing during rescue attempts.

But it is not necessary to be near a lagoon to suffer from the emissions—members of communities plagued by CAFOs also carry health risks. One study showed that people in CAFO-occupied communities “suffered disproportionate levels of tension, anger, confusion, fatigue, depression, and lack of overall vigor as well as more upper respiratory and gastrointestinal ailments than neighbors of other types of farms and non-livestock areas.” Ammonia is a “strong respiratory irritant” that causes chemical burns to the respiratory tract, skin, and eyes. It also causes severe coughing and chronic lung disease. Hydrogen sulfide is acutely dangerous, causing “inflammation of the moist membranes” in the eyes and respiratory tract as well as olfactory neuron loss, pulmonary edema, and even death. Particulate matter causes “chronic bronchitis, chronic respiratory symptoms, declines in lung function, [and] organic dust toxic syndrome.”

Some of the most vulnerable individuals in these communities are children. “Children are known to be more vulnerable to the adverse health effects of air pollution due to their higher minute ventilation, immature immune system, involvement in vigorous activities, the longer periods of time they spend outdoors, and the continuing development of their lungs during the postnatal period.” Twenty-six percent of schools surveyed in North Carolina reported that CAFO odors are noticeable outside the school, and 8% reported that the odors were noticeable inside the school. Economically disadvantaged children are more likely to suffer health impacts from CAFOs, including asthma, because those children are more likely to live and attend schools in closer proximity to CAFOs.

C. Plummetering Property Values

There is evidence that CAFOs adversely affect property values. “The most certain fact regarding CAFOs and property values are that the closer a property is to a CAFO, the more likely it will be that the value of the property will drop.” This decline is due in part to the health risks that CAFOs bring to communities, but it is also due to the tremendous nuisances that CAFOs create: odors from pig CAFOs, “reminiscent of rotten eggs and ammonia,” are insufferable. “My family, neighbors, and I have been held prisoner in our own homes by the unbearable stench from the multiple industrial hog operations within a quarter mile of my community.” Many community members no longer hang laundry outside on clotheslines to dry for fear that their clothing will be ruined by the fine mist of manure that sprinkles their homes and cars. Swarms of flies and mosquitoes—attracted to the prolific waste in communities plagued by CAFOs accompany the odor, bringing even further risk of disease.

The degree to which CAFOs harm property values varies depending on several factors. One study found that properties within three miles of a CAFO decreased in value by 6.6% on account of the CAFO, while properties within one-tenth of a mile of a CAFO decreased in value by as much as 88%. Another study suggests that properties downwind from and closest to CAFOs suffer the largest decreases in value. The size and type of CAFO can also affect the degree to which nearby properties decrease in value. A decrease in property value hurts the property owner most directly, but this harm infects the entire local economy when property tax rates plummet along with property values.

III. Law as an Instrument of Oppression: Propping Up CAFOs

While CAFOs devastate the environment and public health, they are severely under-regulated at the federal level. And at the state level, so-called “right-to-farm” and “ag-gag” laws in North Carolina shield CAFO operators from nuisance suits and whistleblowers, while North Carolina purports to regulate CAFOs with laws that largely fail to protect communities. Thus, the law has parted like the Red Sea to make way for CAFOs and all the misery that they rain down on vulnerable communities.
A. Devil in the Details: The Enforcement Gap in Federal Environmental Law

American environmentalism was born in the 1960s. Following the passage of the Clean Air Act (CAA) in 1963 and the Clean Water Act (CWA) in 1972, landmark environmental protection laws began sprouting up through the decades. Still, because “farms are virtually unregulated by the expansive body of environmental law that has developed in the United States . . .” environmental injustice abounds in vulnerable communities.

1. The Clean Water Act

The Clean Water Act (CWA) declares in § 101(a) that it aims to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” and achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife” by establishing a framework for federal regulation of surface waters quality standards and pollution discharges into the navigable waters of the United States. To accomplish this goal, the CWA “authorizes the regulation and enforcement of requirements that govern waste discharges into U.S. waters.” Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES), which administers the effluent (waste) limitations established in § 301 and prohibits the discharge of pollution from point sources into navigable waters of the United States without a permit from the Environmental Protection Agency (EPA) or the state.

Some CAFOs are large enough to qualify as regulated point sources under the CAFO Rule. Those CAFOs must fulfill permit and annual report requirements. Regulated CAFOs are also responsible for creating a plan for handling waste. But the CWA still fails to prevent CAFOs from polluting water. First, fewer than 10% of all CAFOs are large enough to qualify as a regulated point source under the CAFO Rule. Second, the stormwater exception swallows the CAFO Rule. “Agricultural return flows and stormwater discharge are considered non-point sources and therefore do not require NPDES permits to discharge pollutants through these avenues. This exception to the Clean Water Act extends so far as to include rainwater that contacts stored manure and subsequently flows into navigable waters.” Thus, the CWA fails to regulate runoff or to provide incentives to CAFO owners and operators to try to avoid catastrophes during hurricanes and floods. Third, punishing case law has greatly weakened the CAFO Rule, contributing to the low number of CAFOs that are actually required to obtain a NPDES permit. Fourth, noncompliance is rampant and enforcement is dismal—in part due to a lack of data on existing CAFOs. Fifth, the CWA does not directly regulate groundwater.

2. The Clean Air Act

The Clean Air Act (CAA) “regulates ‘criteria-pollutants’ that deteriorate ambient air quality, hazardous air pollutants, and emissions from certain specific sources of air pollution.” The EPA is authorized to “set mobile source limits, ambient air quality standards, hazardous air pollutant emission standards, [and] standards for new pollution sources . . ..” The EPA is also authorized “to identify areas that do not attain federal ambient air quality standards set under the act . . . and phase out substances that deplete the Earth’s stratospheric ozone layer.” The goal of the CAA is to prevent ambient air emissions from harming the environment and public health.

Under the CAA, the EPA must set minimum national standards for air quality, or National Ambient Air Quality Standards (NAAQS), but the states are primarily responsible for ensuring compliance with NAAQS. Areas that are struggling to meet NAAQS, called “nonattainment areas,” must implement special measures to control air pollution. The CAA also creates a comprehensive permit system that applies to major sources of air pollution, which are those sources emitting more than 100 tons of regulated pollutants each year.

The CAA applies to CAFOs in theory. But in reality, the CAA still fails to prevent CAFOs from polluting the air. First, “air emissions from farms typically do not exceed thresholds specified in the Clean Air Act . . . and thus generally escape most CAA regulatory programs.” Second, regulators at both the federal and state levels have been lax in enforcing the CAA (and other environmental laws) against CAFOs. Instead, regulators “traditionally focused most effort on controlling the largest and most visible sources of pollution to the water, air, and land—factories, waste treatment plants, motor vehicles—rather than smaller and more dispersed sources such as farms.” Third, the CAA Mandatory Greenhouse Gas (GHG) Reporting Rule addresses manure management systems, but Congress barred the EPA from using funds to implement mandatory GHG reporting for manure management facilities. Fourth, there is a dearth of data. The CAA “requires accurate measurement of emissions to determine whether [CAFOs] emit regulated pollutants in quantities that exceed specified thresholds.”

Citing a need for such data, the EPA entered into an Air Compliance Agreement with CAFO owners and operators. “Early in 2002, representatives of agriculture industry groups—especially pork and egg producers—approached EPA officials with a proposal to negotiate a voluntary agreement that would produce air quality monitoring data on emissions from animal feedlot operations.” In exchange for industry cooperation, the EPA agreed to provide immunity for past and ongoing violations of the CAA to all participating CAFOs. “EPA granted cov-

enants not to sue and released participants from EPA liability for failing to comply with certain provisions of the CAA.” Critics of the agreement include environmental groups and state and local air quality officials, who were not included in the negotiation process.

