CAFOS: PLAGUING NORTH CAROLINA COMMUNITIES OF COLOR

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I. 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 such depictions of traditional farming. In stark contrast, animal products are overwhelmingly produced in Concentrated Animal Feeding Operations ("CAFOs")—otherwise known as "factory farms."

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

Today, about 10 billion animals are raised and slaughtered in the United States every year.⁶ More than 99% of those animals are raised and slaughtered in CAFOs.⁷ American meat

¹ 40 C.F.R. § 122.23(b) (2012).

² Animal Feeding Operations, UNITED STATES DEPARTMENT OF AGRICULTURE, https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/livestock/afo/ (last visited Mar. 11, 2017).

 $^{^{3}}$ Id.

⁴ § 122.23(c).

⁵ A medium CAFO is one that has more than 200 mature dairy cows, 300 cows that are not dairy or veal cows, 750 pigs weighing at least 55 pounds, 3000 pigs weighing less than 55 pounds, 150 horses, or 9000 laying hens. § 122.23(b)(6). A large CAFO is one that has 700 mature dairy cows, 1000 cows that are not dairy or veal cows, 2500 pigs weighing at least 55 pounds, 10,000 pigs weighing less than 55 pounds, or 500 horses. § 122.23(b)(4).

⁶ Liam H. Michener, *Meating America's Demand: An Analysis of the Hidden Costs of Factory Farming and Alternate Methods of Food Production*, 7 J. ANIMAL & ENVTL. L. 145, 147 (2015-2016) (citing *Farm Animals and the Law, Winning the Case Against Cruelty*, ANIMAL LEGAL DEFENSE FUND http://aldf.org/resources/advocating-for-animals/farmed-animals-and-the-law/ (last visited Feb. 26, 2015); *What Is a Factory Farm?* AMERICAN SOCIETY

consumption has nearly doubled over the last century,⁸ and the USDA projects this consumption will further swell over the next decade.⁹ With this level of consumption, it comes as no surprise that animal products are cheap. Indeed, 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.¹⁰ But while the price Americans pay for animal products at the grocery store checkout counter 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,¹¹ CAFOs put independent family farmers out of business¹² and create deplorable working conditions for employees.¹³ CAFOs also create massive externalities

FOR THE PREVENTION OF CRUELTY TO ANIMALS, https://www.aspca.org/fight-cruelty/farm-animal-cruelty/ what-factory-farm (last visited Feb. 23, 2015)).

⁷ Id.

⁸ DAVID ROBINSON SIMON, MEATONOMICS: HOW THE RIGGED ECONOMICS OF MEAT AND DAIRY MAKE YOU CONSUME TOO MUCH – AND HOW TO EAT BETTER, LIVE LONGER, AND SPEND SMARTER xxii (2013).

⁹ In 2014, Americans consumed 199 pounds per capita of cow, pig, and chicken flesh; the USDA projects that this number will rise to 214 pounds by 2026. STATES DEPARTMENT OF AGRICULTURE, USDA AGRICULTURAL PROJECTIONS TO 2026 39 (2017), https://www.ers.usda.gov/webdocs/publications/oce20171/oce-2017-1.pdf?v=42788.

¹⁰ Simon, *supra* note 8, at xxii.

¹¹ The suffering of animals who are exploited and tortured by the billions in CAFOs is not the primary focus of this project, but it is impossible to proceed without acknowledging this reality. Female breeding pigs, for example, spend most of their lives in gestation crates barely larger than their bodies. *Farm Animal Welfare: A Closer Look At Animals on Factory Farms*, AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS, http://www.aspca.org/animal-cruelty/farm-animal-welfare/animals-factory-farms (last visited Mar. 24, 2017). Pigs in such crates are unable even to turn around. *Id*. Their piglets are taken from them at two to three weeks of age and confined to enormous (but overcrowded) sheds with no access to fresh air, sunlight, earth, or even windows. *Id*. After several years of constant pregnancy and birth, the female pigs are slaughtered. *Id*. The pigs go on to endure unimaginable horrors at slaughterhouses. The Editorial Board, *No More Exposés in North Carolina*, N.Y. TIMES, Feb. 1, 2016, https://www.nytimes.com/2016/02/01/opinion/no-more-exposes-in-north-carolina.html (pigs stabbed, beaten with sledgehammers, and boiled alive).

¹² Simon, *supra* note 8, 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."). In North Carolina, "corporate-run hog facilities have forced many independent hog farms out of business." Aaron M. McKown, *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 n.3 (1999).

¹³ CAFO workers are subjected to many health and safety hazards, including exposure to inhalable particulate matter (PM) and harmful gases such as ammonia and hydrogen sulfide. *Factory Farm Workers*, FOOD EMPOWERMENT PROJECT, http://www.foodispower.org/factory-farm-workers/ (last visited Mar. 24, 2017). The

in the form of environmental destruction while they ravage their vulnerable host communities and trample civil rights. 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. 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. Section III explores relevant law and how it fails to protect these vulnerable communities. This is the enforcement gap. 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") eagerly and effectively exploits this idea, raking in immense profit (including subsidies from misinformed tax payers) and power. 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. 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.

workers are also prone to repetitive stress injuries. Id. "The resulting health effects are well documented and include chronic aches and pains, respiratory disorders, cardiovascular complications and premature death." Id. Many workers are undocumented individuals, who CAFO owners seek out "because they are less likely to complain about low wages and hazardous working conditions." Id.; see also HUMAN RIGHTS WATCH, BLOOD, SWEAT, AND FEAR: WORKERS' U.S. RIGHTS IN MEAT AND POULTRY PLANTS (Jan. 24. 2005). https://www.hrw.org/report/2005/01/24/blood-sweat-and-fear/workers-rights-us-meat-and-poultry-plants (discussing dire conditions of slaughterhouse work).

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.¹⁴ "Historically, the Black Belt has been defined as places with a black population majority at the time of the Civil War. Those areas stretched from Virginia to Texas and, for practical purposes, covered the old plantation region of the South."¹⁵ After the Civil War and emancipation, many African Americans remained in the Black Belt and worked as sharecroppers and tenant farmers.¹⁶ But African American farmers in the Black Belt were systematically deprived of acquiring their own 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 (which is most important to increase production, ownership of resources, and thus farm incomes) from the [Farmers Home Administration (FmHA)] which was

¹⁴ Wendee Nicole, *CAFOs and Environmental Justice: The Case of North Carolina*, 121 ENVTL. HEALTH PERSP. A182, A183 (Jun. 1, 2013), https://ehp.niehs.nih.gov/121-a182/ (citing *Focus on Black Belt Counties: Life Conditions and Opportunities*, PROCEEDINGS OF A PRECONFERENCE OF THE PROFESSIONAL AGRICULTURAL WORKERS CONFERENCE (Ntam Baharanyi et al, eds., Tuskegee University and the Southern Rural Development Center, 1993) http://goo.gl/4iCrN; Dale W. Wimberley, *Quality of Life Trends In the Southern Black Belt, 1980–2005: A Research Note*, 25 J. RURAL SOC. SCI. 103 (2010). Booker T. Washington described the Black Belt: "So far as I can learn, the term 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." BOOKER T. WASHINGTON, UP FROM SLAVERY: AN AUTOBIOGRAPHY 108 (1901).

¹⁵ Libby V. Morris et al, *Current Conditions and Trends In the Southern Black Belt, in Focus on Black Belt Counties: Life Conditions and Opportunities, in* PROCEEDINGS OF A PRECONFERENCE OF THE PROFESSIONAL AGRICULTURAL WORKERS CONFERENCE (Ntam Baharanyi et al, eds., Tuskegee University and the Southern Rural Development Center, 1993) http://goo.gl/4iCrN.

¹⁶ Nicole, *supra* note 14, at A183.

established in the 1930s to service the credit needs of farmers who failed to meet the lending criteria of other lending institutions.¹⁷

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.¹⁸

CAFOs descended on these vulnerable communities like a plague, beginning in the mid-1980s.¹⁹ Because communities of color and low-income communities tend to lack the political power of white, affluent communities, they are less likely to successfully ward off siting threats for undesirable facilities such as CAFOs and are disproportionately burdened with such facilities—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.²⁰ "[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

¹⁷ Ejigou Demissie, Past-Present Conditions and Future Issues In the Black Belt of the South, in PROCEEDINGS OF A PRECONFERENCE OF THE PROFESSIONAL AGRICULTURAL WORKERS CONFERENCE (Ntam Baharanyi et al, eds., Tuskegee University and the Southern Rural Development Center, 1993), http://goo.gl/4iCrN ("[D]uring 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 FmHA. Furthermore, between 1966 and 1976, the percentage of FmHA farm ownership loans made to black farmers declined from 5.7 percent to 1.5 percent, suggesting discrimination on the part of FmHA. 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 generally Thomas W. Mitchell, Destabilizing the Normalization of Rural Black Land Loss: A Critical Role for Legal Empiricism, 2005 WIS. L. REV. 557 (2005) (examining legal methods by which African American landowners were dispossessed of their land in the twentieth century): Ta-Nehisi Coates. The Case for Reparations, THE ATLANTIC. Jun. 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).

