

COMING HOME TO ROOST: HOW THE CHICKEN
INDUSTRY HURTS CHICKENS, HUMANS,
AND THE ENVIRONMENT

By
Bruce Friedrich & Stefanie Wilson*

The chicken industry is harming animals, befouling our environment, exploiting farmers and workers, and harming human health. In this Article, we discuss the harms and some of the solutions. In Part I, we discuss animal welfare, both on the farm and at slaughter. In Part II, we discuss the environment, both local and global. In Part III, we discuss human rights, with a focus on chicken growers, slaughterhouse workers, and the global poor. In Part IV, we discuss the effect of chicken consumption on human health. In each of our first four Sections, we offer a few examples of actions that creative lawyers are taking in an effort to mitigate some of the discussed harm. Finally, in Part V, we discuss our belief that the U.S. Department of Agriculture (USDA) is ‘captured’ by the industries it is supposed to regulate, leading to under-regulation. We conclude that, while the tireless efforts of lawyers, activists, and organizations to ameliorate industry and agency failures are critical, the best that can be done through litigation and other forms of policy action is to mitigate the harm caused by the poultry industry.

I. INTRODUCTION	104
II. ANIMALS	105
A. <i>The Numbers: Basically, All Slaughtered Land Animals are Chickens</i>	106
B. <i>Smarter Than a 4-Year-Old: Chicken Ethology</i>	107
C. <i>Chicken Abuse on the ‘Farm’</i>	108
D. <i>Chicken Abuse at Slaughter</i>	111

* * © Bruce Friedrich & Stefanie Wilson 2016. Bruce Friedrich, J.D., magna cum laude, Georgetown University Law Center. Executive Director, The Good Food Institute. Stefanie Wilson, J.D., summa cum laude, University of California, Irvine, School of Law. Litigation Fellow, Animal Legal Defense Fund. We were helped in understanding the issues and what is being done to address them by many brilliant, committed, and creative lawyers. In alphabetical order, we would like to express particular appreciation for your work and assistance to Hannah Connor from the Humane Society of the United States, Jessica Culpepper from Public Justice, Scott Edwards from Food and Water Watch, Stephanie Feldstein from the Center for Biological Diversity, Prof. Thomas Fritzsche from the Cardozo School of Law, Sara Rich from the Southern Poverty Law Center, and Paige Tomaselli from the Center for Food Safety. We also would like to thank Akhil Sheth and the Animal Law Review editors, especially Audrey Clungeon, Colby Stewart, Tyler Lobdell, and Malorie Sneed for their insightful comments and edits.

	<i>E. Humane Certified, Organic, and Kosher Provide False Comfort</i>	115
	<i>F. Strategies for Change</i>	117
III.	THE ENVIRONMENT	119
	<i>A. Basic Inefficiency and Consequences</i>	119
	<i>B. Strategies for Change</i>	121
	1. <i>Transparency-Based Litigation</i>	123
	2. <i>Clean Water Act Litigation</i>	125
	3. <i>Clean Air Act Litigation</i>	126
	4. <i>CERCLA and EPCRA Litigation</i>	128
IV.	HUMAN RIGHTS	129
	<i>A. Feudalism for the Post-War Era: Contract Growers</i>	129
	<i>B. Dangerous Conditions and Worker Exploitation in Slaughter and Processing</i>	132
	<i>C. Inefficiency Revisited: How The Poultry Industry Drives Global Hunger</i>	136
	<i>D. Strategies for Change</i>	138
	1. <i>Packers and Stockyards Act, Class Action Suits</i>	138
	2. <i>Occupational Safety and Health Act Complaints</i>	139
	3. <i>Petitions for Rulemaking</i>	141
V.	HUMAN HEALTH	142
	<i>A. Fat, Sick, and Dying: the American Diet</i>	142
	1. <i>Cancer</i>	143
	2. <i>Heart Disease</i>	144
	3. <i>Obesity, Diabetes, and Other Diseases of Affluence</i>	146
	<i>B. Outbreaks and Epidemics: The Twin Problems of Contamination and Drug Use</i>	147
	1. <i>There's Sh*t in the Meat</i>	147
	2. <i>This is Your Chicken on Drugs</i>	151
	<i>C. Strategies for Change</i>	154
VI.	FRIENDS IN HIGH PLACES	157
	<i>A. The USDA and Agribusiness: A "Revolving Door"</i>	157
	1. <i>The Industry's Influence Over the Nutritional Guidelines</i>	159
	2. <i>The USDA's Failure to Ensure Food Safety</i>	161
	<i>B. EPA and Capture</i>	162
VII.	CONCLUSION	163

I. INTRODUCTION

In 1928, the Hoover presidential campaign claimed that Republican prosperity had placed “the proverbial ‘chicken in every pot.’”¹ At that time, each American consumed approximately 10 pounds of chicken per year.² Today, we consume 84.7 pounds of chicken per capita annually, and chicken is by far the most commonly consumed meat

¹ *A Chicken for Every Pot*, N.Y. TIMES, Oct. 30, 1928 (available at <https://research.archives.gov/id/187095> (accessed Oct. 4, 2015)).

² USDA Economic Research Service, *Major Trends in U.S. Food Supply, 1909–11*, 23 FOOD REVIEW 8, 11 (2000) (available at <http://ers.usda.gov/publications/foodreview/jan2000/frjan2000b.pdf> [<http://perma.cc/Q5D3-2QM2>] (accessed Oct. 4, 2015)).

in America.³ Our consumption translates into nearly 9 billion chickens slaughtered in the U.S. each year.⁴

In Hoover's time, chickens in pots, like cars in garages, were a sign of prosperity.⁵ What could be the downside of limitless chicken consumption? Today, factory chicken production has brought with it a host of problems, and also a variety of creative advocacy tactics to address some of these problems, a few of which we will examine in this Article.

In Part I, we discuss animal welfare, both on the farm and at slaughter. In Part II, we discuss the environment, both local and global. In Part III, we discuss human rights, with a focus on chicken growers, slaughterhouse workers, and the global poor. In Part IV, we discuss the effect of chicken consumption on human health. In each of our first four Parts, we offer examples of actions that creative lawyers are taking in an effort to mitigate some of the discussed harm. We are delighted to report that there is enough creative activity in each of these areas for scores of additional law review articles—in each Section, we discuss just a few of the efforts that strike us as particularly noteworthy. Finally, in Part V, we discuss agency capture: the theory that the agencies that are supposed to be protecting animals, the environment, and the public are 'captured' by those industries, leading to under-regulation. We conclude that while the tireless efforts of lawyers, activists, and organizations to police industry and agency failures are critical, the best that can be done is to mitigate the harm caused by the poultry industry.

II. ANIMALS

In the popular online video "Glass Walls," produced by People for the Ethical Treatment of Animals (PETA), Sir Paul McCartney states that "chickens and turkeys are arguably the most abused animals on the face of the planet."⁶ We agree with Sir Paul; indeed, the principal reason that we are concerned about the chicken industry, and the reason we are writing about it for *Animal Law*, is the abuse of animals. In this Part, we discuss the following: the number of chickens killed and

³ NAT'L AGRIC. STATISTICS SERV., POULTRY SLAUGHTER: 2014 SUMMARY 4–5 (Feb. 2015) (available at <http://usda.mannlib.cornell.edu/usda/current/PoulSlauSu/PoulSlauSu-02-25-2015.pdf> [<http://perma.cc/9BKT-FBEM>] (accessed Nov. 3, 2015)); *Per Capita Consumption of Poultry and Livestock, 1965 to Estimated 2016, in Pounds*, NAT'L CHICKEN COUNCIL, <http://www.nationalchickencouncil.org/about-the-industry/statistics/per-capita-consumption-of-poultry-and-livestock-1965-to-estimated-2012-in-pounds/> [<http://perma.cc/QU6V-NW24>] (updated July 10, 2015) (accessed Oct. 18, 2015).

⁴ *The United States Meat Industry at a Glance*, N. AM. MEAT INST., <http://www.meatami.com/ht/d/sp/i/47465/pid/47465> [<http://perma.cc/PNK6-2SP9>] (2015) (accessed Oct. 4, 2015).

⁵ *A Chicken for Every Pot*, *supra* note 1.

⁶ People for the Ethical Treatment of Animals, *Official "Glass Walls" Video by Paul McCartney* at 0:55, YOUTUBE, <https://www.youtube.com/watch?t=25&v=ql8xkSYvwJs> (Apr. 12, 2013) (accessed Oct. 4, 2015).

what that means for how we think about farm animal protection; the complexity of chicken emotion, behavior, and cognition; the suffering that chickens experience on farms and in slaughterhouses; and finally, some of the actions that animal protection groups are currently taking to try to decrease cruelty to chickens.

A. *The Numbers: Basically, All Slaughtered Land Animals are Chickens*

In 2013, Americans consumed approximately 9 billion chickens and 300 million turkeys,⁷ 112 million pigs, 34 million cattle, and 2 million other animals.⁸ In the very first paragraph of his introduction to his collection of essays about animal law, in a section titled, “Dogs, Cats, and Hypocrisy,” Professor Cass Sunstein notes that “through their daily behavior, people who love [their] pets, and greatly care about their welfare, help ensure short and painful lives for millions, even billions of animals [who] cannot easily be distinguished from dogs and cats.”⁹ Animal protection advocates often discuss the billions of animals killed annually for food without noting that the number would not crack 150 million without the inclusion of fish and poultry; indeed, more than 98% of land animals slaughtered in 2012 were birds.¹⁰

In the chapter of Professor Sunstein’s animal law collection that focuses on farm animals, David Wolfson and Mariann Sullivan write that “[f]rom a statistician’s point of view, since farmed animals represent 98[%] of all animals (even including companion animals and animals in zoos and circuses) with whom humans interact in the U.S., all animals are farmed animals; the number that are not [farm animals] is statistically insignificant.”¹¹ Their logic is fair, and so it is worth extrapolating from it to note that, “from a statistician’s point of

⁷ POULTRY SLAUGHTER: 2014 SUMMARY, *supra* note 3, at 5. More than 99% of poultry slaughter occurs under federal inspection at approximately 300 slaughter plants. *Id.* at 35.

⁸ NAT’L AGRIC. STATISTICS SERV., LIVESTOCK SLAUGHTER: 2013 SUMMARY 6 (Apr. 2014) (available at <http://usda.mannlib.cornell.edu/usda/nass/LiveSlauSu//2010s/2014/LiveSlauSu-04-21-2014.pdf> [<http://perma.cc/8FBE-GSQ2>] (accessed Oct. 4, 2015)) (32.5 million cattle, 762,000 calves, 112.1 million pigs, 2.32 million sheep and lambs). According to the USDA, approximately 99% of slaughtered mammals are killed in USDA-inspected plants. *Id.*

⁹ Cass R. Sunstein, *Introduction: What are Animal Rights?*, in ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS 3 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford University Press 2004).

¹⁰ See NAT’L AGRIC. STATISTICS SERV., LIVESTOCK SLAUGHTER: 2012 SUMMARY 6 (Apr. 2013) (available at <http://usda.mannlib.cornell.edu/usda/nass/LiveSlauSu//2010s/2013/LiveSlauSu-04-22-2013.pdf> [<http://perma.cc/YGQ6-6MWX>] (accessed Oct. 18, 2015)) (reporting that the number of animals slaughtered during 2012 for each species was: 33 million cattle; 772,100 calves; 113.2 million hogs; and 2.18 million sheep, a total of 149.1 million animals).

¹¹ David Wolfson & Mariann Sullivan, *Foxes in the Hen House; Animals, Agribusiness, and the Law: A Modern American Fable*, in ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS 205–07 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford University Press 2004).

view,” since more than 98% of land animals slaughtered are poultry, all slaughtered land animals are poultry.

We do not mean to discount the suffering of other animals who are killed for food. We are opposed to killing animals for food, period, and if just one restaurant in the U.S. were to begin serving dog or cat meat, we would support the majority of Americans who would be outraged, despite the very small number of animals killed. We are only noting that for the animal movement, the same cogent arguments supporting the assertion that we can maximize our impact on animal suffering by focusing our efforts on farm animals¹² can also be made to explain why the poultry industry should be getting more of our attention than it is.

B. *Smarter Than a 4-Year-Old: Chicken Ethology*

There is no moral or ethical difference between cruelty to a chicken and cruelty to a kitten. Chickens have unique personalities, and they actually outperform both dogs and cats on tests of cognitive and behavioral sophistication.¹³ Primatologist Dr. Jane Goodall wrote the introduction to a beautiful book about farm animal cognition, emotion, and behavior, titled *The Inner World of Farm Animals: Their Amazing Social, Emotional, and Intellectual Capacities*. She ends her reflection by writing,

farm animals feel pleasure and sadness, excitement and resentment, depression, fear, and pain. They are far more aware and intelligent than we ever imagined and, despite having been bred as domestic slaves, they are individual beings in their own right. As such, they deserve our respect. And our help. Who will plead for them if we are silent?¹⁴

Compared to the great deal of scientific research about cognition and sentience in cetaceans, great apes, elephants, and dogs, little has been done to study these traits in chickens. But the work that has been done indicates that chickens may well be the smartest animals in the barnyard. For example, Professor Christine Nicol of the University of Bristol concluded that chickens exhibit complex social structures and methods of communication, social learning, behavioral flexibility, empathy, an understanding of object permanence, the logic of transitive inference, and the ability to plan ahead and exhibit self-control.¹⁵

¹² *Id.*; see also Gaverick Matheny & Cheryl Leahy, *Farm-Animal Welfare, Legislation, and Trade*, 70 LAW & CONTEMP. PROBS. 325, 326 (2007) (noting that the number of farm animals in the U.S. far exceeds the number of animals kept for any other exploitative purpose).

¹³ Bruce Friedrich, *Chickens: Smarter Than a Four-Year-Old*, N.Y. DAILY NEWS (Aug. 16, 2013) (available at <http://www.nydailynews.com/opinion/chickens-smarter-four-year-old-article-1.1428277> (accessed Oct. 4, 2015)).

¹⁴ Jane Goodall, *Foreword* to AMY HATKOFF, *THE INNER WORLD OF FARM ANIMALS* 13 (Kristen Latta ed., 2009).