More than 13,900 operations across forty-two states signed up to participate in the agreement, including 1,856 pig operations. After the EPA released the data gathered under the agreement in 2011, an Environmental Integrity Project analysis showed that “measured levels of several pollutants—particles, ammonia, and hydrogen sulfide—exceeded CAA health-based
standards, worker protection standards, and federal emission reporting limits at some of the study sites.” The EPA’s methodologies have come under fire, however, since the study failed to include turkey operations, beef cattle operations, or sprayfields, and collected data from a very small number of operations. Years later, after granting thousands of CAFOs immunity, the EPA still has not taken steps to use the data collected to better regulate CAFOs under the CAA. This holding pattern, and the enforcement gap more broadly across federal law, is likely the result of the politically powerful farm lobby exerting its influence.

B. INDUSTRY ABOVE PEOPLE: NORTH CAROLINA LAW

North Carolina law serves CAFO owners and operators in three main ways. First, the state has eviscerated nuisance as a cause of action under its so-called “Right-to-Farm” law. Second, the state has passed an “ag-gag” law intended to prevent the public from discovering the misconduct and illegal actions of CAFO owner and operators. Third, the state has lax environmental regulations of CAFOs.

1. INSULT TO INJURY: THE NORTH CAROLINA “RIGHT-TO-FARM” LAW

Property owners have been suing pig farmers for centuries. In William Aldred’s Case, the Court of the King’s Bench recognized an action on the case lies for erecting a hogstye so near the house of the plaintiff that the air thereof was corrupted. Common law nuisance theories remain an essential tool for U.S. property owners who seek to protect their right to enjoy their property, even after the development of complex environmental laws. But in North Carolina, nuisance suits against CAFOs are now an option extinguished and community members are left without legal remedy.

North Carolina first enacted its so-called “right-to-farm” (RTF) law in 1979. That early version of the law created an affirmative “coming to the nuisance” defense for preexisting CAFO owners and operators when they faced suits from community members who purchased property in the CAFO-occupied community. The rationale behind these laws was that the CAFO was there first.

In 2013, North Carolina’s RTF law became a “right-to-commit-nuisance” law (RTCN). Now, a CAFO “may raise an affirmative defense to liability in a nuisance action regardless of whether it had undergone a change in ownership, size, or type of product produced. As a result, agricultural operations may be able to benefit from these protections regardless of whether the facility actually preceded its neighboring landowners.” The RTCN amendments followed close on the heels of lawsuits filed by hundreds of community members against Murphy-Brown, LLC—a subsidiary of Smithfield Foods, Inc.—for the operation of pig CAFOs in eastern North Carolina, and they will further disempower community members to fight the destruction of their homes and neighborhoods.

The North Carolina legislature recently pushed through yet another RTCN bill, overriding Democratic Governor Cooper’s veto. Republican State Representative Jimmy Dixon, whose campaign finance records reveal that he has accepted $115,000 from the pork industry, sponsored House Bill 467. He characterized the bill as “protecting ‘red-blooded, hard-working’ American farmers.” Republican State Senator Brent Jackson sponsored the Senate companion bill, and his campaign finance records reveal that he has accepted more than $130,000 from the pork industry. Previous North Carolina law provided that the jury would determine the amount of compensatory damages in nuisance cases. But now, the law “will essentially cap the damages property owners can collect in nuisance lawsuits at the fair market value of their property, which critics point out is often made lower by the presence of those commercial farms.” Thus, this bill severely limits any damages that a community member might win against a CAFO owner or operator, which in turn makes challenging CAFOs via nuisance law a less appealing option.

2. GAGGING WHISTLEBLOWERS: THE NORTH CAROLINA “AG-GAG LAW”

Ag-gag laws are designed to shield CAFOs from whistleblowers and reporters who seek to collect evidence of wrongdoing. “Ag-Gag bills were designed to place restraints on free speech by making it a crime to take photos or video on a factory farm without the written permission of the owner.” These laws are harmful to the public because they thwart undercover investigations that reveal dangerous and abhorrent activity such as animal abuse, environmental crimes, and food safety risks that could sicken millions. Without the investigations that ag-gag laws seek to prevent, the public may not discover such information until the damage is already done.

Nonetheless, ag-gag legislation is sweeping the nation. On January 1, 2016, North Carolina’s ag-gag law went into effect. This law is even broader than most ag-gag laws:

The law provides for a civil cause of action against whistleblowers who seek to inform the public about matters of public concern in their workplace. This law will deter whistleblowers in facilities like nursing homes, hospitals, day cares, schools, and animal agriculture from reporting concerning or illegal conduct.

Organizations, journalists, and employees who conduct undercover investigations of CAFOs and release evidence of wrongdoing to the public or to the press will be liable and could face civil suit and damages. This law shrords CAFOs in secrecy, making it more difficult for community members to discover any wrongdoing that CAFO owners and operators are committing in their backyards.

3. NORTH CAROLINA REGULATIONS: INDUSTRY OVER PEOPLE

Despite . . . documented environmental and human health harms from CAFO pollution, the industry and its allies have been able to emasculate government protection of its citizens at every level. Local governments have been stripped of control in many communities,
The sprayfield waste system is working because CAFO operators are under the General Permit. This moratorium became permanent in 1997, after which North Carolina legislated a moratorium on new and expanded CAFOs as a result of the disaster. This moratorium became permanent in 2007 with regard to CAFOs using or proposing to use the lagoon and sprayfield waste management system. The existence of CAFOs, however, are still allowed to utilize this system under the General Permit. DEQ insists that the lagoon and sprayfield waste system is working because CAFO operators are limited in the amount of waste they can apply to sprayfields at once. “All waste must be applied at no greater than agronomic rates—an amount that can be used productively by the crops planted.” But in January 2015, researchers found that high levels of fecal bacteria in local waterways are linked to CAFOs, and state officials have only dismissed community members’ concerns. DEQ visits CAFOs only once each year, and the agency has never revoked a permit or shut down a farm.

IV. THE ROOT OF ALL EVIL: MONEY AS THE SOURCE OF THE ENFORCEMENT GAP AND LAW AS AN INSTRUMENT OF OPPRESSION

A. Special Interests

Section III presented the ways in which the law is failing to protect CAFO-occupied communities and even aids in their oppression. Big Ag has engineered this failure by maintaining a stranglehold on the American political process in two ways. First, Big Ag exploits the image of the wholesome farming family, almost always portrayed as white, that many Americans admire. By portraying industrial farms as the small family farms of yore, the Big Ag lobby successfully controls public and political opinion. Second, Big Ag spends tremendous amounts of money influencing members of Congress.

The American Farm Bureau Federation (AFBF), rated by Fortune magazine as one of the top twenty-five most powerful special interest groups in the United States, is a prime example of how Big Ag lobbying groups control the political process. The [AFBF] promotes the interests of farm corporations in Washington D.C., and in state capitals. For decades, they have spent millions fighting environmental regulations of all kinds. And because Big Ag has convinced the country that industrial farms are small family farms, it is all too easy to characterize environmental regulations as the big boot of the Federal Government standing on the little guy’s throat. Ron Prestage, President of the National Pork Producers Council, recently said of the proposed Clean Water Rule: “This regulation isn’t about clean water. This massive land grab is about federal control of private property, growing the size of government and allowing activists to extort and micromanage all kinds of farming and business activities.”