¹⁸ Nicole, *supra* note 14, at A183.

¹⁹ Id. ("North Carolina went from fifteenth to second in hog production between the mid-1980s and mid-1990s." (citing Owen J. Furuseth, *Restructuring of Hog Farming in North Carolina: Explosion and Implosion*, 49 THE PROFESSIONAL GEOGRAPHER 391 (1997))).

²⁰ Steve Wing and Jill Johnston, Industrial Hog Operations in North Carolina Disproportionately Impact African-Americans Hispanics and American Indians 1 (Aug. 29, 2014) (unpublished manuscript), https://www.facingsouth.org/sites/default/files/wing_hogs_ej_paper.pdf.

industrialized pork production."²¹ Communities of color and low-income communities also lack the resources to leave compromised areas, where they are trapped by decreasing property values and plummeting quality of life.²²

There are 9.5 million pigs in North Carolina—the other victims of the state's \$3 billion pig industry.²³ The pigs are spread across approximately 2,100 different operations²⁴ and they produce a total of 10 billion gallons of waste each year, which is "enough to fill more than 15,000 Olympic-size swimming pools."²⁵ The pigs are confined to large indoor facilities with slatted floors, ²⁶ and their waste is pumped outdoors to what the pig industry calls a "lagoon." Lagoons are vast open-air cesspools filled with untreated manure, urine, and afterbirth.²⁷ Some lagoons are as large as seven-and-a-half acres and hold 20 to 45 million gallons of waste.²⁸ There are more than 4,000 of them in North Carolina.²⁹ These lagoons "have broken, failed, or

²¹ Nicole, *supra* note 14, at A183.

²² Id.

²³ Cordon M. Smart, *The "Right to Commit Nuisance" in North Carolina: A Historical Analysis of the Right-to-Farm Act*, 94 N.C. L. REV. 2097, 2105 (2016) (citing U.S. DEP'T OF AGRIC., ACH12-4, 2012 CENSUS HIGHLIGHTS: HOG AND PIG FARMING 1 (2014), http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/ Hog_and_Pig_Farming/ [https://perma.cc/4RD6-3KLD]).

²⁴ Calvin Harmin, Flood Vulnerability of Hog Farms In Eastern North Carolina: An Inconvenient Poop 8 (Nov. 11, 2015) (unpublished M.A. dissertation, East Carolina University), http://thescholarship.ecu.edu/bitstream/handle/ 10342/5143/HARMIN-MASTERSTHESIS-2015.pdf?sequence=1.

²⁵ Exposing Fields of Filth: Landmark Report Maps Feces-Laden Hog and Chicken Operations in North Carolina, ENVTL. WORKING GROUP (Jun. 21, 2016), http://www.ewg.org/research/exposing-fields-filth.

²⁶ Calvin, *supra* note 24, at 16.

 $^{^{\}rm 27}$ Anand M. Saxena, The Vegetarian Imperative 32 (2011).

²⁸ ROBBIN MARKS, NATURAL RESOURCES DEFENSE COUNCIL, CESSPOOLS OF SHAME: HOW FACTORY FARM LAGOONS AND SPRAYFIELDS THREATEN ENVIRONMENTAL AND PUBLIC HEALTH 3 (Jul. 2001), https://www.nrdc.org/sites/default/files/cesspools.pdf.

²⁹ Elizabeth Friend, *New Maps Detail Scope of NC's Poultry and Hog Industries*, WUNC 91.5: North Carolina Public Radio (Jun. 24, 2016), http://wunc.org/post/new-maps-detail-scope-ncs-poultry-and-hog-industries (citing *Exposing Fields of Filth: Locations of Concentrated Animal Feeding Operations in North Carolina*, ENVTL. WORKING GROUP & WATERKEEPER ALLIANCE, http://www.ewg.org/research/exposing-fields-filth (last visited Apr. 7, 2017) (mapping tool to locate CAFOs)).

overflowed, leading to major fish kills and other pollution incidents."³⁰ When the lagoons become full, CAFO operators manage volume by spraying this waste through sprinkler systems onto "sprayfields" in large quantities.³¹ "Operators have sprayed waste in windy and wet weather, on frozen ground, or on land already saturated with manure," causing runoff and leaks into the aquifer.³² These waste management strategies fail 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, depressing their property values, and harming their health.

A. Polluted Water

CAFOs pollute surface and groundwaters in several different ways, including lagoon breaches, catastrophic flooding, and runoff. Potential contaminants include nitrates and pathogens,³³ as well as ammonium, phosphate, dissolved solids, metals and metalloids, pharmaceutical chemicals, and natural and synthetic hormones.³⁴ "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."³⁵ Metals and

³⁰ Marks, *supra* note 28, at 1.

 $^{^{31}}$ *Id*.

³² Id. at 1-2; Adam Skolnick, The CAFO Industry's Impact on the Environment and Public Health: CAFO Farming Is an Environmental and Public Health Disaster, SIERRA CLUB (Feb. 23, 2017), http://www.sierraclub.org/sierra/2017-2-march-april/feature/cafo-industrys-impact-environment-and-public-health

³³ Steve Wing et al, *Environmental Injustice in North Carolina's Hog Industry*, 108 ENVTL. HEALTH PERSP. 225, 225 (2000).

³⁴ UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, CASE STUDIES ON THE IMPACT OF CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOS) ON GROUND WATER QUALITY 7-8 (2012) (citing I. G. Krapac et al, *Impacts* of Swine Manure Pits on Groundwater Quality, 120 ENVTL. POLLUTION 475 (2002); J. M. Ham & T. M. DeSutter, Toward Site-Specific Design Standards for Animal-Waste Lagoons: Protecting Ground Water Quality, 29 J. OF ENVTL. QUALITY 1721 (2000); J. M. Ham & T. M. DeSutter, Seepage Losses and Nitrogen Export from Swine-Waste Lagoons: A Water Balance Study, 28 J. OF ENVTL. QUALITY 1090 (1999).

³⁵ CARRIE HRIBAR, NATIONAL ASSOCIATION OF LOCAL BOARDS OF HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES 8 (2010), https://www.cdc.gov/nceh/ehs/docs/

metalloids include copper, zinc, arsenic, nickel, and selenium.³⁶ Pharmaceutical chemicals include antibiotics, and hormones include estrogen.³⁷

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."³⁸ Lagoon compromises are more likely during hurricane season. Hurricane Floyd pummeled the North Carolina coast in 1999 and compromised 52 lagoons, releasing uncontrolled waste into the floodwaters.³⁹ "Sampling conducted after Hurricane Floyd in 1999 found dangerous levels of *E. Coli* and *Clostridium perfringens* in water, even after floodwaters had receded."⁴⁰ In 2016, it happened again. Hurricane Matthew dumped 18 inches of rain on the North Carolina Coastal Plain, causing flooding so extensive that it was visible from space.⁴¹ "[T]he flood partially submerged 10 industrial pig farms with 39 barns . . . and 14 open-air pits holding millions of gallons of liquid hog manure."⁴² Once more, uncontrolled waste are also submerged following such major flooding events.⁴³

⁴² *Id*.

⁴³ *Id*.

understanding_cafos_nalboh.pdf.8-9. Possible diseases include anthrax, leptospirosis, listerosis, salmonellosis, tetanus, histoplasmosis, ringworm, giardiasis, and cryptosporidiosis. *Id.* at 9.

³⁶ United States Environmental Protection Agency, *supra* note 34, at 9.

 $^{^{37}}$ *Id.* at 9-13. "It is estimated that estrogen loads from land application by livestock manure would account for greater than 90% of the total estrogen in the environment....") *Id.* at 12.

³⁸ Marks, *supra* note 28, at 36. *See* Skolnicks, *infra* note 155.