¹⁵ Christine Nicol and Robbi l’Anson Price, *The Intelligent Hen* (June 2013) (unpublished manuscript) (on file with authors); see also Carolynn L. Smith & Sarah L. Zielinski, *Brainy Bird*, SCI. AM. (Feb. 2014) (available at <http://www.scientificamerican.com/article/the-startling-intelligence-of-the-common-chicken> [<http://perma.cc/6J5G-EE39>]).

In some of these areas, chickens were able to accomplish cognitive tasks that humans do not generally develop until they are approximately four years old.¹⁶ Professor Nicol explains:

“The question of whether an animal is able to think about the past or the future is of great importance when considering their intelligence The ability to show self-control in these scenarios emerges [for human children] at around 4 years of age [and] . . . not all children are capable of it. This opens up the possibility that chickens might be superior to children in terms of their ability to execute self-control.”¹⁷

C. *Chicken Abuse on the ‘Farm’*¹⁸

The chicken industry has become largely industrialized and, as a result, the animals suffer miserably. In December 2014, *New York Times* columnist Nicholas Kristof took an inside look at modern broiler production:

These chickens don’t run around or roost as birds normally do. They stagger a few steps, often on misshapen legs, and then collapse onto the excrement of tens of thousands of previous birds. It is laden with stinging ammonia that seems to eat away at feathers and skin [so that] the bellies of nearly all the chickens have lost their feathers and are raw, angry, red flesh. The entire underside of almost every chicken is a huge, continuous bed sore.¹⁹

Kristof’s reflection echoes that of *New Yorker* staff writer Michael Specter roughly ten years earlier:

I was almost knocked to the ground by the overpowering smell of feces and ammonia. My eyes burned and so did my lungs, and I could neither see nor breathe There must have been thirty thousand chickens sitting silently on the floor in front of me. They didn’t move, didn’t cluck. They were

(accessed Oct. 4, 2015)) (describing the complex social structures and communication patterns of chickens); Jennifer Viegas, *Chickens Worry About the Future*, DISCOVERY NEWS (July 15, 2005) (available at <http://www.abc.net.au/science/articles/2005/07/15/1415178.htm> [<http://perma.cc/35KX-BUHB>] (accessed Oct. 4, 2015)) (illustrating the cognition of chickens through their ability to delay gratification); William Grimes, *If Chickens Are So Smart, Why Aren’t They Eating Us?*, N.Y. TIMES (Jan. 12, 2003) (available at <http://www.nytimes.com/2003/01/12/weekinreview/if-chickens-are-so-smart-why-aren-t-they-eating-us.html> (accessed Oct. 4, 2015)) (noting that people commonly attribute the level of intelligence that chickens exhibit to monkeys).

¹⁶ Nicholas Kristof, *Are Chicks Brighter Than Babies?*, N.Y. TIMES (Oct. 19, 2013) (available at <http://www.nytimes.com/2013/10/20/opinion/sunday/are-chicks-brighter-than-babies.html> (accessed Oct. 4, 2015)); Friedrich, *supra* note 13.

¹⁷ Nicol & Price, *supra* note 15.

¹⁸ Although the poultry houses where the chickens are grown are sometimes conventionally referred to as ‘farms’ and the persons who own the houses and land where the chickens are grown (but not much else) are sometimes called ‘farmers,’ industrial chicken houses are nothing like the bucolic images conjured by the term.

¹⁹ Nicholas Kristof, *Abusing Chickens We Eat*, N.Y. TIMES (Dec. 3, 2014) (available at <http://www.nytimes.com/2014/12/04/opinion/nicholas-kristof-abusing-chickens-we-eat.html?ref=opinion> (accessed Oct. 4, 2015)).

almost like statues of chickens, living in nearly total darkness, and they would spend every minute of their six-week lives that way.²⁰

Kristof sums up the situation: “Torture a single chicken and you risk arrest. Abuse hundreds of thousands of chickens for their entire lives? That’s agribusiness.”²¹

Reading the American Society for the Prevention of Cruelty to Animals’ (ASPCA) report on the chicken industry, it becomes clear that Kristof and Specter were not being hyperbolic; indeed, chickens now appear to be—to quote the ASPCA—“bred to suffer.”²² Chickens, who would normally live eight to ten years, are now killed after just six or

²⁰ Michael Specter, *The Extremist*, NEW YORKER, Apr. 14, 2003, at 60 (available at <http://www.newyorker.com/magazine/2003/04/14/the-extremist> [<http://perma.cc/J4WN-F5G2>] (accessed Oct. 4, 2015)).

²¹ Kristof, *supra* note 19. Of course, these are all standard abuses. As with all other investigations into modern farms, undercover investigations consistently document sadistic abuse that cannot be explained by economics. As the authors were finalizing a draft of this article, Mercy For Animals released an investigation into a Tyson farm that documented workers hitting chickens with metal clubs that had nails on the end, impaling the animals and tossing them alive into buckets to bleed or dehydrate to death. Sadistic cruelty appears to be the norm, not the exception, on modern farms and in modern slaughterhouses. Mercy for Animals, *Hidden-Camera Exposes Disgusting Secret Behind McDonald’s Chicken McNuggets*, YOUTUBE, <https://www.youtube.com/watch?v=-UWcQLtpAKU> (Aug. 26, 2015) (accessed Oct. 6, 2015).

²² AM. SOC’Y FOR THE PREVENTION OF CRUELTY TO ANIMALS, A GROWING PROBLEM: SELECTIVE BREEDING IN THE CHICKEN INDUSTRY: THE CASE FOR SLOWER GROWTH, 2 (2015) (available at http://www.aspc.org/sites/default/files/chix_white_paper_lores.pdf [<http://perma.cc/RLA9-ZCLV>] (accessed Oct. 6, 2015)) [hereinafter ASPCA REPORT]; see also HUMANE SOC’Y OF THE U.S., AN HSUS REPORT: THE WELFARE OF ANIMALS IN THE CHICKEN INDUSTRY 1 (2013) (available at http://www.humanesociety.org/assets/pdfs/farm/welfare_broiler.pdf [<http://perma.cc/2YXP-ZZNC>] (accessed Oct. 4, 2015)) (reporting on the abysmal conditions chickens are raised in) [hereinafter HSUS WELFARE REPORT]. For video documentation of the conditions described, see Compassion Over Killing’s undercover investigations: *Buried Alive: COK Investigation Uncovers Shocking Cruelty to Chickens at NC Factory Farm*, COMPASSION OVER KILLING, <http://cok.net/inv/pilgrims/> (accessed Oct. 6, 2015) (showing undercover video of unmarketable chickens buried alive in trash pits, live chickens dumped into waste buckets with corpses, workers violently throwing live chickens across the barn; local law enforcement declined to bring any charges); *Investigation Exposes Cruelty to Baby Birds Inside “Humane” Bell & Evans Hatchery*, COMPASSION OVER KILLING, <http://cok.net/inv/bell-and-evans/> (accessed Oct. 6, 2015); *COK Uncovers Cruelty to Chicks & Ducklings: Cal-Cruz Hatcheries Closes Down*, COMPASSION OVER KILLING, <http://cok.net/inv/cal-cruz/> (accessed Oct. 6, 2015) (“A chick drowning in a bucket of liquid waste, birds entangled in machinery, their dead bodies mangled, decapitated, or missing limbs, sick or severely injured birds left to suffer for hours, unwanted hatchlings dumped down the egg shell disposal chute, then sprayed with a high-pressure hose, birds thrown five to six feet across the room into buckets where they often languished for hours”; investigative documents turned over to law enforcement, who refused to prosecute); Mercy for Animals, *SHOCKING! Chick-fil-A Suppliers Caught on Hidden-Camera Torturing Animals*, YOUTUBE, https://www.youtube.com/watch?v=7cHbi_IRYpo (Nov. 19, 2014) (accessed Nov. 13, 2015) (documenting standard practices such as illness and injury due to conditions in factory farms, catchers violently throwing chickens by their necks and legs into transport crates, bones broken during hanging onto the slaughter line, and the red carcasses of birds who have been scalded alive).

seven weeks.²³ Despite being infants, genetic breeding causes the animals to grow exponentially more quickly than they would naturally. University of Arkansas poultry scientists have explained that were a human child to grow as quickly as a modern chicken, she would weigh 660 pounds by the time she was two months old.²⁴

At this rate of growth, the animals' vital organs and limbs cannot support their massive bodies,²⁵ and they are "[b]arely able to move at just a few weeks old."²⁶ The ASPCA explains: "They often walk slowly and unsteadily, becoming out of breath from the slightest exertion, and grow progressively weaker, often spending the final portion of their lives lying in their own waste, unwilling or unable to walk even a few steps."²⁷ Living in their own filth leads to open sores all over the animals' bodies, deep ulcers, abscesses, foot lesions, and a host of other problems based on living in their ammonia-laden waste.²⁸ Dr. John Webster, a professor of animal husbandry in the veterinary school at the University of Bristol, sums up the almost unimaginable reality that is modern chicken production: "This must constitute, in both magnitude and severity, the single most severe, systematic example of man's inhumanity to another sentient animal."²⁹

Perhaps especially shocking is what the industry calls 'Green Muscle Disease,' which is "a condition where the breast muscles hemorrhage and may even die and atrophy inside the body, turning purple, green or brown."³⁰ Agriculture reporter Christopher Leonard may be describing acute Green Muscle Disease in a story he tells about a chicken farmer whose birds were all dying: "Their bodies were like soft, purple balloons by the time she gathered them. They fell apart to the touch, legs sloughing off the body when she tried to pick them up She kept calling the Tyson field men, asking them to come and inspect the buckets of liquefying birds."³¹

These well-documented growing conditions for broiler chickens demonstrate the most troubling aspect of advocating on behalf of these animals. While we can ban the cages and crates that egg-laying hens, breeding sows, and veal calves are kept in, and make other incremen-

²³ ASPCA REPORT, *supra* note 22, at 3.

²⁴ R.F. Wideman et al., *Pulmonary Arterial Hypertension (Ascites Syndrome) in Broilers: A Review*, 92(1) POULTRY SCI. 64, 65 (2013).

²⁵ ASPCA REPORT, *supra* note 22, at 5–6 ("While from the outside, their bodies are adult-sized, their organs and bones are much smaller and do not grow quickly enough to support their massive muscles. After only a few weeks, there is evidence that the birds' skeletons and organs cannot keep up: Their hearts, lungs and legs strain to work under severe pressure, causing severely low stamina, shortness of breath, trouble standing and walking, collapse and even congestive heart failure.").

²⁶ *Id.* at 2.

²⁷ *Id.* at 7.

²⁸ *Id.* at 7–8.

²⁹ HSUS WELFARE REPORT, *supra* note 22, at 11.

³⁰ ASPCA REPORT, *supra* note 22, at 9.

³¹ CHRISTOPHER LEONARD, *THE MEAT RACKET: THE SECRET TAKEOVER OF AMERICA'S FOOD BUSINESS* 19 (2014).

tal changes to improve the welfare of those animals while they continue to be raised for meat, for the broiler chicken it is her own body that is her cage and the root cause of much of her suffering. While the Animal Welfare Institute (AWI), Compassion in World Farming (CWF), the ASPCA, and others are working to require that organic and 'humane'-labeled meat not come from fast-growing breeds, even if they are successful, such efforts will affect only a tiny percentage of these animals. There does not appear to be a solution to the problem, at least in the near term. Thus, the best—and maybe the only—way to improve the welfare of the modern broiler chicken during her time on the farm is for her to not exist at all.

D. *Chicken Abuse at Slaughter*

Although slaughter is over quickly in comparison to the six to seven weeks of unmitigated misery that constitutes chickens' lives, the very clear and egregious abuse that occurs in the poultry slaughter process is worthy of discussion. As noted, roughly 9 *billion* birds are slaughtered each year,³² compared to 150 million mammals.³³

The problems begin on the 'farm,' where animals are gathered by workers who grab three to four animals in each hand and throw them aggressively into transport crates.³⁴ The process is undoubtedly terrifying and painful for the animals since—as noted—most are already suffering from leg deformities and other injuries.³⁵ Then, the animals are trucked through various weather extremes to slaughterhouses where they often wait for hours in the freezing cold or blistering heat.³⁶

Once inside the slaughterhouse, birds are dumped out of the transport crates onto a conveyor belt, snapped into metal shackles, paralyzed by a painful electric shock, and killed by having their throats slit. Each stage causes extreme pain, and all would be illegal under federal law if they were pigs or cattle instead of chickens.³⁷ Chickens are shackled at such a breakneck pace that one really must see it to believe it.³⁸ The animals are aggressively slammed into metal

³² N. AM. MEAT INST., *supra* note 4.

³³ NAT'L AGRIC. STATISTICS SERV., *supra* note 8, at 6.

³⁴ HSUS WELFARE REPORT, *supra* note 22, at 8.

³⁵ *Id.* at 8–9.

³⁶ *Id.*

³⁷ Animals must be unconscious before they can be processed according to the Humane Methods of Livestock Slaughter Act (HMSA), unless they are slaughtered in accordance with religious ritual requirements. 7 U.S.C. § 1902 (2014). Although government enforcement of the requirements of the HMSA is bad, it is not nonexistent. Bruce Friedrich, *When the Regulators Refuse to Regulate: Pervasive USDA Under-enforcement of the Humane Slaughter Act*, 104 GEO. L.J. 197 (2015).

³⁸ See *infra* note 57 (listing several websites that show undercover videos of the slaughtering process).

shackles, upside down, which no doubt terrifies them.³⁹ About 90% of the animals struggle vigorously in the shackles, which causes dislocated joints, further bruising, and broken bones.⁴⁰ As USDA veterinarian Dr. Stan Painter explained to the *Washington Post*, workers “are literally throwing the birds into the shackles, often breaking their legs as they do it.”⁴¹

Then the animals are paralyzed by a painful electric shock, which the industry claims renders the animals insensible to pain, even though the available scientific evidence indicates that it does not.⁴² There is no requirement in the U.S. that paralysis baths render animals insensible to pain, and bath settings “are based on achieving good carcass and meat quality rather than on scientific evidence that they effectively produce unconsciousness.”⁴³ Although the poultry industry has no incentive to study the issue and the animal protection community is unlikely to fund research that would necessarily cause animals to suffer extreme pain, the limited research that exists indicates that electric paralysis is almost unfathomably cruel to the birds being killed.⁴⁴

Dr. Sara Shields and Dr. Mohan Raj reviewed the evidence with regard to whether electric paralysis renders the birds insensible.⁴⁵ First, they noted that electric paralysis has inherent problems that make effective stunning impossible.⁴⁶ The difficulty is fairly intuitive: no matter what the current-level setting, “the total current equals the sum of the currents flowing though [sic] each bird individually,” which is affected by the number of birds being electrocuted, as well as body size and composition, feather condition, depth of immersion, shackle tightness, amount of minerals and dirt in the water, and so on.⁴⁷ Thus,

³⁹ Sara J. Shields & A.B.M. Raj, *A Critical Review of Electrical Water-Bath Stunning Systems for Poultry Slaughter and Recent Developments in Alternative Technologies*, 13 *J. OF APPLIED WELFARE SCI.* 281, 283 (2010).