And then there is money. “[Q]uestions about whether environmental laws should apply to CAFOs continue to give rise to controversy in Congress and the states, and the $297 billion and growing agricultural industry maintains an extensive bench of lobbyists to take advantage of that controversy.” Between 2005 and 2010, Big Ag spent $126.9 million lobbying Congress and federal regulatory agencies. AFBF alone spent $33.6 million and employed fifty lobbyists who spent their time fighting the Clean Water Act and other rules affecting CAFO pollution. In 2016, Big Ag spent $127,592,310 lobbying. Big Ag directed the majority of that money to Republican politicians, including $2,702,601 to then-Republican presidential candidate Donald J. Trump. Finally, Big
Ag receives an average of $38.4 billion in farm subsidies (also known as “corporate welfare”) per year.199

B. NORTH CAROLINA: “CAPTURED BY THE INDUSTRY”200

North Carolina makes no secret of its allegiance to Big Ag. In 2015, then-Governor Pat McCrory attended a rally held by the pork industry. “McCrory told those at the industry rally,” which was held to oppose lawsuits over the industry’s environmental practices, that the “state government would fight for them.”201 A Pulitzer Prize-winning investigative series on the North Carolina pork industry revealed that the industry and the government have been close since the beginning:

In a seven-month investigation, The N&O found that state agencies aid the expansion of pork production but are slow to act on a growing range of problems resulting from that increase. The industry has won laws and policies promoting its rapid growth in North Carolina. It also has profited from a network of formal and informal alliances with powerful people in government.202

One explanation for this closeness is that when the North Carolina tobacco industry went into decline in the 1980s, the burgeoning pork industry filled the void.203 But whatever reason, one thing is clear: North Carolina is prioritizing industry over community—especially communities of color.

V. NORTH CAROLINA: FIGHTING BACK AND GRASSROOTS GROWTH

Poor people, and people of color especially, continue to suffer from the horrible conditions brought on by the industrial hog industry . . . . People just can’t ignore this.204

Members of CAFO-occupied communities have pleaded with North Carolina government officials for years. “[C]ommunities have repeatedly asked [DEQ] for stronger protections. Citizens have tried to reach a resolution with government officials that is agreeable to neighbors, regulators, and the industry. Some have brought civil complaints for nuisance and trespass against individual facilities.”205 Advocacy organizations, including North Carolina Riverkeepers, Waterkeepers Alliance, North Carolina Environmental Justice Network (NCEJN), and Rural Empowerment Association for Community Help (REACH), have all joined in the fight to take back these communities from CAFO occupation.206 But alas, “over the decades, complaints have largely fallen on deaf ears.”207

A. COMMUNITY ORGANIZING AND INFORMATION GATHERING

Community members rallied together and armed themselves with information. Devon Hall, who was one such community member, co-founded REACH in 2002 and began collaborating with Professor Steve Wing, a public health professor at the University of North Carolina.208 Hall and Wing (the researchers) worked alongside community members to gather valuable data for their fight against CAFOs.209

In the Duplin Health Awareness Project,210 the first of ten such studies, the researchers set up equipment in neighborhoods within a mile of CAFOs to monitor the air quality for toxins and PM.211 Then, the researchers instructed community members to sit outdoors and note odor intensity and their own daily stress levels.212 At the same time, the community members tracked their own blood pressure and lung function with medical equipment.213 They recorded all of the data they collected about their surroundings, health, and well-being.214 The researchers and the community members were able to develop data proving what the community members already knew from experience: there are “correlations between hog waste and asthma and other respiratory problems, such as bronchitis, along with compromised immune systems and increased stress and anxiety.”215

REACH took further action to monitor air and water and to organize the community. First, the organization worked with Waterkeeper Alliance, who deployed Riverkeepers to take water samples from area waterways.216 Additionally, the collaborators created maps of the CAFOs and lagoons and patrolled the community to record violations of the General Permit, such as when CAFO operators spray manure on the sprayfields before or during a storm.217 Finally, REACH went door-to-door in communities to distribute fact sheets and unite neighbors. “‘We told them, this is how many pigs live around you, and this is who’s making the money. We got good at mobilizing the community.’”218 Ultimately, the community utilized the information and data they collected to try to prevent DEQ from renewing the General Permit in 2014.219 While they did not succeed in preventing the renewal, their efforts did come to fruition in 2007 when the North Carolina legislature made the moratorium on new lagoon and sprayfield CAFOs permanent.220

But community mobilization and investigative efforts are not without risk. CAFO operators harassed water samplers.221 Community members reported that CAFO operators subjected community members who spoke out to several intimidation tactics, “including sustained tailgating, yelling, threats of gun and other physical violence, and driving back in forth in front of their houses.”222 When community members called DEQ to report illegal spraying during or before a storm, they were rewarded with calls from disgruntled CAFO operators after DEQ informed them of the complaint.223 Such complaints are confidential—but nonetheless, DEQ regulators sometimes choose to expose those who make them.224 In the most egregious incident of harassment, a CAFO operator entered “the home of an elderly African American woman and shook the chair she sat in while threatening her and her family with physical violence if they continued to complain about the odors and spray.”225

B. CIVIL RIGHTS COMPLAINT

In March 2014, DEQ ignored community pleas and renewed the General Permit that allowed CAFOs to continue using lagoons and sprayfields as waste management.226 This was the last straw for North Carolina activists. “‘We’ve been asking the state and our representatives for years to do something different about how this industry operates in the state,’ says NCEJN’s
Muhammad. "It was an insult to the community and to the people of the state of North Carolina to renew those permits."227

In September 2014, Earthjustice and the University of North Carolina Center for Civil Rights, representing Waterkeeper Alliance, NCEJN, and REACH (Citizens), filed a complaint ("Complaint")228 in the EPA External Civil Rights Compliance Office (ECRCO) (formerly the Office of Civil Rights) under Title VI of the Civil Rights Act of 1964 (Title VI)229 and its implementing regulations.230 Under Title VI, state regulatory programs that receive federal funding may not operate in such a way that disproportionately impacts communities of color in a negative way.231 In their Complaint, the groups allege that "the State’s lax regulation of hog-waste disposal discriminates against minority communities in eastern North Carolina, and that its [Department of Environmental Quality’s] recent permit allowing thousands of hog facilities to function without adequate waste-disposal controls violates federal law."232

In February 2015, ECRCO began investigating DEQ on the basis of the Complaint.233 In March, the Citizens and DEQ agreed to enter into alternative dispute resolution, funded by the EPA.234 As the January 2016 mediation date approached, the National Pork Council and the North Carolina Pork Council moved to intervene—a troubling development for the Citizens, since the negotiations were confidential.235 The Citizens objected to industry involvement in the mediation:

On behalf of our clients, who were adamant that the Pork Council should not be at the table—this was not about them, it was about DEQ’s responsibility to protect the environment and health and safety of the people of North Carolina—we said no, there’s no place for you here.236

Nonetheless, the National Pork Council and the North Carolina Pork Council appeared at the session, and DEQ made it clear that the agency supported their presence during negotiations.237 Earthjustice attorney Marianne Lado declined to "speculate on whether DEQ told the pork councils about the mediation, but added that the agency ‘tried to normalize the problem and suggest that it was acceptable for pork councils to be there. [DEQ] didn’t act surprised that they were there.’"238 The Citizens were concerned about exposing the identities of the community representatives present at the meeting, due to the pork industry’s long history of intimidating residents.239 The Citizens withdrew from mediation in March 2016 and the negotiations broke down.240