³⁹ *Id*. at 23.

⁴⁰ Exposing Fields of Filth, WATERKEEPER ALLIANCE (Nov. 4, 2016), http://waterkeeper.org/exposingfieldsoffilth/ There are 166 lagoons within the 100-year flood plane along North Carolina's Coastal Plain. *Id*.

⁴¹ *Id*.

Even during normal weather conditions, sprayfield runoff threatens North Carolina lakes, rivers, streams, and other surface waters. Indeed, "[t]he agriculture sector, including CAFOs, is the leading contributor of pollutants to lakes, rivers, and reservoirs. It has been found that states with high concentrations of CAFOs experience on average 20 to 30 serious water quality problems per year as a result of manure management problems."⁴⁴ These contaminations cause loss of aquatic life and invade the water supply.⁴⁵

Lagoons and sprayfields also compromise groundwater on a regular basis.⁴⁶

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.⁴⁷

Contaminated groundwater leads to contaminated drinking water in rural areas like the Black Belt.⁴⁸ Indeed, rural populations have elevated rates of reliance upon wells for drinking water.⁴⁹ Nonetheless, in this area of North Carolina, "[m]ost hog operations . . . are located in areas with high dependence on well-water for drinking."⁵⁰ 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

⁴⁴ Hribar, *supra* note 35, at 4.

⁴⁵ Id.

⁴⁶ Marks, *supra* note 28, at 1.

⁴⁷ United States Environmental Protection Agency, *supra* note 34, at 3.

⁴⁸ Id.

⁴⁹ Hribar, *supra* note 35, at 3 ("Groundwater is a major source of drinking water in the United States. The EPA estimates that 53% of the population relies on groundwater for drinking water, often at much higher rates in rural areas...").

⁵⁰ Wing, *supra* note 33, at 225.

Coastal Plain, which has high water tables and wells that are unlined and shallow.⁵¹ For these reasons, some residents have stopped using their wells.⁵²

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.⁵³ "Those who have weakened immune systems are at increased risk for severe illness or death. Those at higher risk include infants or young children, pregnant women, the elderly, and those who are immunosuppressed, HIV positive, or have had chemotherapy. This risk group now roughly compromises 20% of the U.S. population."⁵⁴

In addition to pathogen-driven illnesses, there is also the threat of new viruses.⁵⁵ Indeed, there is speculation that H1N1 may have spawned in pig CAFOs in Mexico.⁵⁶ 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.⁵⁷

Finally, there are often antibiotics in CAFO animal feed.⁵⁸ Seventy percent of all antibiotics used in the United States are administered to animals as additives in their feed.⁵⁹ "The antibiotics often are not fully metabolized by animals, and can be present in their manure. If

⁵⁷ Id.

⁵⁸ Id.

⁵⁹ Id.

⁵¹ Id.

⁵² NCEJN and Allies Respond to Latest Attack by Hog Industry, NORTH CAROLINA ENVIRONMENTAL JUSTICE NETWORK (Jan. 6, 2017), http://www.ncejn.org.

⁵³ Hribar, *supra* note 35, at 10.

⁵⁴ *Id.* at 9, 3 ("Elevated nitrates in drinking water can be especially harmful to infants, leading to blue baby syndrome and possible death. Nitrates oxidize iron in hemoglobin in red blood cells to methemoglobin. Most people convert methemoglobin back to hemoglobin fairly quickly, but infants do not convert back as fast. This hinders the ability of the infant's blood to carry oxygen, leading to a blue or purple appearance in affected infants."). *Id.* at 3.

⁵⁵ *Id*. at 10.

⁵⁶ Id.

manure pollutes a water supply, antibiotics can also leech into groundwater or surface water."⁶⁰ 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.⁶¹

B. Polluted Air

CAFOs produce emissions that fuel climate change⁶² and diminish ambient air quality. Indeed, between the animals themselves and the degrading waste in lagoons and on sprayfields, CAFOs cause asthma, acid range, and climate change by releasing the following into the air: 400 volatile organic compounds (VOC), particulate matter (PM), methane, ammonia, hydrogen sulfide, ozone, endotoxins, and noxious odors.⁶³

These emissions are so concentrated that it can be dangerous even to approach a lagoon—particularly in hot summer months.⁶⁴ "The oxygen-deficient, toxic, and/or explosive atmosphere which can develop in a manure pit has claimed many lives."⁶⁵ 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.⁶⁶

⁶⁰ Id.

⁶¹ Id. (citing Marc Kaufman, Worries Rise Over Effect of Antibiotics in Animal Feed: Humans Seen Vulnerable To Drug-Resistant Germs, WASHINGTON POST, Mar. 17, 2000, at A01). Eating the flesh of animals who have been fed antibiotics further increases one's risk of developing antibiotic resistance. Id.

 $^{^{62}}$ "While carbon dioxide is often considered the primary greenhouse gas of concern, manure emits methane and nitrous oxide which are 23 and 300 times more potent as greenhouse gases than carbon dioxide, respectively." *Id.* at 7.

⁶³ Marks, *supra* note 28, at 1, 17; 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, 541 (2007).

⁶⁴ *Id*. at 26.

⁶⁵ INIOSH Warns: Manure Pits Continue to Claim Lives, CENTERS FOR DISEASE CONTROL (Jul. 6, 1993), https://www.cdc.gov/niosh/updates/93-114.html.

⁶⁶ Marks, *supra* note 28, at 26 (citing *INIOSH Warns: Manure Pits Continue to Claim Lives*, CENTERS FOR DISEASE CONTROL (Jul. 6, 1993), https://www.cdc.gov/niosh/updates/93-114.html.

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."⁶⁷ Methane is a respiratory irritant that causes chemical burns to the respiratory tract, skin, and eyes.⁶⁸ It also causes severe cough and chronic lung disease.⁶⁹ Hydrogen sulfide is the most acutely dangerous, causing "inflammation of the moist membranes" of the eyes and respiratory tract, as well as olfactory neuron loss and even death.⁷⁰ PM causes "chronic bronchitis, chronic respiratory symptoms, declines in lung function, [and] organic dust toxic syndrome."⁷¹

Some of the most vulnerable individuals in these vulnerable communities are children. "While all community members are at risk from lowered air quality, children take in 20-50% more air than adults, making them more susceptible to lung disease and health effects."⁷² 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.⁷³ Economically disadvantaged children are more likely to suffer health impacts from CAFOs,

⁶⁷ Wilson, *supra* note 63 at 541 (citing SIERRA CLUB, CLEAN WATER AND FACTORY FARMS: REPORTS AND FACT-SHEETS: AIR POLLUTION FROM FACTORY FARMS, http://www.sierraclub.orgfactoryfarms/ factsheets/air.asp (last visited Jan. 20, 2007), *cited in* J. Nicholas Hoover, *Can't You Smell That Smell? Clean Air Act Fixes for Factory Farm Air Pollution*, 6, 9 STAN. J. ANIMAL L. & POL'Y 1, 10 (2013).

⁶⁸ Hribar, *supra* note 35, at 6.

⁶⁹ Id.

⁷⁰ Id.

⁷¹ *Id*.

 ⁷² Id. at 5 (citing Michael T. Kleinman, The Health Effects of Air Pollution on Children (Fall 2000) (unpublished manuscript), http://www.aqmd.gov/docs/default-source/students/health-effects.pdf); J. R. Barrett, *Hogging the Air: CAFO Emissions Reach Into Schools*, 114 ENVTL. HEALTH PERSP. A241 (2006)) (internal citations omitted).
 ⁷³ Id.

including asthma, because those children are more likely to live and attend schools in closer proximity to CAFOs.⁷⁴

C. Plummeting 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."⁷⁵ 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.⁷⁶ "'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."⁷⁷ 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.⁷⁸ Swarms of flies and mosquitos—attracted to the prolific waste in communities plagued by CAFOs—accompany the odor, bringing even further risk of disease.⁷⁹

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

⁷⁴ Id. at 5-6 (citing M. 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).

⁷⁵ *Id*. at 11.

⁷⁶ Nicole, *supra* note 14, at A183.

⁷⁷ North Carolina Environmental Justice Network, *supra* note 51 (quoting Duplin County, North Carolina resident Elsie Herring).

⁷⁸ Nicole, *supra* note 14, at A183.