⁴⁰ *Id.*

⁴¹ Kimberly Kindy, *USDA Plan To Speed Up Poultry-Processing Lines Could Increase Risk of Bird Abuse*, *WASH. POST*, Oct. 29, 2013, at A1 (available at http://www.washingtonpost.com/politics/usda-plan-to-speed-up-poultry-processing-lines-could-increase-risk-of-bird-abuse/2013/10/29/aeeffe1e-3b2e-11e3-b6a9-da62c264f40e_story.html [<http://perma.cc/4H3T-743T>] (accessed Oct. 24, 2015)).

⁴² Shields & Raj, *supra* note 39, at 288.

⁴³ *Id.* at 285.

⁴⁴ *Id.* at 288.

⁴⁵ *Id.* at 285.

⁴⁶ *Id.*

⁴⁷ *Id.* at 286; see also EFSA Panel on Animal Health and Welfare (AHAW), *Scientific Opinion on Electrical Requirements for Poultry Waterbath Stunning Equipment*, 12(7) *EFSA J.* 3745, 3746 (2014) (available at <http://www.slideshare.net/charmkey5/efsa-opinion-on-waterbath-stunning> (accessed Oct. 25, 2015)) (“In multiple birds waterbath stunning situations . . . the electrical resistance varies widely between birds making it impossible to deliver the same constant and predetermined current to each individual bird. The complexity of such multiple bird electrical waterbath stunning systems used in poultry slaughterhouses is not conducive to maintaining good animal welfare and, therefore, alternatives should be developed/implemented.”).

it is not surprising that scientists using electroencephalograms (EEGs) to measure brain activity find that electric paralyzing of poultry generally does not render the animals unconscious.⁴⁸

It is worth noting that the previous paragraph discusses best-case electric paralysis. In the U.S., we use an even less effective form of this killing method. Drs. Raj and Shields explain that poultry slaughter plants in the U.S. use a “low-current setting with a high frequency, pulsed, direct current (DC),” even though “alternating current (AC) is more effective at producing EEG recordings indicative of unconsciousness.”⁴⁹ According to the scientists, the method of DC paralysis used in the U.S. would require at least 200 mAmps in order to render more than half of the animals insensible to pain. U.S. facilities generally use only 10 to 45 mAmps.⁵⁰ Based on these numbers, it is clear that most or even all animals in U.S. plants will still be conscious through the entire slaughter process. The authors summarize: “[I]t is more than likely that muscular paralysis, rather than unconsciousness and insensibility, is induced by prolonged application of inadequate current parameters. This induction of seizures in conscious birds would obviously cause pain and suffering, and these birds would remain sensible and able to feel pain during their subsequent slaughter and the throat-cutting step.”⁵¹

These scientists’ findings were confirmed by a scientific review offered by the European Food Safety Authority (EFSA) in 2014. Specifically, the EFSA found that: (1) even EU-level currents do not render animals insensible to pain;⁵² (2) the application of the current must last for at least fifteen seconds, which causes fifteen seconds of painful electrocution;⁵³ and (3) even where animals are finally rendered insensible to pain, they often wake up soon after being paralyzed, which would cause them to still be conscious when their necks are cut and they bleed out.⁵⁴

In other words, the animals are painfully shocked, are still conscious when their throats are slit, and often wake up entirely in the middle of the slaughter process—and this when using EU-level electric

⁴⁸ Shields & Raj, *supra* note 39, at 284–85.

⁴⁹ *Id.* at 285.

⁵⁰ *Id.* at 287.

⁵¹ *Id.* at 288.

⁵² EFSA Panel on Animal Health and Welfare (AHAW), *supra* note 47, at 11 (“[T]he information provided was sufficient to conclude that the birds were not rendered immediately unconscious by the intervention.”).

⁵³ *Id.* at 9 (“The results of study one showed clearly that the proposed electrical stunning parameters had to be applied for a minimum of 15 seconds to produce epileptiform activity in the EEG. This prolonged application of an electric current through the whole body of poultry, while the animal is still conscious, would cause pain, distress and suffering until the loss of consciousness.”).

⁵⁴ *Id.* at 10 (“The duration of unconsciousness achieved, even after 15 seconds of exposure to the electrical parameters, is not long enough to prevent recovery of consciousness before neck cutting or during bleeding.”).

immobilization. It is hard to imagine a crueler or more gruesome way to torture and kill animals.

It is worth noting that everything discussed above involves chicken slaughter when it is done perfectly. More often than not, it is done haphazardly and with additional unintentional or intentional cruelty. The former happens with animals that are flapping around or improperly hung in the shackles, as they often are, and miss the waterbath paralyzer. When that happens, the animals will end up getting sliced someplace other than their neck—their chest cavity may be ripped open or a wing or leg sliced off while the animal is completely conscious. Then, they are boiled alive. As Dr. Painter explained to the *Washington Post*, workers are moving so quickly that “they sometimes get just one leg in the shackles. When that happens, the chickens aren’t hanging right . . . They don’t get killed, and they go into the scald tank alive.”⁵⁵ According to USDA statistics, this happens to about a million chickens and turkeys annually.⁵⁶

Undercover investigations conducted by Compassion Over Killing (COK), The Humane Society of the United States (HSUS), Mercy for Animals (MFA), and PETA of different facilities at various stages of chicken production (from hatcheries, to growing, to catching, and to slaughter) repeatedly document both the standard abuses discussed above as well as additional, egregious and intentional abuse and cruelty perpetrated by the workers against the animals.⁵⁷ If your job is to

⁵⁵ See Kindy, *supra* note 41.

⁵⁶ *Id.* (ellipses in original) (“Nearly 1 million chickens and turkeys are unintentionally boiled alive each year in U.S. slaughterhouses, often because fast-moving lines fail to kill the birds before they are dropped into scalding water, Agriculture Department records show. . . . Over the past five years, an annual average of 825,000 chickens and 18,000 turkeys died this way.”).

⁵⁷ Chicken slaughterhouses appear to be the most investigated of all factory farming facilities; for this article, we found nine investigations—including five just released in the past year (i.e., since July 2014). *Amid Pending North Carolina Ag-Gag Bill, New COK Video Uncovers Horrific Abuse to Birds at Mountaire Farms Chicken Slaughterhouse*, COMPASSION OVER KILLING, <http://cok.net/inv/mountaire/> (accessed Nov. 13, 2015); *Minnesota Hen Slaughter Exposé: Birds Abused, Scalded Alive Daily*, HUMANE SOCIETY OF THE U. S., http://www.humanesociety.org/news/press_releases/2015/01/minnesota-hen-investigation010514.html [<http://perma.cc/HL3M-ALMJ>] (accessed Nov. 13, 2015); *COK Uncovers Cruelty to Chicks & Ducklings: Cal-Cruz Hatcheries Closes Down*, COMPASSION OVER KILLING, <http://cok.net/inv/cal-cruz/> [<http://perma.cc/85X3-PW33>] (accessed Oct. 25, 2015); Mercy For Animals, *What Does That “American Humane Certified” Label on Your Chicken Really Mean?*, HUMANE MEAT SCAM EXPOSED!, <http://www.americanhumane.com/> (accessed Oct. 25, 2015); Mercy For Animals, *The Video the Poultry Industry Doesn’t Want You to See*, GORY FOOD SERVICE, <http://www.goryfoodservice.com/> (accessed Oct. 25, 2015); Mercy for Animals, *SHOCKING! Chick-fil-A Suppliers Caught on Hidden-Camera Torturing Animals*, YOUTUBE, https://www.youtube.com/watch?v=7cHbi_IRYpo (Nov. 19, 2014) (accessed Nov. 13, 2015); *Exposed: Tyson Workers Torturing Birds, Urinating on Slaughter Line*, PETA, <http://www.peta.org/action/action-alerts/tyson-workers-torturing-birds-urinating-slaughter-line/> [<http://perma.cc/R2SJ-579R>] (accessed Oct. 25, 2015); PETA, *If This Is the Best, What’s the Worst?*, KENTUCKY FRIED CRUELTY, <http://www.kentuckyfriedcruelty.com/u-georges.asp> [<http://perma.cc/9N7R-YHWN>] (accessed Oct. 25, 2015); PETA, *Thousands*

slam live animals into shackles, it makes sense that you might convince yourself to see a chicken as incapable of feeling pain, or as somehow unworthy of moral concern. The nature of the work, combined with a culture in the industry that reduces individuals to commodities, leads people to punch, kick, torment, and urinate on animals who are, as Professor Sunstein rightly noted, no different from the dogs and cats that many of us treat as family members.⁵⁸

E. Humane Certified, Organic, and Kosher Provide False Comfort

Some will wonder whether ‘humane certified,’ organic, or kosher products represent an improvement over the standard practices just catalogued. The problems of rapid growth and inhumane slaughter are not addressed by any of these three options—everything discussed above about animals crippled from rapid growth and animals being paralyzed without being stunned applies equally to ‘humane,’ organic, and kosher products.⁵⁹ In fact, the kosher label has no humane requirements at all,⁶⁰ and the best that humane and organic labels can do is indicate that gratuitous cruelty may be less likely. As you will see in the next paragraph, undercover investigations have found gratuitous cruelty in so-called humane, organic, and kosher production as well.

Two recent undercover investigations document what is happening on farms and in slaughterhouses for the first- and second-largest of the ‘humane’ certifiers.⁶¹ The largest certifier by far is American Humane Association Certified (AHA-certified). In 2015, MFA investigated

of Chickens Tortured by KFC Supplier, KENTUCKY FRIED CRUELTY, <http://www.kentuckyfriedcruelty.com/u-pilgrimspride.asp> [<http://perma.cc/26ZB-D62H>] (accessed Oct. 25, 2015).

⁵⁸ See *supra* note 57. The poultry industry would like the public to think that, every time an undercover video comes out depicting these actions by workers, that it is the result of a few bad eggs among their employees. But the volume of documented evidence proves otherwise. Even if bad eggs do exist and do seek out work in slaughterhouses, the real reasons for most intentional acts of cruelty in slaughterhouses are that the very nature of the job is cruel and employees are working under extremely stressful conditions.

⁵⁹ Many self-proclaimed private third-party ‘humane’ certifiers allow standard industry practices such as debeaking and keeping animals entirely indoors. *Animal Welfare Standards: A Comparison of Industry Guidelines and Independent Labels*, ANIMAL WELFARE INST., <https://awionline.org/sites/default/files/uploads/documents/web-standardscomparisonfactsheet2-1293133314-document-33104.pdf> [<http://perma.cc/6YPJ-UWGD>] (accessed Oct. 25, 2015). As for the USDA Certified Organic Program, while the regulations do require access to the outdoors, 7 C.F.R. § 205.237, they do not include any animal care requirements at the livestock transport and slaughter stages.

⁶⁰ The HMSA exempts kosher and other ritual slaughter, 7 U.S.C. §§ 1902(b), 1906 (2012).

⁶¹ These are private, third-party auditors that establish their own standards and market themselves to meat producers to become ‘certified’ as ‘humane’ to appeal to consumers. The Food Safety and Inspection Service (FSIS) could—but does not—regulate ‘humane’ claims on meat labels under the Poultry Products Inspection Act, 21 U.S.C. § 457(b)–(c). Though even if FSIS did, we would be dubious about their likelihood of enforcing meaningful standards.

an AHA-certified farm and slaughterhouse and documented exactly what is discussed in Sections C and D of this Part, including sadistic and intentional cruelty—none of which was prosecuted.⁶² Anyone who thinks that humane labels are meaningful should watch the video, narrated by Bob Barker, at www.AmericanHumaneScam.com.

Roughly a year earlier, the animal group Direct Action Everywhere (DxE) documented conditions in a facility that produced eggs certified under the “Humane Farm Animal Care” program, the second largest humane certifier, and under the USDA’s federal organic program. The investigation found the same horrific-yet-standard conditions, confirming that these so-called ‘humane’ programs mean next-to-nothing where animal welfare is concerned.⁶³

In addition, the Center for Food Safety (CFS) released an eye-opening report in 2014 about organic broiler and egg production that explains how the conditions documented in DxE’s investigation could happen in an organic-certified facility.⁶⁴ According to CFS, “ninety-nine percent of organic broilers are produced in facilities that house more than 100,000 birds,”⁶⁵ so that “poultry confinement practices have become common for the largest organic producers. Little do consumers know that unnatural lighting conditions, tight stocking rates, few and small doors leading to the outside, cement porches instead of pasture, and limited-to-no access to the natural environment currently represent the norm.”⁶⁶

Finally, on the issue of kosher slaughter, PETA conducted an undercover investigation into the largest kosher slaughterhouse in the U.S., AgriProcessors. In that investigation, PETA found that animals had their tracheas ripped out while they were still conscious, and were then dumped onto the floor in pools of their own blood, still completely conscious and struggling to stand for more than a minute after their throats had been ripped out.⁶⁷

⁶² *What Does That “American Humane Certified” Label on Your Chicken Really Mean?*, MERCY FOR ANIMALS, <http://www.americanhumanescam.com/> (accessed Oct. 25, 2015).

⁶³ Brian Burns, *Statements on “Certified Humane” Whole Foods Investigation*, DxE, <http://directactioneverywhere.com/investigationstatements/> [<http://perma.cc/4KKE-ENJ6>] (Jan. 8, 2015) (accessed Nov. 27, 2015); DxE, *Truth Matters: DxE Investigators Expose “Humane” Fraud at Whole Foods*, YOUTUBE, <https://www.youtube.com/watch?v=YU4PJCuslD0> (Jan. 7, 2015) (accessed Oct. 25, 2015).