In May 2016, ECRCO reinstated its DEQ investigation.241 The Citizens filed an additional complaint (“Second Complaint”)242 against DEQ in July, alleging that the agency “engaged in and failed to protect [the Citizens] from intimidation, which is prohibited by Title VI and EPA regulations, 40 C.F.R. § 7.100."243 The Second Complaint discussed the long history of the pork industry using intimidation tactics against residents of eastern North Carolina.244 In August, ECRCO agreed to investigate DEQ based on the Second Complaint.245 DEQ requested that the original Complaint be dismissed, but ECRCO declined to do so.246 In October, twenty community representatives drove to Washington, D.C., to share their story with EPA and members of Congress.247 A month later, officials from ECRCO toured the area and listened to residents with Senator Cory Booker, a member of the Senate Environment and Public Works Committee.248

Finally, in January of 2017, ECRCO took an “unprecedented step”249 and sent an official Letter of Concern to DEQ.250 In the letter, ECRCO expressed “deep concern about the possibility that African Americans, Latinos, and Native Americans have been subjected to discrimination as the result of NC DEQ’s operation of the Swine Waste General Permit program, including the 2014 renewal of the Swine Waste General Permit.”251 ECRCO also expressed “grave concerns about these reports indicating a potential hostile and intimidating environment for anyone seeking to provide relevant information to NC DEQ or EPA.”252 ECRCO made several recommendations to DEQ:

- Assess the Swine Waste General Permit to determine how it should be changed to substantially reduce impacts on nearby residents. The EPA also asked for a timeline.
- Assess current regulations on industrialized hog farms and determined what could be changed. If the DEQ claims it doesn’t have the authority to change a rule, it needs to show evidence of the impediment.
- Evaluate risk management options, such as covering the lagoons, not using dead boxes [a holding pen for hog carcasses] and not spraying on the weekends.
- Assess current swine waste technologies and what could be adopted.
- Conduct an internal evaluation of DEQ’s enforcement and compliance of industrialized hog farms. If corrective measures are needed, deliver a timetable to do so.
- Evaluate its non-discrimination program if its [sic] in place, using a federal checklist. If the program hasn’t been established, DEQ is to correct the deficiencies.253

While the Letter of Concern is not the firm decision that community members had hoped to receive, they are pleased that people are taking notice of the community’s plight.254 And there is reason to remain hopeful: “the agency’s pointed, harsh letter and its ongoing investigation—plus a new administration at DEQ—could tip the scales toward environmental justice.”255

C. OVERCOMING IN A TIME OF AGGRESSIVE REGRESSION

In November 2016, Donald J. Trump was declared the victor of the 2016 United States Presidential Election.256 At the same time, both houses of Congress remained under Republican domination.257 As a result, both the Executive and Legislative branches of the Federal Government now seek to greatly reduce or eliminate the EPA, and the President’s budget proposal included an External Civil Rights Compliance Office reduction of $268,000 and eleven full-time employees.258 The EPA has issued a plan to lay off 25% of its employees and eliminate fifty-six programs.259 Thus, it may be necessary for communities seeking to protect themselves from CAFOs to focus on state law in the foreseeable future.
North Carolina is an ideal state for such action. The community has succeeded in generating tremendous publicity, which will make it more difficult for state legislators and DEQ to continue to ignore their pleas. Roy Cooper, a Democrat and former Attorney General of North Carolina, unseated Pat McCrory in the state’s 2016 gubernatorial race. This change may give community members the toe-hold they need to take back their state from Big Ag, even if EPA fails them going forward.

There are several ways community members might move forward in this fight at the state-level. First, they may campaign to repeal the so-called “right-to-farm” law and the ag-gag law. Second, they may continue to exert pressure on DEQ to update the General Permit and ban lagoon and sprayfield waste management systems. In the (weaker) alternative, they may campaign for lagoons to be covered and for sprayfields to be rigorously inspected to avoid runoff. Third, they may leverage the EPA Letter of Concern to DEQ and petition DEQ to adopt EPA’s recommendations. Fourth, and perhaps most importantly, the communities may campaign to replace the Republican members of the North Carolina legislature with representatives who would aid them in their fight against CAFOs.

The fourth objective is likely to be difficult at present, however, as there is evidence that the Republican legislature suppresses the votes of North Carolinians of color and gerrymanders districts along racial lines. Fortunately, lawsuits have challenged both of these barriers to the full participation and representation of marginalized North Carolina communities. With the help of the federal courts, the communities may be able to change the makeup of their legislature and ensure that their representatives actually represent them and not Big Ag.

VI. CONCLUSION

CAFOs are major polluters that exploit and endanger the vulnerable communities they occupy. Therefore, they must be treated as such at both the federal and state levels. CAFOs should be strictly regulated as major polluters and should be subject to strict siting regulations that protect vulnerable communities like those of the North Carolina Coastal Plain.

To break down the political barriers that prevent these essential regulations from coming to fruition, it is necessary to attack the corrupting influence of corporate money in politics. So long as the farm lobby can buy politicians to guard and promote the interests of Big Ag, including the corporate welfare the industry siphons from taxpayers in the form of subsidies, it will be impossible to make meaningful progress in this arena.

Likewise, it is necessary to challenge and change the narrative that CAFOs are family farms with happy pigs dotting their pastureland. This lie, which depends upon the American tradition of exalting the white, rugged farmer of yesteryear, has proven wildly successful and forms the foundation of the CAFO house of cards. The first step in challenging and changing this narrative is to unmask CAFOs and Big Ag. Their true faces are those of massive industry, not small business. Once unmasked, it will become politically feasible to regulate this industry appropriately. Such regulation has the potential to ensure that the industry’s access to our economic infrastructure and society is a privilege that will not be to the detriment of the most vulnerable among us, including non-human animals.

In this time of great political turmoil, the North Carolina communities have modeled a path forward: grassroots organization and mobilization. By forging connections among neighbors, researchers, advocacy organizations, and public interest law firms, the communities created a formidable coalition of justice-minded people. While it may be that EPA is of little help going forward, these communities can continue to fight CAFOs at the state level. With Mr. Cooper in the Governor’s Mansion, they just may be able to get enough traction to make change in their state.

More broadly, Americans must recognize and resist the vast destruction that CAFOs cause. CAFOs fuel climate change, wantonly torture sentient non-human animals, and harm human health. Big Ag manipulates our political system and exploits taxpayers for tremendous profit. And, as the case of North Carolina demonstrates, CAFOs are cogs in the machine that has systematically oppressed communities of color for centuries. While comprehensive CAFO regulation (or, ideally, elimination) will increase the cost of animal products at the checkout counter, the status quo is a cost that communities of color cannot continue to bear.

ENDNOTES

2. Michener, supra note 1, at 146–47.
3. 40 C.F.R. § 122.23(b) (2012).
5. Id.
6. § 122.23(c).
7. See id. § 122.23(b)(4) (defining “Large CAFO”); see also id. § 122.23(b) (6) (defining “Medium CAFO”).
8. Michener, supra note 1, at 147.
9. Id.; see generally Pork Facts, NAT.’S. PORK PRODUCERS COUNCIL, http://pppc.org/pork-facts/ (last visited Dec. 20, 2017) (noting that the pork industry boasts that it butchers an average of 115 million individual pigs each year, twenty-six percent of which are exported to other countries).

continued on page 43
opinion/no-more-exposes-in-north-carolina.html (describing how pigs have been stabbed, beaten with sledgehammers, and boilled alive at slaughterhouses). 14 See Simon, supra note 10, at xxi ("[M]om-and-pop farms are mostly gone—either acquired by large corporate operations or plowed under for new housing subdivisions. For instance, between 1954 and 2007, even as demand for dairy increased by 40 percent, the number of US dairy farms plummeted from 2.9 million to 65,000."); see also Aaron M. McKown, Note, Hog Farms and Nuisance Law in Parker v. Barefoot: Has North Carolina Become a Hog Heaven and Waste Lagoon?, 77 N.C. L. Rev. 2355, 2355 (1999) (stating that in North Carolina, “corporate-run hog facilities have forced many independent hog farmers out of business”). 15 See Factory Farm Workers, FOOD EMPOWERMENT PROJECT, http://www. foodspender.org/factory-farm-workers/ (last visited Dec. 20, 2017) (explaining that CAFO workers are subjected to many health and safety hazards, including but not limited to exposure to inhalable particulate matter and harmful gases such as ammonia and hydrogen sulfide); id. (explaining that many workers are undocumented individuals, who CAFO owners seek out “because they are less likely to complain about low wages and hazardous working conditions.”); see also Blood, Sweat, and Fear: Workers’ Rights in U.S. Meat and Poultry Plants, HUMAN RIGHTS WATCH 52–53 (2004), https://www.hrw.org/report/2005/01/24/
blood-sweat-and-fear/workers-rights-us-meat-and-poultry-plants (discussing the dire conditions of slaughterhouse work).