⁷⁹ Hribar, *supra* note 34, at 8.

by as much as 88%.⁸⁰ Another study suggests that properties downwind from and closest to CAFOs suffer the largest decreases in value.⁸¹ The size and type of CAFO can also affect the degree to which nearby properties decrease in value.⁸² 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.⁸³

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

While CAFOs devastate the environment and public health, they are severely underregulated 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.⁸⁴ Thus, the law has parted like the Red Sea to make way for CAFOs and all of the misery that they rain down on vulnerable communities.

⁸² *Id*.

⁸³ Id.

⁸⁰ *Id.* at 11 (citing *CAFO Economic Impact*, DAKOTA RURAL ACTION: GRASSROOTS ORGANIZING FOR THE FUTURE (Jun. 2006), http://www.dakotarural.org/issues/livestock/cafos/).

⁸¹ Id. (citing Joseph A. Herriges et al, Living With Hogs in Iowa: The Impact of Livestock Facilities On Rural Residential Property Values, 81 LAND ECON. 530-45 (2005)).

⁸⁴ Nicole, *supra* note 14, at A185 (citing Pat Stith & Joby Warrick, *Murphy's Laws: For Murphy, Good Government Means Good Business*, RALEIGH NEWS & OBSERVER, Feb. 22, 1995, http://www.pulitzer.org/winners/news-observer-raleigh-nc-work-melanie-sill-pat-stith-and-joby-warrick; Aaron M. McKown, *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 n.3 (1999)); Gray Jernigan, *What To Do When State Regulation Stinks*, 11 WATERKEEPER MAGAZINE 33 (2015) (http://waterkeeper.org/app/uploads/2016/01/WKMagSummer15r14-small1.pdf).

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 $(CAA)^{85}$ in 1963 and the Clean Water Act $(CWA)^{86}$ 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 ...,"⁸⁷ environmental injustice abounds in vulnerable communities.

1. The Clean Water Act

The Clean Water Act (CWA) declares in Section 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.⁸⁸ To accomplish this goal, the CWA "authorizes the regulation and enforcement of requirements that govern waste discharges into U.S. waters."⁸⁹ Section 402 of the CWA⁹⁰ establishes the National Pollutant Discharge Elimination System (NPDES), which administers the effluent (waste) limitations established in section 301⁹¹ and prohibits the discharge of pollution⁹² from point sources⁹³ into navigable waters

⁸⁵ Clean Air Act, 42 U.S.C. §§ 7401–7671q (2016).

⁸⁶ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2016). The legislation came to be known as the Clean Water Act following the 1972 amendments to the Federal Water Pollution Control Act of 1948. *History of the Clean Water Act*, EPA (last visited Apr. 8, 2017) https://www.epa.gov/laws-regulations/history-clean-water-act.

⁸⁷ J. B. Ruhl, Farms, Their Environmental Harms, and Environmental Law, 27 ECOLOGY L. Q. 265, 265 (2000).

⁸⁸ 33 U.S.C. § 1251(a) (2016). "The term 'navigable waters' means the waters of the United States, including the territorial seas." § 1362(7).

⁸⁹ DAVID M. BEARDEN ET AL, CONG. RESEARCH SERV., RL 30798, ENVIRONMENTAL LAWS: SUMMARIES OF MAJOR STATUTES ADMINISTERED BY THE ENVIRONMENTAL PROTECTION AGENCY Summary (2013).

⁹⁰ § 1342.

⁹¹ § 1311.

of the United States without a permit from the Environmental Protection Agency (EPA) or the state, if the state is qualified to issue such permits.⁹⁴

Some CAFOs are large enough to qualify as regulated point sources under the CAFO Rule. Those CAFOs must fulfill permit and annual report requirements.⁹⁵ Regulated CAFOs are also responsible for creating a plan for handling waste.⁹⁶

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.⁹⁷ 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."⁹⁸ Thus, the CWA fails to regulate runoff or to provide incentives to CAFO

⁹² "The term 'pollutant' means dredged 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(6).

⁹³ A "point source" is "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. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture." § 1362(14). Nonpoint sources are governed by state water quality programs. 40 C.F.R. § 122 (2012); CLAUDIA COPELAND, CONG. RESEARCH SERV., RL 32947, AIR QUALITY ISSUES AND ANIMAL AGRICULTURE: A PRIMER 8 (2014), http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL32948.pdf.

⁹⁴ Bearden, *supra* note 89, at 29 (discussing § 1342(a)).

^{95 40} C.F.R. § 122 (2012); Copeland, supra note 93, at 8.

⁹⁶ Copeland, *supra* note 93, at 8.

⁹⁷ *Id.* (about 15,300 CAFOs are covered nationwide).

⁹⁸ Adam Scott Carlesco, *The Sidestepping of National Pollution Discharge Elimination System Permitting Requirements by Concentrated Animal Feeding Operations*, 5 J. ANIMAL & ENVTL. L. 43, 48 (2013-2014) (citing 33 U.S.C. §§ 1362(14); 1342(1)(1); *see* Copeland, *supra* note 93, at 8 ("The rule contains a performance 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). *See* Wilson, *supra* note 63, 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.")

owners and operators to try to avoid catastrophes during hurricanes and floods.⁹⁹ Second, 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.¹⁰⁰ Third, noncompliance is rampant and enforcement is dismal¹⁰¹—in part due to a lack of data on existing CAFOs.¹⁰² Fourth, the CWA does not directly regulate groundwater.¹⁰³

⁹⁹ The Safe Drinking Water Act also fails to regulate runoff. 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)).

¹⁰⁰ Waterkeeper Alliance v. EPA, 399 F.3d 486 (2d Cir. 2005) (directing EPA to remove requirement that all CAFOs obtain NPDES permit); Nat'l Pork Producers Council v. EPA, 635 F.3d 738, 745 (5th Cir. 2011) (directing EPA to remove requirement that CAFOs that propose to discharge apply for NPDES permits).

¹⁰¹ Many states, especially those with powerful CAFO industries, fail to properly administer the NPDES program and enforce the CWA. "EPA discovered 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." Carlesco, *supra* note 98, at 63. Without the states doing their part to regulate CAFOs, EPA cannot possibly achieve the goal of the CWA. *Id.* at 64.

¹⁰² Carlesco, *supra* note 98, at 60. EPA proposed a new version of the CAFO Rule in 2011 that would have required "CAFOs to report facility-specific information in order to help the EPA properly implement the NPDES program and ensure CAFO compliance with CWA requirements." *Id.* (discussing 76 Fed. Reg. 65,431, Oct. 21, 2011). The proposal, grounded in the authority granted to EPA under § 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. *Id.* Second, the proposal would allow EPA to use § 308 authority to get information from CAFOs that are located in areas struggling with water quality issues likely caused by CAFOs. *Id.* "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. 65431, Oct. 21, 2011)). The purpose of the proposed rule would be to "allow 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). Ultimately, EPA withdrew the rule on July 13, 2012. *Id.* at 61. EPA elected to get this information directly from state agencies and other channels following a settlement agreement related to the 2008 version of the CAFO Rule. *Id.*

¹⁰³ ENVIRONMENTAL PROTECTION AGENCY, INTRODUCTION TO THE CLEAN WATER ACT 2 (2011), https://cfpub.epa. gov/watertrain/pdf/modules/introtocwa.pdf. The Resource Conservation and Recovery Act (RCRA), however, presents a promising option for protecting groundwater from CAFO pollution. Solid Waste Disposal Act, 42 U.S.C. §§ 6901–6992k (2016) (known as the Resource Conservation and Recovery Act following the 1976 amendments of the Solid Waste Disposal Act). *See Community Association for Restoration of the Environment, Inc. v. Cow Palace, LLC*, 80 F. Supp. 3d 1180 (E.D. Wash. 2015) (extending RCRA to agriculture by holding that manure can, under some circumstances, qualify as "solid waste" under RCRA). *See also* Rachel Fullmer, A Cow Palace *Coup: Expanding the Reach of RCRA to Combat Agricultural Pollution*, 28 Georgetown Envtl. L. Rev. 501, 503 (2016).

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."¹⁰⁴ EPA is authorized to "set mobile source limits, ambient air quality standards, hazardous air pollutant emission standards, [and] standards for new pollution sources. . . ."¹⁰⁵ 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."¹⁰⁶ The goal of the CAA is to prevent ambient air emissions from harming the environment and public health.¹⁰⁷

Under the CAA, 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.¹⁰⁸ Areas that are struggling to meet NAAQS, called "nonattainment areas," must implement special measures to control air pollution.¹⁰⁹ The CAA also creates a

¹⁰⁴ Hoover, *supra* note 67, at 10 (citing 42 U.S.C. § 7409 (2012) (criteria pollutants, which are sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, lead, and PM), § 7412 (hazardous air pollutants), § 7411 (stationary sources)).