⁶⁴ PAIGE M. TOMASELLI & LISA J. BUNIN, USDA STALLS REGULATIONS TO IMPROVE ORGANIC POULTRY LIVING CONDITIONS 3 (2014) (available at http://www.centerforfood.safety.org/files/animal-welfare-final_56276.pdf [<http://perma.cc/K5PT-BAYZ>] (accessed Oct. 25, 2015)); see also Bruce Friedrich, *USDA Sells Out Organics*, LOUISVILLE COURIER-JOURNAL, <http://www.courier-journal.com/story/opinion/contributors/2014/10/29/usda-sells-organics/18111573/> [<http://perma.cc/Z3KJ-X7BX>] (Oct. 29, 2014) (accessed Oct. 25, 2015) (arguing that the USDA is refusing to promulgate organic regulations in order to protect five massive, organic egg producers).

⁶⁵ Tomaselli & Bunin, *supra* note 64, at 10.

⁶⁶ *Id.* at 3.

⁶⁷ *PETA Reveals Extreme Cruelty at Kosher Slaughterhouses*, PETA, <http://www.peta.org/features/agriprocessors/> [<http://perma.cc/LP25-9P78>] (accessed Oct. 25, 2015).

In response to the video, much consternation arose in the wider Jewish community,⁶⁸ but the only concern raised by kosher oversight bodies was the bad publicity. They defended the slaughter: “After carefully studying the video . . . [Orthodox Union (OU) experts concluded] that these procedures meet all OU standards to the highest degree, and that the *shochtim* (rabbinic slaughterers) are all highly proficient, skilled and knowledgeable.”⁶⁹ As Dr. Aaron Gross explains in his book, “the leadership of all of America’s halakhic forms of Judaism—modern Orthodoxy, Haredi Orthodoxy, and the Conservative movement—have, since the AgriProcessors event, emphasized publicly that any degree of cruelty, no matter how egregious, has no impact on the kosher status of the meat.”⁷⁰

F. Strategies for Change

The landscape for legal challenges of the egregious cruelty on modern poultry farms is fraught with roadblocks. Wolfson and Sullivan detail the problem, noting that 1) federal law exempts all farm animals from the Animal Welfare Act and the USDA does not apply the Humane Methods of Livestock Slaughter Act (HMSA) to poultry,⁷¹ and 2) state anti-cruelty statutes all but exempt farm animals, and they certainly will never apply to practices that are universal, such as the breeding practices discussed above.⁷²

Legal strategies that focus on chicken genetics appear to be non-existent outside the realm of ‘humane’ and organic labeling; although, the ASPCA, AWI, CWF, and Farm Forward have focused significant energy on educating the public about this problem.⁷³ Legal efforts aimed at slaughter have been a bit more robust, with three specific endeavors that are especially noteworthy.

First, AWI and Farm Sanctuary filed a petition for rulemaking under the Poultry Products Inspection Act (PPIA),⁷⁴ which charges the

⁶⁸ For a powerful argument that eating any meat, because essentially all of it comes from factory farming situations, is antithetical to the humane principle of *tza’ar baalei chayim*, see *Reform the Scandal-Prone Kosher Meat Industry? Let’s Get Real.*, THE BEET-EATING HEEB, <http://thebeeteatingheeb.com/2015/07/23/reform-the-scandal-prone-kosher-meat-industry-lets-get-real/> [<http://perma.cc/2NLS-5KFP>] (July 23, 2015) (accessed Oct. 25, 2015). The post quotes former Chief Rabbi of Ireland, David Rosen, stating that, “[a]nybody with eyes in their head can see that (factory farming) is a categorical transgression and desecration of the prohibition on causing cruelty to animals.” *Id.*

⁶⁹ AARON S. GROSS, *THE QUESTION OF THE ANIMAL AND RELIGION: THEORETICAL STAKES, PRACTICAL IMPLICATIONS* 42 (2014) (internal quotations omitted).

⁷⁰ *Id.* at 34.

⁷¹ Sullivan & Wolfson, *supra* note 11, at 207–09.

⁷² *Id.* at 209–13, 216.

⁷³ ASPCA REPORT, *supra* note 22, at 2; *Reinventing the Poultry Industry*, FARM FORWARD, <http://farmforward.com/reinventing-the-poultry-industry/> [<http://perma.cc/5CMT-VJGF>] (2015) (accessed Oct. 27, 2015).

⁷⁴ Petition from Farm Sanctuary & Animal Welfare Institute, to USDA Food Safety and Inspection Serv. (Dec. 17, 2013) (available at <http://www.fsis.usda.gov/wps/wcm/connect/e138fe1a-d380-42b2-88b7-f24a11ed7d7f/Petition-AWI-PPIA-121713.pdf?MOD=>

USDA with protecting the public by preventing poultry carcass adulteration and mislabeling. In that petition, the groups argue that food safety laws require regulations focused on protecting poultry from cruelty. The argument is not as odd as it sounds since the USDA has stated at least three times in official policy documents that cruelty to birds at slaughter leads to adulteration,⁷⁵ which is illegal under the PPIA. AWI and Farm Sanctuary argue that, just like the USDA's Food Safety and Inspection Service (FSIS) that promulgates regulations to decrease other forms of adulteration, here too the agency should promulgate prophylactic regulations focused on humane slaughter. There has been no response from the agency to date, but the groups are ready to sue if their petition is denied.

Second, HSUS sued the USDA to try to force the agency to include poultry in the Humane Methods of Livestock Slaughter Act.⁷⁶ Their basic argument was that the HMSA mandates that the USDA require the humane slaughter of all "livestock," and that poultry are livestock according to the plain meaning of that term when the Act was passed. HSUS lost on standing grounds at the Ninth Circuit. The court felt that even if they agreed with HSUS's legal argument, the USDA still might not promulgate regulations to require humane slaughter because such regulations were only required (and enforceable) under the Federal Meat Inspection Act.⁷⁷ Bruce Friedrich argued that a Petition for Rulemaking would still likely succeed where HSUS's lawsuit fell short,⁷⁸ and MFA has filed that petition⁷⁹ with plans for litigation in the event that it is denied.

Third, PETA is suing the California Department of Food and Agriculture because California's Humane Slaughter Law expressly applies to poultry, but the state does not enforce it. The PETA suit, filed in 2015, argues that the state both fails to enforce the law and, by promulgating regulations allowing for electric paralysis of poultry, actively encourages the law's violation. According to the suit, the Department of Food and Agriculture "not only turns a blind eye to what goes on inside slaughterhouses across the State but has enacted regulations purporting to legitimize practices that cause tens of millions of ani-

AJPERES [<http://perma.cc/S4XM-H4F3>] (accessed Oct. 27, 2015)). Bruce Friedrich is a co-author of the petition with Dena Jones from AWI.

⁷⁵ *Id.* at 5.

⁷⁶ *Levine v. Vilsack*, 587 F.3d 986, 986 (9th Cir. 2009); see also Bruce Friedrich, *Still in the Jungle: Poultry Slaughter and the USDA*, 23 N.Y.U. ENVTL. L.J. 245, 250 (forthcoming 2015) (providing a detailed analysis of the decision in *Levine*) [hereinafter *Still in the Jungle*].

⁷⁷ *Still in the Jungle*, *supra* note 76, at 287–88; see also *Levine*, 587 F.3d at 993–95 (holding that although the USDA has authority to include poultry in the HMSA, plaintiffs did not prove redressability).

⁷⁸ *Still in the Jungle*, *supra* note 76, at 279–80.

⁷⁹ Petition from Carter Dillard et al., Animal Legal Defense Fund, on behalf of Mercy for Animals et al., to USDA Food Safety and Inspection Serv. (Sept. 1, 2015) (available at www.aldf.org/wp-content/uploads/2015/09/FSIS-Petition-FINAL.pdf [<http://perma.cc/7YK9-U489>] (accessed Oct. 29, 2015)).

imals every year to have their throats slit while fully conscious and to be boiled alive in tanks of scalding water, in violation of California's Humane Slaughter Law, Food and Agr. Code § 19501-19503, and the Animal Cruelty Statute, Penal Code § 597.”⁸⁰

III. THE ENVIRONMENT

Fourth generation cattle farmer Howard Lyman, who became a vegetarian evangelist and got Oprah sued for explaining on her show that Mad Cow Disease is probably in the U.S., is fond of declaring that “to consider yourself an environmentalist and still eat meat is like saying you're a philanthropist who doesn't give to charity.”⁸¹ The meat industry certainly causes very big problems in every environmental arena. In this Part we discuss the basic inefficiencies of poultry production, as well as the effect of poultry production on climate change, water pollution, and air pollution. We then discuss some of the efforts of advocacy groups to address the problems identified.

A. *Basic Inefficiency and Consequences*

The fundamental case against animal product consumption is intuitive: other animals have to eat in order to survive, just like humans do. Most of us probably consume between 1,500 and 2,500 calories every single day, and we are probably not gaining weight. That caloric intake is required simply to sustain our basic bodily functions. Similarly, only a fraction of the calories from grains and other crops fed to a chicken will go into producing edible meat. Most of those calories will go into simply keeping the animal alive, while much will also go into developing and maintaining the parts of the chicken that are generally not able to be sold for human consumption (e.g., feathers, blood, and bones).

According to the World Resources Institute, “even poultry, the most efficient source of meat, convert only around 11 percent of gross feed energy into human food according to the most comprehensive [scientific] methods.”⁸² Put another way, eating chicken wastes about ten calories for every calorie consumed. If you eat 2,000 calories from grains or legumes, that requires 2,000 calories of grain or legume input, but if you want to eat 2,000 calories of chicken, you have to feed that chicken more than 18,000 calories of grains and legumes. More than 16,000 calories in grain goes either to simply keeping the chicken

⁸⁰ Petition for Writ of Mandate at 2, *People for the Ethical Treatment of Animals, Inc. v. Karen Ross, et al.*, No. BS156139 (Cal. Super. Ct. Cnty. of Los Angeles June 29, 2015).

⁸¹ VICTORIA MORAN, *MAIN STREET VEGAN: EVERYTHING YOU NEED TO KNOW TO EAT HEALTHFULLY AND LIVE COMPASSIONATELY IN THE REAL WORLD* 135 (2012) (quoting Howard Lyman).

⁸² WORLD RESOURCES INSTITUTE, *CREATING A SUSTAINABLE FOOD FUTURE 4* (2013) (available at http://www.wri.org/sites/default/files/wri13_report_4c_writ_online.pdf [<http://perma.cc/Z2JT-9NYT>] (accessed Oct. 29, 2015)).

alive or to producing bone and feathers, the parts of the chicken that humans do not eat. This is the argument that turned one of these two authors vegan—that when one consumes animal products, one is essentially throwing away at least nine calories of food for every calorie consumed.

Of course, since funneling crops through animals requires growing a lot more crops, that exponential environmental harm from excess crop cultivation must also be considered. As just one example, we are all aware of the water shortages in California, and we have probably read that water issues are becoming more common globally. But of course, growing nine times as much food to feed chickens than would be required were we eating that food directly also requires vastly more water to irrigate those crops. According to Pew, it requires 420 gallons of water to produce just one pound of chicken.⁸³ Put another way, it requires eight gallons of water to produce just ten calories of chicken.⁸⁴ So it is not surprising that “[l]eading water scientists have issued one of the sternest warnings yet about global food supplies, saying that the world’s population may have to switch almost completely to a vegetarian diet over the next forty years to avoid catastrophic shortages.”⁸⁵

But the process of irrigating and growing crops to feed to animals so that we can eat those animals does not capture the entirety of the system’s inefficiency. To do so, we must also consider the different stages of production. In order to produce grains or legumes for direct human consumption, those crops must be grown, shipped, and processed. To produce meat, the crops still have to be grown, but now they are shipped to a feed mill, and that feed mill must be operated. And then the feed is shipped to an industrial farm, and that farm must be operated. And then the animals are shipped to a slaughterhouse, and that slaughterhouse must be operated. And so on. Each stage of shipping and each additional factory add to the overall negative environmental footprint, even beyond the vast inefficiency of growing crops to feed animals rather than humans.⁸⁶

⁸³ PEW COMM’N ON INDUS. FARM ANIMAL PROD., PUTTING MEAT ON THE TABLE: INDUSTRIAL FARM ANIMAL PRODUCTION IN AMERICA 27 (2008) (available at http://www.ncifap.org/_images/pcfapfin.pdf [<http://perma.cc/T584-7T9M>] (accessed Oct. 29, 2015)).

⁸⁴ Susanne Stoll-Kleemann & Tim O’Riordan, *The Sustainability Challenges of Our Meat and Dairy Diets*, ENV’T: SCI. AND POL’Y FOR SUSTAINABLE DEV., May/June 2015, at 34, 40 (available at <http://admin.indiaenvironmentportal.org.in/files/file/meat%20and%20dairy%20diets.pdf> (accessed Oct. 30, 2015)).

⁸⁵ John Vidal, *Food Shortages Could Force World Into Vegetarianism, Warn Scientists*, THE GUARDIAN (Aug. 26, 2012) (available at http://www.theguardian.com/global-development/2012/aug/26/food-shortages-world-vegetarianism?CMP=twf_fd [<http://perma.cc/M65B-PFVS>] (accessed Oct. 30, 2015)) (original report discussed in the Vidal column is on file with the authors).

⁸⁶ See generally Bruce Friedrich, *Eating as Though the Environment Mattered*, THE HUFFINGTON POST, http://www.huffingtonpost.com/bruce-friedrich/meat-consumption-impact-environment_b_3274251.html [<http://perma.cc/X5KS-Z2PM>] (May 15, 2015) (accessed Oct. 30, 2015) (discussing the inefficiency of meat consumption).