16 See infra Part V(B).

17 See infra Section II.

18 See infra Section II.

19 See infra Section III.

20 See Michael L. Cook & Fabio R. Chaddad, Agroindustrialization of the Global Agrifood Economy: Bridging Development Economics and Agribusiness Research, 23 AGRIC. ECON. 207, 209 (2000) (defining “agribusiness” as “the sum total of all operations involved in the production and distribution of food and fiber”); Hidden Costs of Industrial Agriculture, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/industrial-agriculture-hidden-costs-of-industrial.html#WhsTB4Zzros (last visited Dec. 20, 2017) (“Industrial agriculture is currently the dominant food production system in the United States. It’s characterized by large-scale monoculture, heavy use of chemical fertilizers and pesticides, and meat production in CAFOs (confined animal feeding operations). The industrial approach to farming is also defined by its heavy emphasis on a few crops that overwhelmingly end up as animal feed, biofuels, and processed junk food ingredients.”).

21 Mark Koba, Meet the “4%”: Small Number of Farms Dominate US, CNBC (May 6, 2014, 2:25 PM), https://www.cnbc.com/2014/05/06/state-of-american-farming-big-producers-dominate-food-production.html (noting that “[large farms with over $1 million in sales account for only 4 percent of all farms, but 66 percent of sales”).

22 See infra Section V.


24 Libby v. Morris et al., Current Conditions and Trends In the Southern Black Belt, in FOCUS ON BLACK BELT COUNTIES: LIFE CONDITIONS AND OPPORTUNITIES 5, 5 (Ntam Baharanyi et al., eds., 1993), http://srdec.msstate.edu/publications/archive/176.pdf; see Booker T. Washington, UP FROM SLAVERY: AN AUTOBIOGRAPHY 108 (1901) (“So far as I can learn, the term ["Black Belt"] was first used to designate a part of the country which was distinguished by the color of the soil. The part of the country possessing this thick, dark, and naturally rich soil was, of course, the part of the South where the slaves were most profitable, and consequently they were taken there in the largest numbers. Later, and especially since the war, the term seems to be used wholly in a political sense — that is, to designate the counties where the black people outnumber the white.”).

25 Nicole, supra note 23, at A183.

26 See Ejigu Demissie, Past-Present Conditions and Future Issues In the Black Belt of the South, in FOCUS ON BLACK BELT COUNTIES: LIFE CONDITIONS AND OPPORTUNITIES 25, 26 (Ntam Baharanyi et al., eds., 1993), http://srdec.msstate.edu/publications/archive/176.pdf (“During the period of 1964 to 1967, black farmers, who constituted about a third of all farms in the South, received only a fourth of all loans and only a seventh of the total funds from the FarmH.

Furthermore, between 1966 and 1976, the percentage of FarmH farm ownership loans made to black farmers declined from 5.7 percent to 1.5 percent, suggesting discrimination on the part of FarmH. This agency is part of the local political machinery and has been the subject of many investigations by the U.S. Commission on Civil Rights.”); see also Ta-Nehisi Coates, The Case for Reparations, THE ATLANTIC (June 2014), https://www.theatlantic.com/magazine/archive/2014/06/the-case-for-reparations/361631/ (discussing Associated Press’s series revealing the theft of African American land since antebellum period); see generally Thomas W. Mitchell, Destabilizing the Normalization of Rural Black Land Loss: A Critical Role for Legal Empiricism, 2005 WIS. L. REV. 557, 561 (2005) (examining legal methods by which African American landowners were dispossessed of their land in the twentieth century).

27 Nicole, supra note 23, at A183.

28 See id. (“North Carolina went from fifth to second in hog production between the mid-1980s and mid-1990s.”).

29 See id. (“[P]eople of color and the poor living in rural communities lacking the political capacity to resist are said to shoulder the adverse socio-economic, environmental, or health related effects of swine waste externality without sharing in the economic benefits brought by industrialized pork production.”).


31 Id. at 6.


35 Harmen, supra note 33, at 16.


39 Marks, supra note 37, at 1.

40 Id. at 4.


42 See infra notes 43–57 and accompanying text (discussing the impact of polluted water).


45 Carrie Hibbar, Understanding Concentrated Animal Feeding Operations and Their Impact on Communities 8–9 (Mark Shultz ed., 2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf (highlighting possible diseases including, but not limited to: anthrax, leptospirosis, lysteriosis, salmoneilliosis, tetanus, histoplasmosis, ringworm, giardiasis, and cryptosporidiosis).

46 Hutchins et al., supra note 44, at 9.

47 Id. at 9–13. “It is estimated that estrogen loads from land application by livestock manure would account for greater than [ninety percent] of the total estrogen in the environment . . . .” Id. at 12.

48 Marks, supra note 37, at 36; see also Skolnick, supra note 41.

49 Marks, supra note 37, at 23.

50 Exposing Fields of Filth, WATERKEEPER ALLIANCE (Nov. 4, 2016), http://waterkeeper.org/exposingfieldsoffilth/.

51 Id.

52 Id.

53 Id.

54 See Marks, supra note 37, at 29 (stating that “[l]iquid waste can be over-applied or inaccurately applied to farm fields through irrigation pivots with resulting runoff into lakes, rivers, and streams or seepage into groundwater”).

55 Hibbar, supra note 45, at 4.

56 Id.

57 Marks, supra note 37, at 1.

58 Hutchins et al., supra note 44, at 3.

59 See id. at 2.

60 See Hibbar, supra note 45, at 3 (noting that groundwater is the primary source of drinking water in the United States, accounting for drinking water in more than fifty-three percent of households).

61 Wing et al., supra note 43, at 225.

62 See id.
But see [omitted]).

Id. at 4 (explaining that elevated nitrates in drinking water are particularly harmful to these at risk populations).

Id. at 10.

Id.

Id.


Hribar, supra note 45, at 10. But see Gilchrist et al., supra note 69, at 313 (noting that estimates suggest up to eighty-seven percent of all antibiotic use in the United States is for livestock animals).

Gilchrist et al., supra note 69.

CDC, supra note 69, at 11.

Hribar, supra note 45, at 10.

Id. (citing Marc Kaufman, Worries Rise Over Effect of Antibiotics in Animal Feed: Humans Seen Vulnerable to Drug-Resistant Germs, WASH. POST, A01 (Mar. 17, 2000), http://www.washingtonpost.com/wp-srv/WPcap/2000-03/17/071r-031700-idx.html (explaining that eating the flesh of animals who have been fed antibiotics further increases one’s risk of developing antibiotic resistance)).