¹⁰⁵ Bearden, *supra* note 88, at Summary.

¹⁰⁶ Id.

¹⁰⁷ *Id*. at 3.

¹⁰⁸ *Id.* States must create 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." Copeland, *supra* note 92, 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." Hoover, *supra* note 67, at 11 (citing 42 U.S.C. §§ 7475, 7503, 7475(a)(4), 7479(3)).

¹⁰⁹ Bearden, *supra* note 88, at 3.

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.¹¹⁰

The CAA applies to CAFOs in theory.¹¹¹ 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."¹¹² 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."¹¹³ Third, the CAA Mandatory Greenhouse Gas (GHG) Reporting Rule¹¹⁴ addresses manure management systems, but Congress barred EPA from using funds to implement mandatory GHG reporting for manure management facilities.¹¹⁵ Fourth, there is a dearth of data.¹¹⁶ The CAA "requires accurate measurement of emissions to determine whether [CAFOs] emit regulated pollutants in quantities that exceed specified thresholds."¹¹⁷

¹¹⁰ Id.; Copeland, supra note 92, at 11.

¹¹¹ The CAA does not provide a blanket exception for agricultural activities. Hoover, *supra* note 67, at 11. Indeed, EPA has stated that CAFOs "'plainly fit the definition of stationary source." *Id.* (citing 67 Fed. Reg. 63,556-57).

¹¹² CLAUDIA COPELAND, CONG. RESEARCH SERV., RL 32947, AIR QUALITY ISSUES AND ANIMAL AGRICULTURE: EPA'S AIR COMPLIANCE AGREEMENT 2 (2014), http://nationalaglawcenter.org/wpcontent/uploads/assets/crs/RL32947.pdf. But there is a lack of reliable data on CAFO emissions, so it is possible that more CAFOs exceed thresholds than are currently known. *Id.* "Resolving questions about AFOs' 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." *Id.*

¹¹³ *Id*.

¹¹⁴ 74 Fed. Reg. 56260, October 30, 2009.

¹¹⁵ MEGAN STUBBS, CONG. RESEARCH SERV., RL 41622, ENVIRONMENTAL REGULATION AND AGRICULTURE 4-5 (2014).

¹¹⁶ Copeland, *supra* note 112, at 2.

¹¹⁷ *Id*. at 1.

Citing a need for such data, EPA entered into an Air Compliance Agreement¹¹⁸ with CAFO owner and operators.¹¹⁹ "Early in 2002, representatives of some 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."¹²⁰ In exchange for industry cooperation, EPA agreed to provide immunity for past and ongoing violations of the CAA to all participating CAFOs. "EPA granted covenants not to sue and released participants from EPA liability for failing to comply with certain provisions of the CAA."¹²¹ Critics of the agreement include environmental groups and state and local air quality officials, who were not included in the negotiation process.¹²²

More than 13,900 operations across 42 states signed up to participate in the agreement, including 1,856 pig operations.¹²³ After 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."¹²⁴ EPA's methodologies have come under fire, however, since the study failed to include turkey

¹¹⁸ 70 Fed. Reg. 4958, January 31, 2005.

¹¹⁹ Copeland, *supra* note 112, at 3.

 $^{^{120}}$ Id.

¹²¹ *Id.* at 4. Under the agreement, CAFOs are 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) Comprehensive Environmental Response, Compensation, and Liability Act. 42 U.S.C. §§ 9601–9675 (2016); 42 U.S.C. §§ 11001–11050 (2016). EPA finalized this exemption on in late 2008, 73 Fed. Reg. at 76,948 (Dec. 18, 2008), but this rule was recently overturned. Waterkeeper Alliance, et al v. EPA, No. 09-1017 (D.C. Cir. Apr. 11, 2017). It remains to be seen whether EPA will enforce CERCLA and EPCRA against CAFO owners and operators.

¹²² Copeland, *supra* note 112, at 5. Critics argue that "EPA has authority under CAA Section 114 to require that AFOs provide emission monitoring data, without the need to provide an industry-wide exemption." *Id.* at 6. ¹²³ *Id.* at 10.

¹²⁴ *Id.* at 11 (citing ENVIRONMENTAL INTEGRITY PROJECT, HAZARDOUS POLLUTION FROM FACTORY FARMS: AN ANALYSIS OF EPA'S NATIONAL AIR EMISSIONS MONITORING STUDY DATA (Mar. 2011), http://www.environmentalintegrity.org/documents/ HazardousPollutantsfromFactoryFarms.pdf.).

operations, beef cattle operations, or sprayfields, and collected data from a very small number of operations.¹²⁵ Years later, after granting thousands of CAFOs immunity, EPA still has not taken steps to use the data collected to better regulate CAFOs under the CAA.

B. Hastening the Takeover: North Carolina Law

North Carolina law serves CAFO owners and operators in three main ways. First, the state has eviscerated nuisance 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*,¹²⁶ "the Court of the King's Bench recognized [a]n action on the case lies for erecting a hogstye so near the house of the plaintiff that the air thereof was corrupted."¹²⁷ 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.¹²⁸ But in North Carolina, nuisance suits against CAFOs are an option extinguished and community members are left without legal remedy.

North Carolina first enacted its so-called "right-to-farm" (RTF) law¹²⁹ in 1979.¹³⁰ That early version of the law created an affirmative "coming to the nuisance" defense for preexisting

¹²⁵ Hoover, *supra* note 67, at 15 (citing 76 Fed. Reg. 3060, 3061 (Jan. 19, 2011)).

¹²⁶ William Aldred's Case, (1611) 77 Eng. Rep. 816; 9 Co. Rep. 57 b.

¹²⁷ Smart, *supra* note 23, at 2098.

 $^{^{128}}$ Id.

¹²⁹ 1979 N.C. Sess. Laws 140, 140–41 (codified as amended at N.C. GEN. STAT. §§ 106-700 to 106-701 (2016)).

¹³⁰ Smart, *supra* note 23, at 2099.

CAFO owners and operators when they faced suits from community members who purchased property in the CAFO-occupied community.¹³¹ The rationale behind these laws was that the CAFO was there first.¹³²

In 2013, North Carolina's RTF law became a "right-to-commit-nuisance" law (RTCN).¹³³ 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."¹³⁴ 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 will further disempower community members to fight the destruction of their homes and neighborhoods.¹³⁵

As of April 2017, the North Carolina legislature is attempting to push through yet another RTCN bill.¹³⁶ Current North Carolina law provides that, in nuisance cases, the jury determines the amount of compensatory damages.¹³⁷ "The farms' liability would be limited to the lost rental or property value plaintiffs can prove was the result of the nuisance. The liability couldn't exceed a piece of property's market value." Thus, if successful, this bill would limit any damages that a

¹³¹ *Id* at 2099-2100.

 $^{^{132}}$ *Id*.

¹³³ *Id*. at 2101.

 $^{^{134}}$ *Id*.

¹³⁵ *Id.* (citing McMillon et al v. Murphy-Brown, LLC, Docket No. 7:14-cv-00181 (E.D.N.C. Aug 21, 2014)).

¹³⁶ Jonathan Drew, *Legislators Significantly Change Hog Farm Liability Bill*, Idaho Statesman, Apr. 10, 2017, http://www.idahostatesman.com/news/business/article143837444.html (bill originally applied to the pending suits against Murphy-Brown, LLC, but updated version did not apply to pending suits).

¹³⁷ Legislature Proposes Protecting Polluters over People, NORTH CAROLINA ENVIRONMENTAL JUSTICE NETWORK (Apr. 6, 2017), http://www.ncejn.org. (citing N.C. GEN. STAT. § 1-539 (2016)).

community member did manage to win against a CAFO owner or operator to the value of their property.¹³⁸

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."¹³⁹ 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.¹⁴⁰ 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.¹⁴¹ On January 1, 2016, North Carolina's ag-gag law¹⁴² went into effect.¹⁴³ 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

¹³⁸ Drew, *supra* note 136.

¹³⁹ ANIMAL LEGAL DEFENSE FUND, FACTORY FARMS & "AG-GAG" LAWS (2014), http://aldf.org/wp-content/uploads/2014/08/Ag-Gag-brochure-web.pdf.