Scientists from the United Nations produced a 408-page report on the environmental harms caused by the meat industry globally, in which they find that meat production is “one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global.”⁸⁷ Specifically, the report lays out how the inefficiency and waste discussed above leads to “problems of land degradation, climate change and air pollution, water shortage and water pollution and loss of biodiversity.”⁸⁸

The report contains sections on each of these issues, but in the interest of space, we will note only that regarding the environmental challenge of our time, climate change, the most conservative estimates indicate that raising animals for food causes about 18% of all greenhouse gas emissions⁸⁹ while some environmental scientists suggest that the real number is three times that.⁹⁰ On the issue of chicken specifically, one calorie of chicken creates fifty-two grams of carbon dioxide.⁹¹ Legumes create twenty-five times less greenhouse gases per calorie and forty times less per gram of protein.⁹²

In no uncertain terms, raising animals for food is a top contributor to basically everything bad for the environment.

B. Strategies for Change

The three areas where environmental lawyers have been most active are in the realms of air pollution and the Clean Air Act (CAA),⁹³ water pollution and the Clean Water Act (CWA),⁹⁴ and transparency. While there is a relative dearth of work and information on animal

⁸⁷ UNITED NATIONS FOOD AND AGRIC. ORG., *LIVESTOCK’S LONG SHADOW: ENVIRONMENTAL ISSUES AND OPTIONS XX* (2006) (available at <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e.pdf> (accessed Oct. 30, 2015)).

⁸⁸ *Id.*

⁸⁹ *Id.* at 271.

⁹⁰ Robert Goodland & Jeffrey Anhang, *Livestock and Climate Change: What if the Key Actors in Climate Change are Cows, Pigs, and Chickens?*, *WORLDWATCH* (Nov./Dec. 2009) (available at <https://www.worldwatch.org/files/pdf/Livestock%20and%20Climate%20Change.pdf> [<https://perma.cc/GSF4-9XQJ>] (accessed Oct. 30, 2015)); *see also* Robert Goodland, *FAO Underplays Impact of Livestock Industry Emissions*, *EARTH ISLAND JOURNAL*, http://www.earthisland.org/journal/index.php/elist/eListRead/fao_underplays_impact_of_livestock_industry_emissions/ [<http://perma.cc/B42Z-MAGQ>] (Sept. 27, 2013) (accessed Oct. 30, 2015) (detailing how the FAO has discounted the true impact of animal agriculture).

⁹¹ Stoll-Kleemann & O’Riordan, *supra* note 84, at 39.

⁹² *Id.* Wheat is ten times less polluting, soy is seven times less polluting, and even vegetables are one-third as polluting. *Id.*

⁹³ Air Pollution Prevention and Control Act, 42 U.S.C. §§ 7401–7515 (2012); *see* Sarah C. Wilson, *Hogwash! Why Industrial Animal Agriculture is Not Beyond the Scope of Clean Air Act Regulation*, 24 *PACE ENVTL. L. REV.* 439, 441 (2007) (discussing the history of the Clean Air Act and calling for regulatory oversight of CAFOs).

⁹⁴ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1388 (2012). *See* Hannah Connor, *Comprehensive Regulatory Review: Concentrated Animal Feeding Operations Under the Clean Water Act From 1972 to the Present*, 12 *VT. J. ENVTL. L.* 275, 281 (2011) (examining the history of the CWA and animal agriculture).

welfare and the chicken industry specifically (the vast majority of what does exist comes from humane groups), there is a plethora of governmental and scientific reports on the effect of industrial farming more broadly on our land, water, and air. In 2008, the U.S. Government Accountability Office (GAO) did a meta-review of the recent science documenting harms, as well as potential responses by U.S. Environmental Protection Agency (EPA), thoroughly examining fifteen government-sponsored or peer-reviewed studies done between 2002 and 2008 that linked industrial agriculture to health and environmental harms. Eight of those focused on water pollution, and seven on air pollution.⁹⁵

Excellent work has also been done in this area by nonprofit organizations, most notably the Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health, which convened a commission of agricultural experts to meet over two years, assess the issues, and make recommendations.⁹⁶ Then, five years later, they evaluated any progress resulting from their recommendations (spoiler: there was none).⁹⁷

The typical industrial chicken farm raises 600,000 birds per year,⁹⁸ and according to the USDA, farm animals generate about 500 million tons of manure annually. That is more than three times as much as the 150 million tons of waste generated by the human population.⁹⁹ Untreated poultry waste is spread on fields, causing almost two-thirds of all nutrient overload, the primary cause of water pollution from animal agriculture. Poultry manure is the predominant cause of nutrient overload because it has twice the pollution of other livestock's manure and poultry production often happens on land that

⁹⁵ U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-944, CONCENTRATED ANIMAL FEEDING OPERATIONS: EPA NEEDS MORE INFORMATION AND A CLEARLY DEFINED STRATEGY TO PROTECT AIR AND WATER QUALITY FROM POLLUTANTS OF CONCERN 6 (2008) (available at <http://www.gao.gov/new.items/d08944.pdf> [<https://perma.cc/KK5N-JGWA>] (accessed Oct. 30, 2015)).

⁹⁶ PEW COMM'N ON INDUS. FARM ANIMAL PROD., *supra* note 83, at vii. *See also* GLOBAL P'SHIP ON NUTRITION MGMT., OUR NUTRIENT WORLD: THE CHALLENGE TO PRODUCE MORE FOOD AND ENERGY WITH LESS POLLUTION 46 (2013) (available at <http://www.unep.org/gpa/documents/publications/ONW.pdf> [<http://perma.cc/SEM4-XLYC>] (accessed Oct. 30, 2015)) (providing a global review of the same harms).

⁹⁷ JOHNS HOPKINS CENTER FOR A LIVABLE FUTURE, INDUSTRIAL FOOD ANIMAL PRODUCTION IN AMERICA: EXAMINING THE IMPACT OF THE PEW COMMISSION'S PRIORITY RECOMMENDATIONS 46 (2013) (available at http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/research/clf_reports/CLF-PEW-for%20Web.pdf [<http://perma.cc/L94K-69WB>] (accessed Oct. 30, 2015)).

⁹⁸ THE PEW ENV'T GRP., BIG CHICKEN: POLLUTION AND INDUSTRIAL POULTRY PRODUCTION IN AMERICA 2 (2011) (available at <http://www.pewtrusts.org/~media/legacy/uploadedfiles/peg/publications/report/PEGBigChickenJuly2011pdf> [<http://perma.cc/JMA4-QLDS>] (accessed Oct. 5, 2015)).

⁹⁹ National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176, 7180 (Feb. 12, 2003) (codified at 40 C.F.R. pts. 9, 122, 123 and 412).

does not have associated cropland.¹⁰⁰ The EPA explains that poultry waste pollutants include excess amounts of nitrogen and phosphorus, as well as “salts and trace elements [including metals] . . . antibiotics, pesticides, and hormones.”¹⁰¹ Water quality harms from animal agriculture have been linked to reproductive disorders in fish, degraded water quality, and feces-contaminated drinking water.¹⁰² Air pollution from industrial farms includes ammonia, hydrogen sulfide, and volatile organic compounds.¹⁰³ According to air quality studies, industrial agriculture causes nearby residents respiratory inflammation, headaches, eye irritation, and nausea.¹⁰⁴

We will focus on four areas where litigators from nonprofit groups are working to hold polluters and their EPA protectors responsible for the water and air pollution they create. In all four cases, the strategies that we discuss are novel, creative, and ongoing. We strongly encourage that readers review the original documentation. Each of these endeavors would lend itself to its own very interesting law review article.

1. *Transparency-Based Litigation*

Despite the EPA’s own admission that poultry farms are a huge source of water pollution, “the regulatory impact of the [CWA] on the broiler industry and its enormous waste generation has been minimal at best.”¹⁰⁵ There are a host of reasons for the problem, but a significant one is that the EPA has no idea where farms are or what they are doing. First, more than half of Concentrated Animal Feeding Operations (CAFOs)¹⁰⁶ do not apply for permits, and the EPA does not track

¹⁰⁰ THE PEW ENV’T GRP., *supra* note 98, at 13; *see also* Thomas R. Head, III, *Local Regulation of Animal Feeding Operations: Concerns, Limits, and Options for Southeastern States*, 6 ENVTL. LAW 503, 515–16 (2000) (discussing soil alteration as a result of applying chicken litter to land).

¹⁰¹ EPA, ENVIRONMENTAL AND ECONOMIC BENEFIT ANALYSIS OF PROPOSED REVISIONS TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATION AND THE EFFLUENT GUIDELINES FOR CONCENTRATED ANIMAL FEEDING OPERATIONS 2–7 (2001) (available at http://water.epa.gov/scitech/wastetech/guide/cafo/upload/2001_02_06_guide_cafo_EnvAssessPt1of2.pdf [<http://perma.cc/UA5Y-D3K7>] (accessed Oct. 5, 2015)).

¹⁰² GAO, *supra* note 95, at 6.

¹⁰³ *Id.* at 9.

¹⁰⁴ *Id.* at 6.

¹⁰⁵ THE PEW ENV’T GRP., *supra* note 98, at 17.

¹⁰⁶ Colloquially, ‘CAFO’ is used synonymously with ‘factory farm,’ where massive numbers of animals are intensively confined and fed until they are slaughtered. The EPA defines “Animal Feeding Operations” (AFOs) as agricultural operations where “animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.” *National Pollutant Discharge Elimination System (NPDES): Animal Feeding Operations (AFOs)*, EPA, <http://www.epa.gov/npdes/animal-feeding-operations-afos> [<http://perma.cc/YS3A-FWDW>] (updated Jan. 4, 2016) (accessed Jan. 26, 2016). To be considered a ‘CAFO,’ an ‘AFO’ must additionally meet one of three regulatory definitions for small, medium, and large operations. *Regulatory Definitions of Large CAFOs*,

those operations at all.¹⁰⁷ Second, even where a CAFO has applied for a permit, it does so under the state program, and EPA does not track those permits or sites. In the GAO's thoroughgoing indictment of the EPA's failure to do its job vis-à-vis both the CWA and the CAA as applied to industrial agriculture, it explained that the EPA could not do its job even if it wanted to.¹⁰⁸ This is because, despite the EPA's authority over CAFOs for more than thirty years, it has not bothered to figure out where they are—i.e., it has not taken even the most basic and fundamental requisite step towards adequate regulation.¹⁰⁹

In 2011, the EPA agreed to fix all of that—it would require that all CAFOs report basic location and environmental data using its authority under § 308 of the CWA,¹¹⁰ which allows the agency to gather any information from a CAFO that is discharging or might discharge pollutants.¹¹¹ The agency was clear that such information was required for it to “effectively implement the [National Pollutant Discharge Elimination System] program and to ensure that CAFOs are complying with the requirements of the CWA.”¹¹² The agency reiterated: “Facility location and basic operational characteristics that relate to how and why a facility may discharge is essential information needed to carry out NPDES programmatic functions.”¹¹³ The next year, it withdrew the rule without anything approaching adequate explanation and without reevaluating its claim that such information would be necessary for effective CWA enforcement.

Fortunately, a coalition of groups¹¹⁴ is suing the EPA for this arbitrary and capricious (and violently anti-environmental) decision. In

Medium CAFO, and Small CAFOs, EPA, http://www.epa.gov/sites/production/files/2015-08/documents/sector_table.pdf [<http://perma.cc/YXZ5-56ZG>] (accessed Jan. 26, 2016).

¹⁰⁷ See Proposed Rule, National Pollutant Discharge Elimination System CAFO Reporting Rule, 76 Fed. Reg. 65,431, 65,447 (Oct. 21, 2011) (requiring authorized states to submit their CAFO information). Note that the EPA subsequently withdrew the proposal. 77 Fed. Reg. 42,679, 42,679 (July 20, 2012) (giving notice that EPA withdrew its proposal to collect information from CAFOs by rule).

¹⁰⁸ GAO, *supra* note 95, at 7.

¹⁰⁹ *Id.* (“EPA has not yet assessed the air quality impacts from animal feeding operation emissions because, according to agency officials, it lacks key data on the extent to which these operations are emitting pollutants”); see also *id.* at 48 (“EPA still lacks comprehensive and reliable data on the number, location, and size of the operations that have been issued permits and the amounts of discharges they release. As a result, EPA has neither the information it needs to assess the extent to which CAFOs may be contributing to water pollution, nor the information it needs to ensure compliance with the Clean Water Act.”).

¹¹⁰ Water Pollution Prevention and Control, 33 U.S.C. § 1318 (2012) (stating that the EPA can require CAFOs to keep records and reports).

¹¹¹ *Id.*

¹¹² National Pollutant Discharge Elimination System CAFO Reporting Rule, 76 Fed. Reg. at 65,431.

¹¹³ *Id.* at 65,436.

¹¹⁴ This coalition includes the Center for Food Safety, Columbia University School of Law Environmental Law Clinic, the Environmental Integrity Project, and HSUS. *Coalition Sues Environmental Protection Agency for Abandoning Critical Factory Farm Rule*,

their suit, the plaintiffs point out that the agency's withdrawal notice did not offer any explanation for why it now thought the insoluble problems identified when the rule was proposed were now resolved or unproblematic. It did not deal at all with the 58% of unpermitted CAFOs.¹¹⁵

Granted, judicial deference to agencies in rulemaking is extremely lenient, requiring only that an agency show that it "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action, including a rational connection between the facts found and the choice made" to survive a judicial review.¹¹⁶ However, in this case it seems clear that the EPA will have an uphill battle to satisfy the requirement of *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, where the Supreme Court said that an agency must "cogently explain why it has exercised its discretion"¹¹⁷ in complete contradiction to the facts it had previously offered in support of a proposed rule.

2. Clean Water Act Litigation

Thousands of growers currently operate with CWA permits, and can, hypothetically, be fined by the EPA or subject to a citizen suit if found to be in violation of a permit.¹¹⁸ As an overall pollution control mechanism, such oversight is better than nothing, but it is still vastly inefficient and deeply unfair considering that most of these farms are operated by small farmers who are working under contract with large poultry companies like Tyson, Pilgrim's Pride, and Perdue (generally called 'integrators').¹¹⁹ While farmers own the land, barns, equipment,

HSUS, http://www.humanesociety.org/news/press_releases/2013/08/coalition-sues-epa-factory-farm-rule-abandonment-082813.html [<http://perma.cc/K9VN-FZNG>] (Aug. 28, 2013) (accessed Oct. 31, 2015).