Id. at 7 (explaining that, in addition to carbon dioxide, the methane and nitrous oxide emitted from cow manure are significant greenhouse gasses); CAFO SUBCOMM. of the MICH. DEP’T of ENVTL. QUALITY TOXICS STEERING GRP., CONCENTRATED ANIMAL FEEDLOT OPERATIONS (CAFOs) CHEMICALS ASSOCIATED WITH AIR EMISSIONS 8 (May 10, 2006) [hereinafter CAFO SUBCOMM.] (supra).

Hribar, supra note 45, at 3.

See Marks, supra note 37, at 1, 17; see also Sarah C. Wilson, Comment, Hogwash! Why Industrial Animal Agriculture is Not Beyond the Scope of Clean Air Act Regulation, 24 PACE ENVTL. L. REV. 439, 441 (2007) (highlighting the health impacts of such emissions).


See Marks, supra note 37, at 26.


Marks, supra note 37, at 19 (citing Manure Pits, supra note 80).

See id. at 26.


CAFO SUBCOMM., supra note 75, at 4.

Hribar, supra note 45, at 6.

Id.; CAFO SUBCOMM., supra note 75, at 6.

Id.

Irena Buka et al., The Effects of Air Pollution on the Health of Children, 11 PAEDIATR CHILD HEALTH 513, 513 (2006); see Hribar, supra note 45, at 5 (“While all community members are at risk from lowered air quality, children take in [twenty to fifty percent] more air than adults, making them more susceptible to lung disease and health effects.”) (citing Michael T. Kleinman, The Health Effects of Air Pollution on Children 1 (2000) (unpublished manuscript), http://www.epa.gov/nosocom/docs/default-source/students/health-effects.pdf; Julia R. Barrett, Hogging the Air: CAFO Emissions Reach into Schools, 114 ENVTL. HEALTH PERSP. A241, A241 (2006)).

Hribar, supra note 45, at 5–6.

Id. (citing Maria C. Mirabelli et al., Race, Poverty, and Potential Exposure of Middle-School Students to Air Emissions from Confined Swine Feeding Operations, 114 ENVTL. HEALTH PERSP. 591-96 (2006) (internal citations omitted)).

Id. at 11.

NCEJN, supra note 23, at A183.

Hribar, supra note 45, at 8.

Id. at 11.

See infra note 12 and accompanying text.


J.B. Ruhl, Farms, Their Environmental Harms, and Environmental Law, 27 ECOLOGY L. Q. 265, 267 (2000) (“Congress has actively prevented [the intersection of environmental law and farming] through a nearly unbroken series of decisions to exclude farms and farming from the burdens of federal environmental law, with states mainly following suit. Congress has erected . . . a vast ‘anti-law’ of farms and the environment.”). 35 U.S.C. § 1251(a); see also id. § 1362(7) (defining “navigable waters” as “the waters of the United States, including the territorial seas”).


§ 1342.

§ 1311.

See § 1362(6) (defining “pollutant” as “drugged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water”).

§ 1362(14) (defining a “point source” as “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,” and exempting “agricultural stormwater discharges and return flows from irrigated agriculture” from the definition of “point source”); 40 C.F.R. § 122 (2012) (stating that nonpoint sources are governed by state water quality programs); see generally CLAUDIA COPELAND, CONG. RESEARCH SERV., RL 32947, AIR QUALITY ISSUES & ANIMAL AGRIC.: A Primer 8 (2014).

See BEARDEN ET AL., supra note 106, at 29–30 (“While the CWA addresses federal enforcement, the majority of actions taken to enforce the law are undertaken by states, both because states issue the majority of permits to dischargers and because the federal government lacks the resources for day-to-day monitoring and enforcement. Like most other federal environmental laws, CWA enforcement is shared by EPA and states, with states having primary responsibility. However, EPA has oversight of state enforcement and retains the right to bring a direct action where it believes that a state has failed to take timely and appropriate action or where a state or local agency requests EPA involvement”); see generally U.S. DEP’T OF AGRIC. & NAT. RES. CONSERV. SERV., PART 651 AGRIC. WASTE MGMT. FIELD HANDBOOK 1–4 (2009) (“Most States have been granted full NPDES permitting authority by the EPA with oversight of State operations provided by the EPA. Where States do not have permitting authority, a variety of arrangements for permitting have been made. They range from the EPA doing all permitting to the EPA issuing permits for certain categories of pollutants (or operations) and the State issuing the permits for other categories.”).

40 C.F.R. § 122 (2012); see National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176 (codified at 40 C.F.R. Pts. 9, 122, 123, 412) (“Today’s final rule revises and clarifies the Environmental Protection Agency’s (EPA) regulatory requirements for concentrated animal feeding operations (CAFOs) under the Clean Water Act. This final rule will ensure that CAFOs take appropriate actions to manage manure effectively in order to protect the nation’s water quality. Despite substantial
improvements in the nation’s water quality since the inception of the Clean Water Act, nearly 40 percent of the Nation’s assessed waters show impairments from a wide range of sources. Improper management of manure from CAFOs is among the many contributors to remaining water quality problems. Improperly managed manure has caused serious acute and chronic water quality problems throughout the United States. Today’s action strengthens the existing regulatory program for CAFOs.”.

113 Id.; Copeland, supra note 110, at 8.
114 Copeland, supra note 110, at 8.

115 See id. (stating about 15,500 CAFOs are covered nationwide); see also NPDES CAFO PERMITTING STATUS REPORT—NATIONAL SUMMARY ENDYEAR 2016, EPA (Dec. 31, 2016), https://www.epa.gov/sites/production/files/2017-04/documents/tracksum_endyear2016_v2.pdf (stating that in North Carolina, only fourteen CAFOs out of the state’s 1,222 have NPDES permits).

116 See Adán S. Carlesco, Hiding the Ball: The Sidestepping of National Pollution Discharge Elimination System Permitting Requirements by Concentrated Animal Feeding Operations, 5 J. ANIMAL & ENVTL. L. 43, 48 (2014) (citing 33 U.S.C. §§ 1362(14); 1342(l)(1)); see also Copeland, supra note 110, at 9 (“The rule performs a calculation standard which prohibits discharges from regulated CAFOs except in the event of wastewater or manure overflows or runoff from an exceptional 25-year, 24-hour rainfall event.”) (emphasis added)); Wilson, supra note 77, at 450 (“Agricultural stormwater discharges” from farmlands are not considered discharges for purposes of the CWA. Considering that it is during storms when much of the runoff from farms occurs (including manure that is sprayed on fields), the stormwater exemption effectively forms a shield from CWA regulation for agriculture.”).

117 See Christine L. Rideout, Where are All the Citizen Suits?: The Failure of Safe Drinking Water Enforcement in the United States, 21 HEALTH MATRIX 655, 671 (2011) (discussing 42 U.S.C. §§ 300f–300j-26 (2016) and showing that the Safe Drinking Water Act also fails to regulate runoff).

118 Waterkeeper Alliance v. EPA, 399 F.3d 486, 524 (2d Cir. 2005) (directing the EPA to remove the requirement that all CAFOs obtain NPDES permit; Nat’l Pork Producers Council v. EPA, 635 F.3d 738, 745 (5th Cir. 2011) (directing the EPA to remove the requirement that CAFOs “propose to discharge” apply for NPDES permits).

119 Many states, especially those with powerful CAFO industries, fail to properly administer the NPDES program and enforce the CWA. Without the states doing their part to regulate CAFOs, EPA cannot possibly achieve the goal of the CWA. Carlesco, supra note 116, at 22 (“EPA found that the Iowa Department of Natural Resources was not properly conducting inspections to determine whether unpermitted CAFOs needed permits, assessing adequate penalties against CAFOs, or issuing NPDES permits when appropriate.”).