¹⁴⁰ Jeffrey Vizcaino, Sinclair's Nightmare: SLAPPing Down Ag-Gag Legislation As Content-Based Restrictions Chilling Protected Free Speech, 7 J. ANIMAL & ENVTL. L. 49, 50 (2015-2016) (citing Jennifer Molido, Undercover Investigations Help Protect Farmed Animals, ANIMAL LEGAL DEFENSE FUND (Mar. 31, 2015), http://aldf.org/blog/undercover-investigations-help-protect-farmed-animals/.)

¹⁴¹ Kansas was the first to pass ag-gag legislation in the early 1990s. *Ag-Gag Legislation by* State, AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS, https://www.aspca.org/animal-protection/public-policy/ag-gag-legislation-state (last visited Apr. 9, 2017). Today, ag-gag legislation has either been introduced or already passed into law in more than half of states. *Id*. However, in a major victory for animal advocates, an Idaho federal district court struck down that state's ag-gag law as an unconstitutional restriction on the First and Fourteenth Amendments. Animal Legal Defense Fund et al v. Otter, No. 1:14-cv-00104-BLW (9th Cir. Aug. 3, 2015).

¹⁴² 2015 N.C. Sess. Laws 50 (codified at N.C. GEN. STAT. §§ 99A-2 (2016)).

¹⁴³ Taking Ag-Gag to Court, ANIMAL LEGAL DEFENSE FUND (http://aldf.org/cases-campaigns/features/taking-ag-gag-to-court/) (last visited Apr. 9, 2017). Governor Pat McCrory vetoed the law, but the North Carolina legislature overrode his veto. *Id*.

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."¹⁴⁴ 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.¹⁴⁵ This law shrouds CAFOs in secrecy, making it difficult for community members to discover any wrongdoing that CAFO owners and operators are committing in their backyards.

3. North Carolina Regulations: Failing to Protect Communities

In the 1980s, a pig farmer turned state senator named Wendell Murphy, set out to vertically integrate pig farming in North Carolina.¹⁴⁶ He aimed to pass state laws that would incubate the pig CAFO industry and stymie environmental regulation.¹⁴⁷

In 1986, Murphy helped pass a bill that eliminated the sales tax on hog and poultry houses; in 1987, the sales tax was waived on any equipment related to the CAFO industry. In 1991, county managers from four of the state's largest hog counties considered imposing regulations on the hog industry. Instead, Murphy cosponsored a bill that prohibited them from passing such zoning ordinances. When the bill passed, CAFO facilities were protected like traditional family farms.¹⁴⁸

These laws explain why, though there were 22,000 pig farmers raising 2 million pigs in North Carolina thirty years ago, today there are only 2,300 farmers raising 9 million pigs.¹⁴⁹ WH

¹⁴⁹ Id.

¹⁴⁴ *Id*. (emphasis added).

¹⁴⁵ Coalition Sues North Carolina over Constitutionality of 'Anti-Sunshine' Law, ANIMAL LEGAL DEFENSE FUND (Jan. 13, 2016), http://aldf.org/press-room/press-releases/coalition-sues-north-carolina-over-constitutionality-of-antisunshine-law/. A coalition of advocacy organizations sued North Carolina, challenging the ag-gag law on First and Fourteenth Amendment grounds. *Id.; see* People for the Ethical Treatment of Animals et al v. Cooper, No. 16-cv-25 (M.D.N.C. Jan. 13, 2016).

¹⁴⁶ Skolnick, *supra* note 32.

¹⁴⁷ Id.

¹⁴⁸ Id.

Group, a Chinese corporation that bought out Smithfield Foods in 2013, is now the dominant corporation behind pig CAFOs in North Carolina.¹⁵⁰

The North Carolina Department of Environmental Quality (DEQ) regulates the state's Animal Feeding Operations (AFOs), which are defined such that they include pig operations with 1) at least 250 pigs and 2) a liquid animal waste management system.¹⁵¹ DEQ has also been responsible for "establish[ing] siting requirements for application setbacks from property boundaries and perennial streams since 1992."¹⁵² Almost all permitted pig CAFOs are subject to the regulations of the North Carolina Swine Waste Management System General Permit (General Permit), which contains requirements regarding operation and maintenance, monitoring and reporting, inspections, performance standards, general conditions, and penalties.¹⁵³ The substance of the General Permit comes up for revision every five years, and was renewed in 2014 "following extensive public involvement."¹⁵⁴

DEQ only agreed to regulate CAFOs after the disastrous lagoon breach of 1995, which dumped more than 20 million gallons of waste into the New River.¹⁵⁵ In 1997, North Carolina instituted a moratorium on new and expanded pig CAFOs as a result of the disaster.¹⁵⁶ This moratorium became permanent in 2007 with regard to CAFOs using or proposing to use the

¹⁵⁰ Id. (Smithfield Foods was the world's largest pig producer before the corporation sold out to WH Group).

¹⁵¹ AFO Program Summary, North Carolina Department of Environmental Quality, https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/animal-feedingoperation-permits/afo-program-summary (last accessed Apr. 10, 2017) (citing N.C. GEN. STAT. § 143-215.10B(a)). 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." § 143-215.10B(a).

 $^{^{152}}$ *Id*.

¹⁵³ North Carolina Department of Environmental Quality, *supra* note 151. Only existing CAFOs are eligible for permitting under the General Permit if they use the lagoon and sprayfield waste management system. *Id*. New or expanded CAFOs must be permitted through a separate process. *Id*.

¹⁵⁴ Id. Community members fought this renewal without success. See discussion infra section V.

¹⁵⁵ Skolnick, *supra* note 32. *See supra* note 37 and accompanying text.

¹⁵⁶ *Id.*; North Carolina Department of Environmental Quality, *supra* note 151.

lagoon and sprayfield waste management system.¹⁵⁷ The existing CAFOs, however, are still allowed to utilize this system under the General Permit.¹⁵⁸ 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."¹⁵⁹ 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.¹⁶⁰

IV. The Root of All Evil: Money As the Source of the Enforcement Gap and Law as an Instrument of Oppression

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, preventing them from passing zoning or public health ordinances to address CAFO pollution. State and federal permitting and enforcement activity is nonexistent or weak. . . .¹⁶¹

 $^{^{157}}$ Id. 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. Skolnick, *supra* note 32. This victory followed relentless hard work on the part of the community. Id.; see discussion infra section V.

¹⁵⁸ Jernigan, *supra* note 84, 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 flush 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.").

¹⁵⁹ North Carolina Department of Environmental Quality, *supra* note 151.

¹⁶⁰ Jernigan, *supra* note 84, at 35. See discussion infra section V.

¹⁶¹ Michele M. Merkel, *EPA and State Failures to Regulate CAFOs Under Federal Environmental Laws: Outline of Remarks Prepared for the National Commission on Industrial Farm Animal Production Meeting on September 11, 2006*, http://environmentalintegrity.org/pdf/publications/EPA_State_Failures_Regulate_CAFO.pdf.

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.¹⁶² 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.¹⁶³ "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."¹⁶⁴ And because Big Ag has convinced the country that industrial farms are actually 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: "[T]his regulation isn't about clean water. This massive land grab is

¹⁶² The American Farm Bureau Federation, for example, plasters photos of rolling green hills, white faces, and the American flag on their homepage. AMERICAN FARM BUREAU FEDERATION, http://www.fb.org/ (last visited Apr. 10, 2017). The website declares: "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. See* Hoover, *supra* note 67, at 9 ("The industry . . . carries out marketing campaigns that perpetuate the image of the small American farmer and avoid environmental issues, adding to the regulatory challenge.") (citing Wilson, *supra* note 63, at 541).

¹⁶³ Travis Madsen et al, *Growing Influence: The Political Power of Agribusiness and the Fouling of America's Waterways*, ENVIRONMENT AMERICA RESEARCH AND POLICY CENTER 16 (Feb. 4, 2011), http://www.environmentamerica.org/sites/environment/files/reports/Growing-Influence---low-res.pdf.

¹⁶⁴ *Id*. at 16.