¹¹⁵ Plaintiffs' Memorandum of Law in Support of Its Motion for Summary Judgment at 31–32, *Env'tl Integrity Project v. McCarthy*, No. 1:13-cv-01306-RBW (D.D.C. Oct. 28, 2014), ECF No. 24 ("At every step around the Proposed Information Rule, EPA was aware of, experienced, and acknowledged the problems associated with relying on the states for CAFO information. EPA's evaluations pre- and post-proposal confirmed that the states simply do not have the CAFO information EPA needs to implement the CWA. Neither the public comments nor the administrative record supports EPA's assertion that the states would be able to provide EPA with the CAFO information the Agency has conceded is necessary to fulfill its CWA obligations. The evidence before the Agency at the time it withdrew the CAFO Reporting Rule, therefore, demonstrates that state information is wholly insufficient to provide EPA the basic CAFO information it sorely lacks. By explaining that it was withdrawing the CAFO Reporting Rule because it believed that it could obtain the necessary information from the states EPA was acted [sic] arbitrarily and capriciously.").

¹¹⁶ *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

¹¹⁷ *Id.* at 48.

¹¹⁸ THE PEW ENV'T GRP., *supra* note 98, at 12.

¹¹⁹ RENA STEINZOR ET AL., CENTER FOR PROGRESSIVE REFORM, INTEGRATOR LIABILITY: LEGAL TOOLS TO HOLD THE BIGGEST CHICKEN COMPANIES RESPONSIBLE FOR WASTE 1 (2015) (available at http://www.progressivereform.org/articles/Integrator_Liability_Is

and waste generated, they must follow every dictate of the integrator, who retains ownership of the animals or animal products.¹²⁰ One case tested the theory that this much control makes integrators liable for CWA violations as ‘operators’; the court allowed that theory to proceed, though the plaintiffs ultimately lost on the basis of causality.¹²¹ The Center for Progressive Reform has argued in favor of an EPA rule of liability for integrators,¹²² but has not filed a rulemaking petition—an action that would make a lot of sense.¹²³

3. *Clean Air Act Litigation*

Remarkably, the free ride given to chicken farms under the CWA is eclipsed by the EPA’s even more complete abdication of statutory responsibility vis-à-vis the CAA. In 2005, President George W. Bush’s EPA claimed to be doing something useful when it entered into a compliance agreement with industrial farms with the ostensible goal of studying the issue of air pollution caused by industrial animal farming.¹²⁴ The agreement was fraught from the start, and the GAO accurately predicted in 2008 that the agreement was unlikely to lead to positive reform.¹²⁵ Others called it a delay tactic that served as an “incentive to pollute”—from the agency that was supposed to be doing the opposite.¹²⁶

President Barack Obama’s EPA has done no better. A decade later, the EPA has done nothing under the CAA to regulate industrial farms, despite the fact that they are huge contributors to unsafe air, and despite the fact that environmental and humane groups have laid out the EPA’s precise statutory authority and case for regulation in

sueAlert_1502.pdf [http://perma.cc/JY6K-UERF] (accessed Nov. 1, 2015)) [hereinafter INTEGRATOR LIABILITY].

¹²⁰ *Id.*

¹²¹ *Assateague Coastkeeper v. Alan & Kristin Hudson Farm*, 727 F. Supp. 2d 433, 436, 444 (D. Md. 2010).

¹²² INTEGRATOR LIABILITY, *supra* note 119; RENA STEINZOR ET AL., CENTER FOR PROGRESSIVE REFORM, BARACK OBAMA’S PATH TO PROGRESS IN 2015–16: THIRTEEN ESSENTIAL REGULATORY ACTIONS 48 (2014) (available at <http://www.progressivereform.org/articles/13Rules1406.pdf> [http://perma.cc/BG8G-Y834] (accessed Nov. 1, 2015)).

¹²³ Of course, there is a strong argument that integrators are already liable, which could be established through litigation.

¹²⁴ *See* Animal Feeding Operations Consent Agreement and Final Order, 70 Fed. Reg. 4958, 4958 (Jan. 31, 2005) (explaining that during the Bush Administration, the EPA offered AFOs an opportunity to sign the Air Compliance Agreement in order to aid in their compliance with the Clean Air Act).

¹²⁵ GAO, *supra* note 95, at 48 (“[Q]uestions about the sufficiency of the sites selected for the air emissions study and the quantity and quality of the data being collected could undermine EPA’s efforts to develop air emissions protocols by 2011 as planned. Finally, while the study and resulting protocols are important first steps, a process-based model that more accurately predicts the total air emissions from an animal feeding operation is still needed. While EPA has indicated it intends to develop such a model, it has not yet established a strategy and timeline for this activity.”).

¹²⁶ *See* Wilson, *supra* note 93, at 442, 467–71.

two rulemaking petitions.¹²⁷ First, in 2009, HSUS spearheaded a coalition of nine groups to file a seventy-three-page rulemaking petition¹²⁸ that describes the environmental harms of industrial farms, details the EPA's authority and obligation to regulate emissions and mitigate harms, and demands that the EPA take action to fulfill its statutory obligations.¹²⁹ Then, in April 2011, a coalition of twenty-one nonprofit organizations, including HSUS and the Center for Food Safety, filed a sixty-three-page petition that hones in specifically on the need to regulate ammonia.¹³⁰ This time, the groups laid out the environmental harms associated with ammonia from industrial farms and declared that there is "an affirmative duty by EPA to make an endangerment finding and regulate ambient ammonia."¹³¹

The petitioners summed up the EPA's policy with regard to air pollution from industrial farms:

CAFOs have escaped regulation for their air emissions for decades, and rural citizens whose health have been and continue to be harmed by airborne ammonia require swift action by EPA. Therefore, in determining what constitutes a reasonable time for response to this petition, the petitioners urge EPA to consider that "human health and welfare are at stake."¹³²

After years of non-responsiveness from the EPA, in 2015, HSUS joined with environmental groups to sue the EPA for undue delay regarding both petitions.¹³³ The EPA's response was not to agree to a reasonable timeframe for response; instead, President Obama's EPA filed motions to dismiss in both suits. While the outcome of those motions is uncertain, the clear message is that the agency intends to enable animal agriculture's pollution of our nation's air for years to come.

¹²⁷ The EPA did not even release the results of their study until 2011. *Air Emissions Monitoring Study Data*, EPA, <http://www.epa.gov/airquality/agmonitoring/basicinfo.html> [<http://perma.cc/P592-SNFK>] (updated Sept. 10, 2015) (accessed Nov. 1, 2015).

¹²⁸ Petition from Jessica Culpepper et al., on behalf of HSUS et al., to EPA (Sept. 21, 2009) (available at <http://environmentalintegrity.org/wp-content/uploads/Petition-by-HSUS-2009.pdf> [<http://perma.cc/8HFG-SJA9>] (accessed Nov. 14, 2015)) [hereinafter HSUS Petition].

¹²⁹ *Id.* at 3 ("The threat to public health and welfare caused by the greenhouse gases and other air pollutants emitted by CAFOs necessitates an immediate determination that CAFOs cause or contribute significantly to the air pollution that endangers public health and welfare, the listing of the CAFO industry, and its regulation by EPA under CAA section 111.").

¹³⁰ Petition from Tarah Heinzen et al., on behalf of Environmental Integrity Project et al., to EPA (2009) (available at http://www.centerforfoodsafety.org/files/petitionammonia-as-criteria-pollutant04062011_59802.pdf [<http://perma.cc/7R8H-VGAN>] (accessed Nov. 1, 2015)) [hereinafter EIP Petition].

¹³¹ *Id.* at 57.

¹³² *Id.*

¹³³ Complaint for Declaratory and Injunctive Relief at 1–2, HSUS et al., v. McCarthy, No. 15-cv-0141 (D.D.C. Jan. 28, 2015) [hereinafter HSUS Complaint]; Complaint for Declaratory and Injunctive Relief at 1–2, Environmental Integrity Project et al., v. EPA, No. 15-cv-139 (D.D.C. Jan. 28, 2015).

4. CERCLA and EPCRA Litigation

The final piece of litigation that we discuss includes HSUS, the Center for Food Safety (CFS), and Food and Water Watch (FWW). In 2009, at the behest of the poultry industry, the EPA promulgated a rule that made it harder for communities to learn about CAFO pollution.¹³⁴ Specifically, the agency decided to exempt all animal farms from a requirement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that farms notify the National Response Center when they release hazardous wastes.¹³⁵ It also exempted all but the largest industrial farms from the Emergency Planning and Community Right-to-Know Act (EPCRA) requirement that farms notify state and local officials about the release of hazardous wastes.¹³⁶

Less than a month later, a coalition of groups, including HSUS, Waterkeeper Alliance, and CFS filed a petition for review.¹³⁷ The EPA sought and received a voluntary remand, during which the agency told the court that it would consider vacating the rule and that its revisions were likely to “resolve and render moot” the challenges.¹³⁸ Despite repeated follow-up by plaintiffs, the EPA had taken no action as of April 2015 and was unable to give the plaintiffs any indication of when it might make progress on its promise to the court six years earlier.¹³⁹ Thus, the plaintiffs sued to force the EPA back into court to defend the rule, or in the alternative, to be ordered to promulgate a revised final rule within nine months. The suit details the harms to the environment and public health attributable to ammonia and hydrogen sulfide, both of which are reportable under CERCLA and EPCRA.¹⁴⁰ The suit also discusses the absurdity of exempting farms from reporting requirements and declares, the “EPA’s enforcement of the Exemption Rule lawlessly exempts an industry from generally applicable federal statutes designed to protect public health.”¹⁴¹ This statement appears to capture the EPA’s general sense of its oversight responsibility where environmental protection is at issue.

¹³⁴ HSUS Complaint, *supra* note 133, at 10 (discussing the timeline of the complaint’s factual background).

¹³⁵ CERCLA/EPCRA Administrative Reporting Exemption for Air Releases of Hazardous Substances from Animal Waste at Farms, 73 Fed. Reg. 76,948, 76,950 (Dec. 18, 2008) (codified at 40 C.F.R. pts. 302, 355).

¹³⁶ *Id.*

¹³⁷ *CERCLA/EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms*, EPA, <http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2050-AG66> [<http://perma.cc/MY49-WVD8>] (updated Nov. 1, 2015) (accessed Nov. 1, 2015).

¹³⁸ Motion to Recall the Mandate or, in the Alternative, Petition for Writ of Mandamus at 2–3, *Waterkeeper Alliance et al., v. EPA*, No. 09-1017 (D.C. Cir. Apr. 15, 2015).

¹³⁹ *Id.* at 4.

¹⁴⁰ *Id.* at 13.

¹⁴¹ *Id.*

IV. HUMAN RIGHTS

In this Part, we discuss the poultry industry's impact on human rights: how the industry impoverishes the farmers with whom it contracts to grow its chickens, treats slaughterhouse workers and meat processors like disposable commodities, and drives hunger and poverty across the globe. Finally, we discuss some of the work of nonprofit attorneys who attempt to mitigate these harms.

A. *Feudalism for the Post-War Era: Contract Growers*

Award-winning agricultural journalist and former Washington Bureau Chief for the Des Moines Register, George Anthan, describes the desperate economic conditions for the human cogs in the poultry industry's machine:

[S]lavery time isn't over for many of the people who make it possible for the rest of us to buy cheap chickens It's not the kind of slavery that ended with the Civil War. No one is dragged in chains to produce those chickens and to process them. But it is a system of virtual economic peonage Let's acknowledge that some of the food products we expect to be delivered to us at ever-lower prices are being paid for dearly by others in both economic and . . . human terms.¹⁴²

But how does the poultry industry get away with creating a virtual slave class in twenty-first century America? The industry has achieved almost total vertical integration, which means that the corporate integrators own the hatcheries, the transportation trucks, and the processing plants; they also own the chickens from the moment they hatch until they are sold in their constituent edible parts. The corporations outsource much of the labor, in particular the work of growing chickens from day-old hatchlings to 6-week-old broiler chickens. The success of vertical integration has led to near-complete concentration in the industry, so that, although there are about 33,000 chicken farms in the U.S., there are just a few integrators that control all of those farms and hatchlings.¹⁴³ The chicken industry tacitly acknowledges that 'farmers' do not run these farms in the conventional sense; it refers instead to those who own the barns in which the chickens live as "growers"—they grow chickens that they do not own.¹⁴⁴

There has been a fair bit written in recent years about the exploitation of poultry growers, but nothing we have seen does a better job of capturing the desperation created by the poultry industry in the

¹⁴² Marc Linder, *I Gave My Employer a Chicken That Had No Bone: Joint Firm-State Responsibility for Line-Speed-Related Occupational Injuries*, 46 CASE W. RES. L. REV. 33, 61 (1995) (quoting George Anthan, *Shameful Exploitation of Poultry Workers*, GANNETT NEWS SERVICE (Sept. 6, 1991)).

¹⁴³ Patrick Woodall, Food & Water Watch, testimony before the Committee of Finance on the Farmers' Rights Act (Senate Bill 532), Maryland State Senate 2 (Mar. 6, 2015) (on file with authors) (citing USDA 2012 Census of Agriculture).

¹⁴⁴ *Id.*

people who actually own the farms than former Associated Press agriculture reporter Christopher Leonard's book, *The Meat Racket: The Secret Takeover of America's Food Business*. With powerful anecdotes about the impact of vertical integration, Leonard reveals that "American consumers are using their money to support a system that keeps farmers in a state of indebted servitude, living like modern-day sharecroppers."¹⁴⁵ He supports his anecdotes with in-depth reporting on the severity and universality of the suffering captured by his stories.

In brief, growers are lured into chicken production with promises of a decent living. They take on massive debts to buy the land and build or refit chicken houses (which are built to a particular integrator's specifications). The grower's paycheck is determined by a tournament system, which ranks the farms serving the same slaughterhouse against each other based on their feed conversion rate—how efficiently the chickens convert feed into the meat on their bones. Under this system, the grower who provides the most saleable meat for the amount of feed provided by the company is paid the most per pound. On the other hand, the grower with the worst conversion rate is paid the least, so that one grower's gain is another grower's loss.¹⁴⁶ The difference between a paycheck for a grower ranked at the top of the tournament and one near the bottom can be over \$1,400.¹⁴⁷ If the grower remains at the bottom of the tournament over multiple cycles, the producer can terminate his or her contract, leaving the farmer without an income and liable for a mortgage on their farm.¹⁴⁸

Of course, the newest and best equipment will contribute to better feed-conversion, and as older farms struggle in competition with new growers who have more modern equipment, they are essentially forced to take out more loans in order to upgrade. The alternative is to lose their contract and go bankrupt immediately. Thus, the system ensures that most growers are constantly scraping by and that many will collapse under the weight of their debt.¹⁴⁹

Growers are also completely dependent on the integrator for the healthy flocks and quality feed that will earn them a decent wage.¹⁵⁰

¹⁴⁵ LEONARD, *supra* note 31, at 3.