120 See id. at 60-61 (noting the EPA proposed a new version of the CAFO Rule in 2011 requiring “CAFOs to report facility-specific information in order to help the EPA properly implement the NPDES program and ensure CAFO compliance with CWA requirements.”); see also id. (discussing 76 Fed. Reg. 65,431, Oct. 21, 2011) (stating that proposal, grounded in the authority granted to EPA under section 308 of the CWA, was two-fold when it went up for public review and comment. First, the proposal would require CAFOs to provide basic identifying information to EPA, such as the name and contact information for the owner. Second, the proposal would allow EPA to use section 308 authority to get information from CAFOs that are located in areas struggling with water quality issues likely caused by CAFOs; id. (“The EPA would use existing data to point to ‘focus watersheds’ with abnormally high nitrogen and phosphorous content likely originating from animal agriculture sources”); id. at n.110 (citing 76 Fed. Reg. 65,431, Oct. 21, 2011) (“[A]llow the EPA to identify and permit CAFOs that discharge, conduct education and outreach on best management practices, estimate pollutant loads by facility and geographical area, and assist in allocation of resources for compliance enforcement.”); id. (citing Proposed NPDES CAFO Reporting Rule Q&A, ENVTL. PROT. AGENCY, Oct. 2011) (noting ultimately, EPA withdrew the rule on July 13, 2012).


122 See J. Nicholas Hoover, Can You Smell That Smell? Clean Air Act Fixes for Factor Farm Air Pollution, 6 STAN. J. ANIMAL L. & POL’Y 1, 10 (2013) (citing 42 U.S.C. § 7409 (2012) (criteria pollutants, which are sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, lead, and PM); see also § 7412 (hazardous air pollutants); § 7411 (stationary sources)).

123 BEARDEN ET AL., supra note 106, at Summary. 
124 Id.
125 Id. at 3.

126 See id. (requiring State Implementation Plans (“SIP”) “to translate[] national ambient standards into emission limitations and other control measures that govern individual sources of air pollution; the SIP is enforceable as both state and federal law. The CAA details the basic content of SIPs: enforceable emission limitations, other control measures, monitoring requirements, and schedules for compliance”); see also Copeland, supra note 110, at 11 (“[P] ermit requirements differ for sources in attainment and non-attainment areas. In attainment areas, major emitting facilities must install the ‘best available control technology’ (BACT) for each regulated pollutant, as determined on a case-by-case basis. Facilities in non-attainment are subject to stricter measures. There, they must comply with the ‘lowest achievable emission rate’ (LAER), which requires, in addition to stringent emissions requirements, that the regulator weigh benefits of new sources against their environmental costs.”); see also Hoover, supra note 122, at 11 (citing 42 U.S.C. §§ 7475, 7503, 7475(a)(4), 7479(3)).

127 BEARDEN ET AL., supra note 106, at 3.
128 Id.; Copeland, supra note 110, at 11.

129 The CAA does not provide a blanket exception for agricultural activities. Hoover, supra note 122, at 11 (citing 47 Fed. Reg. 65, 556–57) (explaining that the EPA has stated that CAFOs “plainly fit the definition of stationary source”) (internal quotations omitted).

130 Copeland, supra note 110, at 2 (demonstrating that there is a lack of reliable data on CAFO emissions, so it is possible that more CAFOs exceed threshold ranges than are currently known. “Resolving questions about CAFOs contribution to total air pollution and corresponding ecological and possible public health effects is hindered by a lack of adequate, accurate, scientifically credible data on air emissions.”).

131 Id.


133 See MEGAN SULLIVAN, CONG. RESEARCH SERV., RL 41622, ENVTL. REGULATION & AGRIC. 4–5 (2014) (highlighting Congress’ use of the appropriations process to effectively block the rule).

134 See Copeland, supra note 110, at 3 (describing the need for increased data).

135 Id.


137 See Copeland, supra note 110, at 3 (detailing the development process of EPA’s rule).

138 Id.

139 Id. at 3–4 (noting that, under the agreement, CAFOs were also largely exempt from the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Emergency Planning and Community Right to Know Act (EPCRA); see Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675, 11050 (2012) (stating EPA finally resolved this exemption in late 2008); see also 73 Fed. Reg. at 76,948 (Dec. 18, 2008). But see Waterkeeper Alliance v. EPA, 853 F.3d 527, 530 (D.C. Cir. 2017) (overturning the EPA rule). It remains to be seen whether EPA will enforce CERCLA and EPCRA against CAFO owners and operators.

140 Copeland, supra note 110, at 5 (“EPA has authority under CAA Section 114 to require that AFOs provide emission monitoring data, without the need to provide an industry-wide exemption.”).

141 Id. at 10.


143 Hoover, supra note 122, at 15 (citing 76 Fed. Reg. 3060, 3061 (Jan. 19, 2011)).
struck down that state’s ag-gag law as an unconstitutional restriction on the (declaring a major victory for animal advocates, an Idaho federal district court ag-gag legislation has either been introduced or already passed into law in more (noting Kansas was the first to pass ag-gag legislation in the early 1990s. Today, protection/public-policy/ag-gag-legislation-state (last visited Oct. 24, 2017) (noting a coalition of advocacy organizations sued North Carolina, challenging the ag-gag law on First and Fourteenth Amendment grounds); see also Complaint for Declaratory and Injunctive Relief Concerning the Constitutionality of a State Statute, PETA v. Cooper, No. 16-cv-25 (M.D. N.C. Jan. 13, 2016) (challenging the provision).


Skolnick, supra note 41 (stating that Smithfield Foods was the world’s largest pig producer before the corporation sold out to WH Group).

AFO Program Summary, N.C. Dep’t of Env’t Quality, https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/ animal-feeding-operation-permits/afos-program-summary (last visited Dec. 20, 2017) (citing N.C. GEN. STAT. § 143-215.10B(a)(ii) (noting an operation is also regulated as an AFO if it “has a liquid animal waste management system that discharges to the surface waters of the State.”)).

Id. (stating only existing CAFOs are eligible for permitting under the General Permit if they use the lagoon and sprayfield waste management system. New or expanded CAFOs must be permitted through a separate process).

Id. (mentioning community members fought this renewal without success); see infra Section V.

See supra note 48 and accompanying text (discussing water pollution in the New River).

See supra note 48 and accompanying text.; AFO Program Summary, supra note 179.

AFO Program Summary, supra note 179; see also Skolnick, supra note 41 (noting that the only way to start a new CAFO in North Carolina today is to use proper sewage treatment, which the industry states is cost-prohibitive and acknowledging that this victory followed relentless hard work on the part of the community); infra Section V.

Jernigan, supra note 101, at 34 (“Most hog operations in North Carolina operate under a State General Permit, which supports the assumption that pollutants, including fecal bacteria and nutrients, stay on site. The permit allows the industry to Bush hog feces and urine into open, unlined pits and then to spray this ‘liquid manure’ onto nearby fields under the pretext of it being used as fertilizer. The problem is that there is too much of the waste being produced for the soil or crops to absorb it all. Much of the waste runs off the fields, which are extensively ditched to facilitate drainage in the low-lying coastal plain, and the waste contaminates nearby waters. It also drifts as a noxious mist onto neighboring properties.”).

AFO Program Summary, supra note 179.

Jernigan, supra note 101, at 35; see discussion infra section V.

Skolnick, supra note 41 (noting that as of February 2017, DEQ had issued only eighty-one fines over the previous five years, and the fines averaged $4,207.75).