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."¹⁶⁵

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."¹⁶⁶ Between 2005 and 2010, Big Ag spent \$126.9 million lobbying Congress and federal regulatory agencies.¹⁶⁷ AFBF alone spent \$33.6 million and employed 50 lobbyists who spent their time fighting the Clean Water Act and other rules affecting CAFO pollution.¹⁶⁸ In 2016, Big Ag spent \$126,242,202 lobbying.¹⁶⁹ Big Ag directed the majority of that money to Republican politicians, including \$2,091,657 to then-Republican presidential candidate Donald J. Trump.¹⁷⁰ Finally, Big Ag receives an average of \$38.4 billion in farm subsidies (also known as "corporate welfare") per year.¹⁷¹

B. North Carolina: "Captured by the Industry"¹⁷²

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

¹⁶⁵ Angela Bowman, *WOTUS Survives*, Gulf Coast Cattleman, (Jan. 20, 2016) http://www.gulfcoastcattleman.com /wotus-survives/.

¹⁶⁶ Hoover, *supra* note 67, at 9

¹⁶⁷ Madsen, *supra* note 163, at 18.

¹⁶⁸ *Id*. at 18-19.

¹⁶⁹Agribusiness, OPENSECRETS.ORG: CENTER FOR RESPONSIVE POLITICS, https://www.opensecrets.org/industries/indus.php?cycle=2016&ind=A (last visited Apr. 10, 2017).

¹⁷⁰ Id.

¹⁷¹ Simon, *supra* note 8, at 89.

¹⁷² Sue Sturgis, *Civil Rights Battle Over N.C. Hog Industry Regulation Heats Up as Negotiations Break* Down, FACING SOUTH: A VOICE FOR A CHANGING SOUTH (Mar. 9, 2016), https://www.facingsouth.org/2016/03/civil-rights-battle-over-nc-hog-industry-regulatio ("'[DEQ] has clearly been captured by the industry,' Haddix said. 'This is the opposite of how government is supposed to work.'")

government would fight for them."¹⁷³ 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.¹⁷⁴

One explanation for this closeness is that when the North Carolina tobacco industry went into decline in the 1980s, the pork industry filled the void.¹⁷⁵ 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.¹⁷⁶

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."¹⁷⁷ 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

¹⁷³ Id.

¹⁷⁴ Pat Stith et al, *Boss Hog: The Power of Pork*, THE NEWS & OBSERVER, Feb. 19, 1995, http://archive.pulitzer.org/archives/5892.

¹⁷⁵ Jernigan, *supra* note 84, at 34.

¹⁷⁶ Id. at 34 (quoting Naeema Muhammad, director of the North Carolina Environmental Justice Network).

¹⁷⁷ *Id*. at 33.

back these communities from CAFO occupation.¹⁷⁸ But alas, "over the decades, complaints have largely fallen on deaf ears."¹⁷⁹

A. Community Organizing and Information Gathering

Community members rallied together and armed themselves with information. By collaborating with Professor Steve Wing, a public health professor at the University of North Carolina, and Devon Hall, cofounder of REACH (the researchers), the communities gathered valuable data for their fight against the CAFOs.¹⁸⁰

In the Duplin Health Awareness Project,¹⁸¹ 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.¹⁸² Then, the researchers instructed community members to sit outdoors and note odor intensity and their own daily stress levels.¹⁸³ At the same time, the community members tracked their own blood pressure and lung function with medical equipment.¹⁸⁴ They recorded all of the data they collected about their surroundings, health, and well-being.¹⁸⁵ 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

¹⁸⁴ Id.

¹⁸⁵ Id.

¹⁷⁸ *Id*. at 33-34.

¹⁷⁹ *Id*. at 34.

¹⁸⁰ Skolnick, *supra* note 32. *See supra* notes 20 and 33, and accompanying text, for more of Professor Wing's research.

¹⁸¹ EPA helped fund this study through a small grant to REACH. *Grant Awards* Database, EPA (last updated Mar. 17, 2017), https://yosemite.epa.gov/oarm/igms_egf.nsf/9e9c2a5934a808d585256fb6006df292/2bad6665e2b5ab 7785257d6f0071d5e4!OpenDocument&ExpandSection=-4&Click=.

¹⁸² Skolnick, *supra* note 32.

¹⁸³ *Id*. ("Hall set up the equipment and asked residents to fill out a journal in the morning and in the evening. 'There's more activity at the CAFOs around sunrise and sunset,' Hall said. 'Usually they're flushing out the waste first thing in the morning.'").

respiratory problems, such as bronchitis, along with compromised immune systems and increased stress and anxiety."¹⁸⁶

REACH took further action to monitor air and water and to organize the community. The organization worked with Waterkeeper Alliance, who deployed Riverkeepers to take water samples from area waterways.¹⁸⁷ In addition, 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.¹⁸⁸ 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."¹⁸⁹ Ultimately, the community utilized the information and data they collected to try to prevent DEQ from renewing the General Permit in 2014.¹⁹⁰ While they did not succeed in preventing the renewal, their data did succeed in convincing DEQ from instituting the 2007 moratorium on lagoon and sprayfield CAFOs.¹⁹¹

But community mobilization and investigative efforts are not without risk. CAFO operators harassed water samplers.¹⁹² 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

¹⁸⁶ Id.

 $^{^{187}}$ *Id*.

¹⁸⁸ Id.

¹⁸⁹ *Id.* (quoting Devon Hall, cofounder of REACH).

¹⁹⁰ Jernigan, *supra* note 84, at 35.

¹⁹¹ Skolnick, *supra* note 32.

¹⁹² *Id*.

of their houses.¹⁹³ 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.¹⁹⁴ Such complaints are confidential—but nonetheless, DEQ regulators sometimes choose to expose those who make them.¹⁹⁵ In the most egregious incident of harassment, a CAFO operator entered "the home of an elderly African American woman and sh[ook] the chair she sat in while threatening her and her family with physical violence if they continued to complain about the odors and spray."¹⁹⁶

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.¹⁹⁷ This was the last straw. "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.'"¹⁹⁸

In September 2014, Earthjustice and the University of North Carolina Center for Civil Rights, representing Waterkeeper Alliance, NCEJN, and REACH (Citizens), filed a complaint

¹⁹³ Lisa Sorg, *EPA to NC DEQ: "Grave Concerns" About Swine Industry's Intimidation of Minority Residents*, NC POLICY WATCH (Jan. 25, 2017), http://www.ncpolicywatch.com/2017/01/25/epa-nc-deq-grave-concerns-swine-industrys-intimidation-minority-residents/.

¹⁹⁴ Skolnick, *supra* note 32.

¹⁹⁵ Id.

 ¹⁹⁶ Sue Sturgis, A Step Toward Environmental Justice in North Carolina's Hog Country, FACING SOUTH (Feb. 3, 2017), https://www.facingsouth.org/2017/02/step-toward-environmental-justice-north-carolinas-hog-country.
 ¹⁹⁷ Jernigan, *supra* note 84, at 35.

¹⁹⁸ *Id.* Jernigan, supra note 84, at 35 (quoting Naeema Muhammad, director of the North Carolina Environmental Justice Network). *See* North Carolina Department of Environmental Quality, *supra* note 154 and accompanying text.

(Complaint)¹⁹⁹ 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)²⁰⁰ and its implementing regulations.²⁰¹ 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.²⁰² In their complaint, the groups allege that "the State's lax regulation of hogwaste 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."²⁰³

In February 2015, ECRCO began investigating DEQ on the basis of the Complaint.²⁰⁴ In March, the Citizens and DEQ agreed to enter into alternative dispute resolution, funded by the EPA.²⁰⁵ 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.²⁰⁶ The Citizens objected to industry involvement in the mediation:

¹⁹⁹ Complaint from Marianne Engelman Lado and Loceylyn D'Ambrosio, attorneys, Earthjustice, to Gina McCarthy, Administrator, EPA, and Velveta Golightly-Howell, Director, Office of Civil Rights, EPA (Sep. 3, 2014), http://earthjustice.org/sites/default/files/files/North-Carolina-EJ-Network-et-al-Complaint-under-Title-VI.pdf.

²⁰⁰ *Id.* (discussing Title VI, 42 U.S.C. § 2000d (2016), which prohibits states from discriminating based on race, color, or national origin with regard to state programs that receive federal tax dollars).

²⁰¹ 40 C.F.R. Part 7 (2016).

²⁰² Id.

²⁰³ *Id*. (citing Complaint).

²⁰⁴ Sorg, *supra* note 193.

 $^{^{205}}$ Id.

²⁰⁶ 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://civileats.com/2016/03/23/is-north-carolina-the-next-flint-groups-say-the-hog-industry-disproportionate-impacts-on-people-of-color-in-the-state/ ("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.") (quoting Elizabeth Haddix, attorney at the University of North Carolina Center for Civil Rights).