¹⁴⁶ *Id.* at 23–24, 115.

¹⁴⁷ *See id.* at 116 (describing one farmer's pay cut when he fell from the top of the tournament to a ranking of twelve out of fourteen farmers).

¹⁴⁸ *See id.* at 125–26 (explaining that the Owens' farming family lost their contract with Tyson and therefore likely lost their main source of income to pay their mortgage).

¹⁴⁹ A new broiler house can cost over \$1 million, even upgrading an existing facility (which the integrator can require the farmer to do every few years) can cost on average \$142,000. But the typical chicken grower, who operates four houses, only makes an average of \$35,500 per year. *Fact Sheet: Abusive Poultry Contracts Require Government Action*, FOOD & WATER WATCH, <http://www.foodandwaterwatch.org/sites/default/files/Abusive%20Poultry%20Contracts%20Feb%202015.pdf> [<http://perma.cc/JZ25-47HE>] (Feb. 2015) (accessed Nov. 14, 2015).

¹⁵⁰ LEONARD, *supra* note 31, at 120 ("The success of any given flock of chickens rests primarily on the quality of the feed birds eat and the healthiness of baby chicks when they are delivered.").

This level of dependency renders them powerless to complain or fight the unjust system since complainers are likely to find themselves on the receiving end of a batch of very sick chickens, guaranteeing that they end up at the bottom of the lottery.¹⁵¹ If the integrator sends them bad flock after bad flock, it can then terminate their contract ‘for cause,’ leaving them without any way to pay back their debt. This is a huge incentive for growers not to complain.¹⁵²

Try to imagine the amount of stress and pressure the growers are under as they attempt to avoid insolvency, knowing that one bad flock could completely derail their livelihoods. Also imagine knowing that, when that day comes, your neighbors—fellow chicken growers—are profiting from your catastrophe. It could drive someone to do desperate, vicious things. That is the theory behind the charges brought by Clarendon County, South Carolina law enforcement against failed chicken grower James Lowery, accused of tampering with the heating and cooling systems of multiple chicken houses belonging to other growers on contract with Pilgrims on several different farms on different nights, killing the hundreds of thousands of birds inside by suffocation.¹⁵³

When we first read about the contract grower situation, it struck us as impossible from a business perspective. Obviously, growers must be making enough money to pay back their loans, or banks would stop loaning them money. Here is where the story moves from tragedy to (dark) comedy: banks loan money to growers with zero risk—every default caused by Tyson or Perdue’s unjust system is subsidized by the American taxpayer through the Farm Service Agency, which guarantees all of the growers’ loans and bails out the banks when a grower defaults.¹⁵⁴ In 2008 and 2009, the only two years for which there is poultry-industry specific data available, the federal government guar-

¹⁵¹ Patrick Woodall testimony, *supra* note 143, at 11; LEONARD, *supra* note 31, at 33–38 (describing accounts, including sworn testimony, by former Tyson employees who worked in the office where data on the chickens produced under Tyson’s contracts was kept of Tyson plant managers sending farmers who complained about pay rate, chicken weights, and deductions feed filled with gravel and sand, and consistently sending healthy batches of chicks to some farmers while sending worse batches of chicks to others).

¹⁵² But some growers have finally had enough and have come forward. A recent lawsuit filed in Kentucky against Tyson Foods paints a similar picture as *The Meat Racket* and other investigative sources: Tyson manipulates the tournament system by giving certain growers inferior chickens and food. Plaintiff’s First Amended Complaint at 8–10, 12, 15, *Morris v. Tyson Chicken, Inc.*, No. 4:15-cv-77-m (W.D. Ky. July 30, 2015).

¹⁵³ Christopher Leonard, *Who Is Murdering Thousands of Chickens in South Carolina?*, BLOOMBERG BUSINESS, <http://www.bloomberg.com/news/features/2015-06-02/whos-murdering-thousands-of-chickens-in-south-carolina-> [http://perma.cc/RHS7-CTUV] (June 2, 2015) (accessed Nov. 1, 2015) (quoting Clarendon County Sherriff Randy Garrett, who said, “We knew from the start that it had to be somebody that was disgruntled, mad, upset with Pilgrim’s . . . You had to have inside knowledge.”). As of this writing, there has not yet been an indictment against James Lowery, but local prosecutors intend to bring the charges before a grand jury.

¹⁵⁴ LEONARD, *supra* note 31, at 139.

anteed almost \$569 million in new loans to poultry growers.¹⁵⁵ In a 10-year period, the agency spent \$468 million to bail out banks when farmers defaulted on loans.¹⁵⁶

B. Dangerous Conditions and Worker Exploitation in Slaughter and Processing

The approximately 240,000¹⁵⁷ poultry processing workers in America toil in a factory-like setting; most of the jobs are unskilled and low-wage, and there are high turnover rates.¹⁵⁸ Moreover, poultry workers are a particularly vulnerable group; many are immigrants, including undocumented workers and refugees.¹⁵⁹ As Sarah Rich, attorney for the Southern Poverty Law Center (SPLC), explains, “[t]he industry provides poor to no medical care for workers in jobs that are designed to injure them over time, leaving many with permanent disabilities and serious injuries that impact their ability to find other manual work once they can no longer keep up with the poultry line.”¹⁶⁰

Conditions are so bad in meat and poultry slaughterhouses that groups such as Human Rights Watch (HRW), an international human rights watchdog that generally focuses on abuses in developing world countries, and SPLC, a civil rights organization formed to fight institutional racism, have each dedicated resources to expose exploitation in these industries. We direct readers to HRW’s report *Blood, Sweat, and Fear: Workers’ Rights in U.S. Meat and Poultry Plants*¹⁶¹ and SPLC’s report (produced with Alabama Appleseed), *Unsafe at These Speeds: Alabama’s Poultry Industry and its Disposable Workers*.¹⁶² HRW,

¹⁵⁵ *Id.* at 143.

¹⁵⁶ *Id.* at 144. This number is for all farm loans; the amount that was used to bail out defaulted poultry farm loans is unknown.

¹⁵⁷ *Fact Sheet: Employment and Wages in the Meat Industry*, AM. MEAT INST., <https://www.meatinstitute.org/index.php?ht=A/GetDocumentAction/i/53062> [<http://perma.cc/P7DX-QQ86>] (July 2009) (accessed Nov. 1, 2015).

¹⁵⁸ Email from Sarah Rich, Staff Attorney, Southern Poverty Law Center, to authors (Aug. 3, 2015, 14:01 CST) (on file with authors).

¹⁵⁹ *Id.*; see also GOVERNMENT ACCOUNTABILITY OFFICE, GAO-05-96 SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS 29 (Jan. 2005) (available at <http://www.gao.gov/products/GAO-05-96> [<http://perma.cc/U9C6-XKD9>] (accessed Nov. 1, 2015)) (noting that “large numbers of meat and poultry workers are immigrants” and may be undocumented).

¹⁶⁰ Rich, *supra* note 158.

¹⁶¹ HUMAN RIGHTS WATCH (HRW), BLOOD, SWEAT, AND FEAR: WORKERS’ RIGHTS IN U.S. MEAT AND POULTRY PLANTS 1, 3, 4, 29 (2004) (available at <http://www.hrw.org/reports/2005/usa0105/usa0105.pdf> [<http://perma.cc/DS7U-CVNH>] (accessed Nov. 1, 2015)) [hereinafter BLOOD, SWEAT, AND FEAR].

¹⁶² SOUTHERN POVERTY L. CTR. & ALABAMA APPLESEED, UNSAFE AT THESE SPEEDS: ALABAMA’S POULTRY INDUSTRY AND ITS DISPOSABLE WORKERS 4 (2013) (available at https://www.splcenter.org/sites/default/files/Unsafe_at_These_Speeds_web.pdf [<http://perma.cc/YNA9-K7RQ>] (accessed Nov. 1, 2015)) [hereinafter UNSAFE AT THESE SPEEDS]; see also RACHELLE ADAMS ET AL., THE SPEED KILLS YOU (Oct. 2009) (available at http://boldnebraska.org/uploaded/pdf/the_speed_kills_you_030910.pdf [<http://perma.cc/GYH6-VEYQ>] (accessed Nov. 3, 2015)) (documenting exploitation of poultry industry workers).

based on its findings, concluded that “systematic human rights violations [are] embedded in meat and poultry industry employment” because “the United States is failing to meet its obligations under international human rights standards to protect the human rights of meat and poultry industry workers.”¹⁶³

Worker health and safety problems begin on the slaughter line. Chickens are dumped from their transport crates onto a conveyor belt. The live hang area is kept dark to try to keep the chickens quiet, but the poor lighting causes workers to injure themselves.¹⁶⁴ The line speeds by at 180 shackles per minute, and each worker must hang at least twenty-three birds per minute.¹⁶⁵ Even with the darkness the birds fight back, and workers are cut, pecked, and urinated and defecated on by the birds.¹⁶⁶ The air becomes heavy with dust and bird feathers. Live hang workers “get covered with poultry mess and dust that can expose them to diseases associated with handling live chickens and contact with poultry feces and dust.”¹⁶⁷ Chronic pain and musculoskeletal disorders are common as a result of this physically demanding job.¹⁶⁸

Conditions are no better for the workers who process the animals’ corpses. This is the environment that chicken processing workers clock into every day: frigid temperatures to keep the meat cold; machinery and floors, and the workers themselves, covered in chicken blood, juices, and various cleaning and disinfectant chemicals; and co-workers in close proximity wielding sharp knives.¹⁶⁹ Poultry processing line workers will make the same cut more than 20,000 times during a day’s shift, leading to repetitive motion injuries, fatigue, and chronic pain.¹⁷⁰ One poultry worker described the line speed in an interview with HRW: “The lines are too fast. The speed is for machines, not for people. Maybe we could do it if every cut was easy, but a lot of the chickens are hard to cut. You have to work the knife too hard. That’s when injuries happen.”¹⁷¹ Another worker described how her supervi-

¹⁶³ BLOOD, SWEAT, AND FEAR, *supra* note 161, at 2.

¹⁶⁴ HSUS, HUMAN HEALTH IMPLICATIONS OF LIVE HANG OF CHICKENS AND TURKEYS ON SLAUGHTERHOUSE WORKERS 2 (available at <http://www.humanesociety.org/assets/pdfs/farm/HSUS-Human-Health-Report-on-Poultry-Slaughter-Live-Hang-Workers.pdf> [<http://perma.cc/2Y2E-4HCR>] (accessed Nov. 3, 2015)) [hereinafter HSUS, LIVE HANG REPORT].

¹⁶⁵ *Id.* at 2.

¹⁶⁶ *Id.*; see also BLOOD, SWEAT, AND FEAR, *supra* note 161, at 39 (describing the “dirty business” of live hang labor).

¹⁶⁷ *Poultry Processing Industry eTool, Tasks: Receiving & Killing*, OCCUPATIONAL SAFETY AND HEALTH ADMIN., <https://www.osha.gov/SLTC/etools/poultry/receiving.html> [<http://perma.cc/6ETW-2TR2>] (accessed Oct. 5, 2015) (cited in HSUS, LIVE HANG REPORT, *supra* note 164, at 2, n.32).

¹⁶⁸ HSUS, LIVE HANG REPORT, *supra* note 164, at 2, and sources cited therein.

¹⁶⁹ UNSAFE AT THESE SPEEDS, *supra* note 162, at 4, 11; see also BLOOD, SWEAT, AND FEAR, *supra* note 161, at 33 (identifying line speed as a “chief danger[]” in the meat and poultry industries).

¹⁷⁰ BLOOD, SWEAT, AND FEAR, *supra* note 161, at 36.

¹⁷¹ *Id.*

sor would demand, “Speed, Ruth, work for speed! One cut! One cut! One cut for the skin; one cut for the meat. Get those pieces through!” Another worker explained what is probably obvious to most or all readers right now: “People can’t take it, always harder, harder, harder! [*mas duro, mas duro, mas duro!*]”¹⁷²

According to government data, “[t]he meat and poultry industry . . . has one of the highest rates of injury and illness of any industry.”¹⁷³ The most recent Bureau of Labor Statistics data report that the rate of nonfatal worker injuries and illnesses in poultry processing is 4.5 per 100 workers.¹⁷⁴ These government numbers are far too low, as the HRW report makes very clear in its discussion of intimidated and exploited workers who cannot complain about their injury or take leave due to injury without risking termination.¹⁷⁵ Moreover, in 2002 the Occupational Safety and Health Administration (OSHA) changed the workplace injury reporting form to require less specific reporting on musculoskeletal injuries, which caused a significant drop in the reported incidence rate in the meat and poultry industries.¹⁷⁶

Studies of individual poultry processing facilities provide even bleaker numbers than the Bureau of Labor Statistics data. The Centers for Disease Control’s National Institute for Occupational Safety and Health evaluated typical job tasks in poultry processing (hanging, eviscerating, deboning, cutting) and determined that 81% of these jobs were above the “hand activity and force” limits recommended by the American Conference of Governmental Industrial Hygienists.¹⁷⁷ In the

¹⁷² *Id.* at 1 (brackets and emphasis in original).

¹⁷³ SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 1.

¹⁷⁴ BUREAU OF LABOR STATISTICS, INCIDENCE RATES OF NONFATAL OCCUPATIONAL INJURIES AND ILLNESSES BY INDUSTRY AND CASE TYPES tbl. 1 (2013) (available at <http://www.bls.gov/iif/oshwc/osh/os/ostb3958.pdf> [<http://perma.cc/ZM8W-KL33>] (accessed Nov. 3, 2015)).