AM. FARM BUREAU FED'N, http://www.fb.org/ (last visited Dec. 20, 2017) (depicting photos of rolling green hills, white faces, and the American flag on their homepage); see also id. (“Farm Bureau is committed to working through
our grassroots organizations to enhance and strengthen the lives of rural Americans and to build strong, prosperous agricultural communities.


Id.


Id.

Hoover, supra note 122, at 9.

Madsen et al., supra note 191, at 18.


Simon, supra note 10, at 89.

Sue Sturgis, Civil Rights Battle Over N.C. Hog Industry Regulation Heats Up as Negotiations Break Down, FACING S. (Mar. 9, 2016), https://www.facingsouth.org/2016/03/civil-rights-battle-over-nc-hog-industry-regulato (statement of Elizabeth Haddix) ("[DEQ] has clearly been captured by the industry. . . . [which is] the opposite of how government is supposed to work.")

Id.


Jernigan, supra note 101, at 33; see generally supra notes 28 and 173–177 and accompanying text (discussing the rapid rise of North Carolina pork industry in the 1980s).

Jernigan, supra note 101, at 34 (quoting Naeema Muhammad, director of the North Carolina Environmental Justice Network).

Id. at 33.

Id. at 33–34.

Id. at 34.

See Skolnick, supra note 41, at 7–8; see generally Wing, et al., supra note 43 and accompanying text (discussing Professor Wing’s research).

See Skolnick, supra note 41.

Grant Awards Database, EPA, https://yosemite.epa.gov/oarm/igms_efg.nsf/9e9e2a593a4806d58256b6006df292/2bad6de6e2b5ab77852576d0071d5e4!OpenDocument&ExpanSection=4&Click= (last updated Oct. 1, 2017) (noting the EPA helped fund this study through a small grant to REACH).

Skolnick, supra note 41.

See id. (noting that residents were instructed to fill out journals twice each day).

Id.

Id.

Id.

Id.


See Skolnick, supra note 41.

Id. (quoting Devon Hall, co-founder of REACH).

See Jernigan, supra note 101, at 35.

See Skolnick, supra note 41.

See id.


See Skolnick, supra note 41.

See id.


See Jernigan, supra note 101, at 34-35.

Id. at 35 (quoting Naeema Muhammad, director of the North Carolina Environmental Justice Network); see generally AFO Program Summary, supra note 179 and accompanying text.


See id. (discussing Title VI, 42 U.S.C. § 2000d (2016), which prohibits states from discriminating based on race, color, or national origin regarding state programs that receive federal tax dollars).


See id. §§ 7-3-7.35.

See Jernigan, supra note 101, at 35.

See Sorg, supra note 222 (explaining the grave concerns about the swine industry’s intimidation of minority residents).

Id.

Steve Holt, Is Rural North Carolina the Next Flint? Groups Say People of Color There Bear the Brunt of Hog Farm Pollution, CIVIL EATS (Mar. 23, 2016), http://cleavites.com/2016/03/23/is-north-carolina-the-next-flint-groups-say-the-hog-industry-disproportionate-impacts-on-people-of-color-in-the-state/ (quoting Elizabeth Haddix, attorney at the University of North Carolina Center for Civil Rights) (“They sent it to EPA saying that they wanted to be involved in the mediation, which was a surprise to us because we had been instructed by EPA that the very fact that we were in settlement negotiations should remain confidential. This is a community that has suffered a lot of retaliation and intimidation from the pork industry.

Id.


Id. “[T]his didn’t make me feel good to know that they were there. They could have been writing down all of our [license] tag numbers. I felt exposed and that other community representatives were exposed.” (quoting Naeema Muhammad, acting director of NCEJN).

See Sorg, supra note 222 (explaining the grave concerns about the swine industry’s intimidation of minority residents).

Id.


Id. at 1.

Id. at 9 (explaining one such story of Violet Branch, who has lived on her land in Duplin County since 1943. She lives with two miles of ten hog facilities. A state agency told her to stop drinking water from her well. Shortly after, a CAFO operator came to her home “with their industry spokesperson” and insinuated she was “out to get” the operator. She stated that she believed they were attempting to intimidate her. The industry spokesperson asked her if she had ever considered moving); see Sturgis, supra note 225 (describing another incident of intimidation against an elderly African American woman).

See Sorg, supra note 222.

Id.

Id.

Id.

Id.


Id. at 1.

Id. at 8.

Id.

Sorg, supra note 222; see Sorg, supra note 238 (noting the unlikelihood “that the EPA’s Office of Civil Rights will find in favor of the environmental groups. As the Center for Public Integrity reported last year, that office has determined just one finding of discrimination—from hundreds filed—in [twenty-two] years”) (citing Environmental Justice, Denied, CTR. FOR PUB.
far less—than they ever have. The most astounding genetic changes have been those of chickens. In 1925, chickens reached a weight of two and a half pounds in sixteen weeks; today, they reach a weight of almost six pounds in six weeks (while consuming less than half the feed per pound of weight gained). It’s miraculous but torturous.”.


6 See Lesley J. Rogers, The Development of Brain and Behavior in the Chicken 184 (1995) (explaining that the brain structure of chickens are similar to mammals).


8 See Sentence in Farm Animals, supra note 7, at 138-39.

9 See id. at 131-34.

10 See Thinking Chickens, supra note 7; Robert Grillo, Chicken Behavior: An Overview of Recent Science, Free from Harm (Feb. 7, 2014), http://freefromharm.org/chicken-behavior-an-overview-of-recent-science/ (noting that chicken communication skills may be comparable to some primates).

11 See Amy J. Fitzgerald, Animals as Food: (Re)Connecting Production, Processing, Consumption, and Impacts 16 (2015) (emphasizing that 97% of U.S. livestock are CAFO raised); Daniel Imhoff, CAFO: The Tragedy of Industrial Animal Factories xiii (2010) (stating that the purpose of factory farming is to breed animals for rapid growth and high outputs of animal products such as meat and milk).

12 See Imhoff, supra note 11, at xii-xv (explaining that animals in CAFOs exist in unnatural conditions without fresh-air or sunlight and are reduced to units of production by corporate agribusiness); see also Putting Meat on the Table: Industrial Farm Animal Production in America, Pew Comm’n on Indus. Farm Animal Prod. 22 (2008), http://www.pewtrusts.org/-/media/assets/2008/pctifap_exe_summary.pdf.

13 See Imhoff, supra note 11, at xii-xv.


16 Id.

17 See id. (“Traditionally, a flock of broilers consist of about 20,000 birds in a growout house that measures 400 feet long and 40 feet wide, thus providing an area of about 16,000 square feet, or eight-tenths of a square foot per bird. As the birds age, they grow into this space.”).


19 See Cheryl L. Leahy, Large-Scale Farmed Animal Abuse and Neglect: Law and Its Enforcement, 4 J. ANIMAL L. & ETHICS 63, 64 (2011) (arguing that factory farm conditions also impact the environment and resource consumption).


22 See Mark Essel, LESSER BEASTS: A SNOOT-TO-TAIL HISTORY OF THE HUMBLE PIG 253 (2015) (noting that the world of humane farming has produced a “new tribe” of consumers willing to pay a great deal as long as the animal is treated well before dying at a welfare certified slaughterhouse); see also Memorandum from Bob Meadow & Joshua Ulibarri, Lake Research Partners, to Interested Parties, Broiler Chicken—Online Survey Public Memo 1 (Apr. 2017), https://www.aspca.org/sites/default/files/publicmemo.aspca_broilerchicken2013.pdf (“Once consumers learned more about these conditions, concern about chicken