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.²⁰⁷

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.²⁰⁸ Earthjustice attorney Elizabeth 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.'"²⁰⁹ 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.²¹⁰ The Citizens withdrew from mediation in March 2016 and the negotiations broke down.²¹¹

In May 2015, ECRCO reinstated its DEQ investigation.²¹² The Citizens filed an additional complaint (Second Complaint)²¹³ against DEQ in July, alleging that the agency "engaged in and failed to protect [the Citizens] from intimidation, which is prohibited by Title VI

²⁰⁷ Id.

²⁰⁸ Id.

²⁰⁹ Lisa Sorg, *EPA Office of Civil Rights Investigating Intimidation Claims Against DEQ*, NC Policy Watch (Sep. 21, 2016), http://www.ncpolicywatch.com/2016/09/21/epa-office-of-civil-rights-investigating-intimidation-claims-against-deq-national-producers/.

²¹⁰ *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).

²¹¹ Sorg, *supra* note 193.

 $^{^{212}}$ Id.

²¹³ Complaint from Marianne Engelman Lado, Senior Staff Attorney, and Alexis Andiman, Associate Attorney, Earthjustice, to Lilian Dorka, Deputy Director, Acting Assistant Director, Office of Civil Rights, EPA (Jul. 11, 2016), http://www.ncpolicywatch.com/wp-content/uploads/2016/09/July-11-2016-Letter-from-enviros-to-EPA-OCR.pdf.

and EPA regulations, 40 C.F.R. § 7.100."²¹⁴ The letter discussed the long history of the pork industry using intimidation tactics against residents of eastern North Carolina.²¹⁵ In August, ECRCO agreed to investigate DEQ based on the Second Complaint.²¹⁶ DEQ requested that the original complaint be dismissed, but ECRCO declined to do so.²¹⁷ In October, twenty community representatives drove to Washington, D.C. to share their story with EPA and members of Congress.²¹⁸ 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.²¹⁹

Finally, in January of 2017, the ECRCO took an "unprecedented step"²²⁰ and sent an official Letter of Concern to DEQ.²²¹ In the letter, the 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."²²² ECRCO also expressed "grave concerns about these reports indicating a potential hostile and intimidating environment

²¹⁹ Id.

²²² *Id*. at 1.

²¹⁴ *Id*. at 1.

²¹⁵ *Id.* at 9. One such story is that 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. *Id.* (quoting Ms. Branch). *See* Sturgis, *supra* note 196 (describing another incident of intimidation against an elderly African American woman).

²¹⁶ Sorg, *supra* note 193.

²¹⁷ Id.

²¹⁸ Id.

²²⁰ Id.

²²¹ Letter of Concern from Lilian Dorka, Director, External Civil Rights Compliance Office, Office of General Counsel, EPA to Marianne William G. Ross, Jr., Acting Secretary, North Carolina Department of Environmental Quality (Jan. 12, 2017), https://assets.documentcloud.org/documents/3381929/NCDEQ-Letter-of-Concern-from-EPA.pdf.

for anyone seeking to provide relevant information to NC DEQ or EPA."223 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.²²⁴

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.²²⁵ 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."²²⁶

²²³ *Id*. at 8.

²²⁴ *Id.* (discussing Letter of Concern, *supra* note 221, at 11-12).

²²⁵ Id. ("[I]t's unlikely 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 22 years.") (citing *Environmental Justice*, *Denied*, CENTER FOR PUBLIC INTEGRITY, https://www.publicintegrity.org/environment/environmental-justice-denied) (report actually states that EPA has made zero findings of discrimination in 22 years). See Talia Buford & Kristen Lombardi, *Environmental Justice*, *Denied: Report Slams EPA Civil Rights Compliance*, CENTER FOR PUBLIC INTEGRITY (Sep. 23, 2016), https://www.publicintegrity.org/2016/09/23/20256/report-slams-epa-civil-rights-compliance.

²²⁶ Id.

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.²²⁷ At the same time, both houses of Congress remained under Republican domination.²²⁸ 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 includes an External Civil Rights Compliance Office reduction of \$268,000 and 11 full time employees.²²⁹ The EPA has issued a plan to lay off 24% of its employees and eliminate 56 programs.²³⁰ Thus, it may be necessary for communities seeking to protect themselves from CAFOs to focus on state law for 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.²³¹ 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.

²²⁷ Matt Flegenheimer and Michael Barbaro, *Donald Trump Is Elected President In Stunning Repudiation of the Establishment*, N.Y. TIMES, Nov. 9, 2016, https://www.nytimes.com/2016/11/09/us/politics/hillary-clinton-donald-trump-president.html?_r=0.

²²⁸ Jennifer Steinhauer, *Republicans, Buoyed by Trump's Performance, Keep Control of Senate*, N.Y. TIMES, Nov.
9, 2016, https://www.nytimes.com/2016/11/09/us/politics/republican-senate.html; *House Election Results: G.O.P. Keeps Control*, N.Y. TIMES, Feb. 10, 2017, https://www.nytimes.com/elections/results/house.

²²⁹ Memorandum from David A Bloom, Acting Chief Financial Officer, EPA, to Acting General Counsel, Acting Assistant Administrators, Inspector General Chief of Staff, and Acting Regional Administrators, EPA (Mar. 21, 2017).

²³⁰ Juliet Eilperin et al, *New EPA Documents Reveal Even Deeper Proposed Cuts to Staff and Programs*, WASHINGTON POST, Mar. 31, 2017, https://www.washingtonpost.com/news/energy-environment/wp/2017/03/31/ new-epa-documents-reveal-even-deeper-proposed-cuts-to-staff-and-programs/?utm_term=.5030c31e220d.

²³¹ In His First 100 Days, Cooper Has Made A Strong Start By Following a Positive Agenda, RALEIGH NEWS & OBSERVER (Apr. 10, 2018) http://www.newsobserver.com/opinion/editorials/article143824124.html. It is important to note, however, that Governor Cooper faces a veto-proof majority in the state legislature. *Id*.

There are several ways community members might move forward in this state-level fight. 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. This is likely to be difficult at present, however, as there is evidence that the Republican legislature suppresses the votes of North Carolinians of color²³² and gerrymanders districts along racial lines.²³³ Fortunately, there are ongoing legal challenges to both of these barriers to the full participation and representation of marginalized North Carolina communities.²³⁴ 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.

²³² Julia Craven, *North Carolina NAACP Sues State Over Voter Suppression*, HUFFINGTON POST, Oct. 31, 2017, http://www.huffingtonpost.com/entry/north-carolina-naacp-voter-suppression_us_5817634fe4b064e1b4b385d.

²³³ Vann R. Newkirk II, *What Early Voting in North Carolina Actually* Reveals, THE ATLANTIC, Nov. 8, 2016, https://www.theatlantic.com/politics/archive/2016/11/north-carolina-early-voting/506963/.

²³⁴ See, e.g., Covington v. North Carolina, 316 F.R.D. 117 (M.D.N.C. 2016) (evidence supports finding of racial gerrymandering in North Carolina), U.S. S. Ct. appeal filed, No. 16-649 (Nov. 14, 2016); N.C. State Conference of NAACP v. McCrory, 831 F.3d 204 (4th Cir. 2016) (reversing and remanding to district court with directions to enjoin North Carolina election reform law that imposed photo ID requirement and other barriers to voting because weight of evidence indicated the law was motivated by discriminatory intent of North Carolina General Assembly), *petition for cert filed*, No. 16-833 (Dec. 27, 2016); Harris v. McCrory, 159 F. Supp. 3d 600 (M.D.N.C. 2016) (North Carolina redistricting was predominantly motivated by race and constituted impermissible gerrymandering in violation of Equal Protection Clause), U.S. S. Ct. appeal filed sub nom. Cooper v. Harris, No. 15-1262 (Feb. 8, 2016).

VI. Conclusion

CAFOs are major polluters that exploit and endanger the vulnerable communities they occupy. 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.

In order 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 is able to 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. 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.

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.

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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 the threat that CAFOs pose and take measures to control that threat. CAFOs fuel climate change, wantonly torture sentient non-human animals, harm human health, and trample the civil rights of members of communities who have faced systemic oppression for centuries. Big Ag manipulates our political system and exploits taxpayers for tremendous profit. And while it is true that more CAFO regulation may increase the cost of meat and dairy at the checkout counter, this cost is dwarfed in comparison to the hidden price we have already been paying for decades.