¹⁷⁵ BLOOD, SWEAT, AND FEAR, *supra* note 161, at 52–54, 61–66; *see also* UNSAFE AT THESE SPEEDS, *supra* note 162, at 12–13, 15 (describing study which found that between 33% and 69% of all workplace injuries in poultry plants are not counted in OSHA reports; poultry plant employees interviewed stated that their coworkers were afraid to report injuries for fear of retaliation, and related that workers had been fired for visiting the plant nurse too many times complaining of pain); SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 29–30 (describing underreporting of employers’ workplace safety and illness data, and stating several factors that cause workers not to report injuries: fear of retaliation, employers’ incentive programs that reward low injury rates, and supervisors discouraging or preventing reporting of injuries).

¹⁷⁶ BLOOD, SWEAT, AND FEAR, *supra* note 161, at 55 (also describing how the industries jumped on the reportedly lower incidence rates to misleadingly claim that it had made great strides in worker safety). It is unlikely a coincidence that also in 2002, “OSHA formed an alliance with the American Meat Institute”—an industry trade group—upon which it relies for “assist[ance] . . . in maintaining and updating information on safety and health in the meat industry on its Web site.” SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 35.

¹⁷⁷ JESSICA G. RAMSEY ET AL., EVALUATION OF CARPAL TUNNEL SYNDROME AND OTHER MUSCULOSKELETAL DISORDERS AMONG EMPLOYEES AT A POULTRY PROCESSING PLANT, HEALTH HAZARD EVALUATION REPORT 2014-0040-3232 i (NIOSH 2015) (available at <http://www.cdc.gov/niosh/hhe/reports/pdfs/2014-0040-3232.pdf> [<http://perma.cc/MZ5U->

same study, an employee questionnaire revealed that one out of three employees (34%) in the poultry processing plant described symptoms consistent with carpal tunnel syndrome (and for 92% of afflicted workers their symptoms were moderate or severe), and 76% of workers showed signs of nerve damage similar to carpal tunnel syndrome.¹⁷⁸ This figure is consistent with the findings of Alabama Appleseed and SPLC, in which nearly three-quarters of the 302 current and former poultry plant employees they interviewed reported experiencing musculoskeletal injuries on the job.¹⁷⁹

The ailments suffered are not just musculoskeletal; workers also report skin problems, eye pain or vision problems, and respiratory problems.¹⁸⁰ Exposure to chemicals used in chicken slaughter and production that attempt to neutralize the feces and bacteria that is spread around during the process (see Part IV below) can lead to death in some cases, as happened to federal poultry inspector Jose Navarro.¹⁸¹ There are also affronts to basic human decency. Many workers reported that the processing line never stopped, not even for workers who were in pain. The line also did not stop to provide bathroom

HD22] (updated June 2015) (accessed Nov. 3, 2015)) [hereinafter NIOSH, CARPAL TUNNEL]. A similar study conducted at a different poultry processing plant found that 72% of employees showed signs of nerve damage, and 42% reported symptoms consistent with carpal tunnel syndrome. KRISTIN MUSOLIN, DO, MS ET AL., EVALUATION OF MUSCULOSKELETAL DISORDERS AND TRAUMATIC INJURIES AMONG EMPLOYEES AT A POULTRY PROCESSING PLANT, HEALTH HAZARD EVALUATION REPORT 2012-0125-3204 11 (NIOSH Mar. 2014) (available at <http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0125-3204.pdf> [<http://perma.cc/PZ9H-HD8T>] (accessed Nov. 3, 2015)). While these studies found a significant amount of information regarding the prevalence of musculoskeletal injuries in poultry slaughter workers, it is perhaps ironic that the studies were done as part of the USDA's program to implement a new poultry inspection system that would have allowed increased line speeds of up to 175 birds per minute. See *infra* Section IV.B and accompanying notes. But the studies stopped just short of attributing workplace injuries to line speeds; rather, the NIOSH studies focused on the design of the job tasks and recommended changes like more breaks for employees. FSIS then used the NIOSH studies as a basis for its conclusion that an increase in line speeds was "not a significant factor in worker safety"—a conclusion that NIOSH did not make. See *NIOSH Director Says FSIS Administrator Misinterpreted Line-Speed Study*, FOOD SAFETY NEWS, <http://www.foodsafetynews.com/2014/04/niosh-director-says-fsis-misinterpreted-line-speed-study/#.VasXMyVhBd> [<http://perma.cc/4G7S-3E6B>] (Apr. 10, 2014) (accessed Nov. 3, 2015) (referring to NIOSH director John Howard's statement that NIOSH did not draw that conclusion).

¹⁷⁸ NIOSH, CARPAL TUNNEL, *supra* note 177, at 10, 17.

¹⁷⁹ UNSAFE AT THESE SPEEDS, *supra* note 162, at 7.

¹⁸⁰ *Id.* at 22.

¹⁸¹ Kimberly Kindy, *At Chicken Plants, Chemicals Blamed for Health Ailments Are Poised to Proliferate*, WASH. POST, http://www.washingtonpost.com/politics/at-chicken-plants-chemicals-blamed-for-health-ailments-are-poised-to-proliferate/2013/04/25/d2a65ec8-97b1-11e2-97cd-3d8c1afe4f0f_story.html [<http://perma.cc/2VT2-QM8U>] (Apr. 25, 2013) (accessed Nov. 3, 2015); see also SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 22 (describing "respiratory irritation and . . . asphyxiation from exposure to pathogenic respiratory substances" as among the types of injuries and illnesses that workers in the meat and poultry industry suffer from).

breaks.¹⁸² When they were given a bathroom break, workers were often limited to five minutes—insufficient time to remove all the protective gear they were required to wear on the line, go to the bathroom, and then dress again. As a result, workers held it in, did not drink water before and during their shifts, or relieved themselves while they worked on the line.¹⁸³

C. Inefficiency Revisited: How The Poultry Industry Drives Global Hunger

The front-page headline of the *New York Times* on October 5, 1947, read “Truman Calls on Nation to Forego Meat Tuesdays, Poultry, Eggs Thursdays.”¹⁸⁴ Secretary of State under then-President Truman, George C. Marshall, argued that giving up meat, poultry, and eggs could free up grain that could be sent to the starving instead of being eaten by farm animals:

Food from the United States . . . would deter the march of hunger, cold and collapse, not only enabling Europe to recover its economic stability but also contributing to the resolution of a crisis that could mean the difference between the failure or attainment of world peace and security.¹⁸⁵

Sixty years later, in 2007, the United Nations Special Rapporteur on the right to food declared that turning crops into biofuels is a “crime against humanity,” because it was driving up the price of food, land, and water for the global poor.¹⁸⁶ His point, similar to Secretary Marshall’s, is that turning crops into fuel while people are starving is immoral and indefensible. But, as environmental journalist George Monbiot pointed out, while 100 million metric tons of food was turned into biofuels, 760 million metric tons were “snatched from the mouths of humans to feed [farm] animals—which could cover the global food deficit 14 times.”¹⁸⁷

Basically, the inefficiency discussed in Part II.A means that, as the Worldwatch Institute’s Brian Halweil explains, “grain is used more efficiently when consumed directly by humans. Continued growth in meat output is dependent on feeding grain to animals, creating compe-

¹⁸² UNSAFE AT THESE SPEEDS, *supra* note 162, at 23. Seventy-nine percent of respondents in the survey who answered questions about bathroom breaks (266 employees) stated that they were not allowed to take bathroom breaks when they needed. *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Truman Calls on Nation to Forego Meat Tuesdays, Poultry, Eggs Thursdays*, N.Y. TIMES (Oct. 5, 1947) (available at <http://www.nytimes.com/learning/general/onthisday/big/1005.html#article> [<http://perma.cc/8TGA-LXU8>] (accessed Nov. 3, 2015)).

¹⁸⁵ *Id.*

¹⁸⁶ *UN Independent Rights Expert Calls for Five-Year Freeze on Biofuel Production*, UNITED NATIONS NEWS CTR., <http://www.un.org/apps/news/story.asp?NewsID=24434&#.Va1xLPmUthQ> [<http://perma.cc/6NXJ-NWL9>] (Oct. 26, 2007) (accessed Nov. 3, 2015).

¹⁸⁷ George Monbiot, *Credit Crunch? The Real Crisis is Global Hunger. And If You Care, Eat Less Meat*, THE GUARDIAN, <http://www.theguardian.com/commentisfree/2008/apr/15/food.biofuels> [<http://perma.cc/6G3U-8X2V>] (Apr. 14, 2008) (accessed Nov. 3, 2015).

tition for grain between affluent meat eaters and the world's poor."¹⁸⁸ So when we eat meat, we participate in a system that drives up the cost of land, food, and water—and causes poor people to starve. As Oxfam America's Ben Grossman-Cohen explains, “[e]ating less meat is a simple way to reduce the pressure on global resources and help ensure that everyone has enough to eat. To say it simply, eating less meat helps fight hunger.”¹⁸⁹

In 2015, two environmental scientists published a paper in the prestigious magazine, *Environment*, in which they connected the dots between industrial meat production and its effect on the global poor.¹⁹⁰ In addition to discussing the inefficiency that drives up food prices and causes starvation, they also noted that meat production destroys small-scale farmers in the developing world who “are expelled from their land, which is given to a large soy plantation to grow large amounts of animal feed to export to industrialized countries. In Paraguay, more than 100,000 small-scale farmers have, often forcibly, been expelled from their soy farms since 1990.”¹⁹¹ The authors conclude with their belief that “shifting diets toward more vegetarian and vegan meals (coupled with reducing the 20–25% percent of food waste in the whole food chain) should rank as one of the leading focal themes for sustainability policy.”¹⁹²

All of this is why we are so impressed by a particular Greenpeace action in the Amazon in 2006. The environmental organization unfurled what must be the largest protest banner ever, reading “KFC: Amazon Criminal,” to protest the chopping down of the Amazon rainforest to grow soy to feed to KFC's chickens.¹⁹³ Greenpeace representative, Gavin Edwards, explained, “[d]eforestation, slavery, use of toxic chemicals, land theft, illegal farming and the extinction of rare species are a recipe for disaster in the Amazon rainforest, but they are ingredients in KFC's quest for cheap animal feed.”¹⁹⁴ And of course, it is not just KFC—it is the entire poultry industry.

¹⁸⁸ Brian Halweil, *Briefing on Meat Consumption*, WORLDWATCH NEWS, <http://www2.johnabbott.qc.ca/~geoscience/temp/WorldIssues/Food/meat-wwn.txt> [<http://perma.cc/3YZF-6VYQ>] (July 2, 1998) (accessed Nov. 3, 2015).

¹⁸⁹ Ben Grossman-Cohen, *'Meatless Monday' Too Hot a Potato for USDA*, CNN, <http://www.cnn.com/2012/08/02/opinion/grossman-cohen-meatless-monday/index.html> [<http://perma.cc/R87V-PBGX>] (updated Aug. 2, 2012, 7:50 AM) (accessed Nov. 3, 2015); see also Emily S. Cassidy et al., *Redefining Agricultural Yields: From Tonnes to People Nourished Per Hectare*, 8 ENVTL. RES. LETTERS 1, 6 (Aug. 1, 2013) (available at <http://iopscience.iop.org/1748-9326/8/3/034015> (accessed Nov. 3, 2015)) (arguing in favor of a shift away from animal products, to plants, in order to feed the world).

¹⁹⁰ Stoll-Kleemann & O'Riordan, *supra* note 84, at 40–41.

¹⁹¹ *Id.* at 41.

¹⁹² *Id.* at 43.

¹⁹³ Press Release, Greenpeace, *KFC Exposed for Trashing the Amazon Rainforest for Buckets of Chicken* (May 17, 2006) (available at <http://www.greenpeace.org/international/en/press/releases/kfc-exposed-for-trashing-the-a/> [<http://perma.cc/93EC-WRC4>] (accessed Nov. 3, 2015)).

¹⁹⁴ *Id.*

D. *Strategies for Change*

The poultry industry commits fundamental human rights violations when it impoverishes contract farmers, exploits workers, jeopardizes workers' health and safety, and contributes to global food insecurity.¹⁹⁵ Beyond awareness-raising such as the Greenpeace action just described, little can be done to address the problem of chicken production fueling global poverty. In this Section, we highlight three creative strategies that address the human rights violations against 'growers' and workers in slaughterhouses and processing plants.

1. *Packers and Stockyards Act, Class Action Suits*

First, several growers have sued integrators over deceptive and anticompetitive practices with respect to their chicken growing contracts, and have met with mixed results.¹⁹⁶ Most recently, growers with help from nonprofit attorneys filed a class action against Tyson alleging that Tyson manipulated the tournament system and the quality of birds received by some growers, thereby intentionally decreasing grower compensation.¹⁹⁷ The complaint also alleges that Tyson withheld food and veterinary care from growers, which caused chicken deaths and therefore uncompensated losses to the growers, and that Tyson threatened not to renew growers' contracts unless the growers updated their facilities, which forced the growers to go further into debt.¹⁹⁸ The plaintiffs assert that, "[i]n so doing, Tyson violated the Packers and Stockyards Act, breached the terms of its agreements and its obligations of good faith and fair dealing, and committed common

¹⁹⁵ See BLOOD, SWEAT, AND FEAR, *supra* note 161, at 17–21 (arguing that the conditions faced by poultry processing workers violate provisions of the Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, Covenant on Economic, Social and Cultural Rights, and the North American Agreement on Labor Cooperation, among other international treaties and conventions to which the U.S. is a signatory).

¹⁹⁶ In Oklahoma, growers sued Tyson and a jury awarded them a \$10 million verdict, which the Oklahoma Supreme Court overturned. Chuck Bartels, *Oklahoma Supreme Court Overturns \$10M Tyson Verdict*, INSURANCE J., <http://www.insurancejournal.com/news/southcentral/2012/03/09/238927.htm> [<http://perma.cc/4FF3-A5TP>] (Mar. 9, 2012) (accessed Nov. 3, 2015); see also *Braswell v. ConAgra, Inc.*, 936 F.2d 1169, 1172, 1177 (11th Cir. 1991) (affirming jury verdict and the \$13.6 million award in favor of broiler chicken growers who sued producer for fraud in weighing chickens and calculating the growers' pay); *Bunting v. Perdue, Inc.*, 611 F.Supp. 682, 683, 692 (D.C.N.C. 1985) (granting summary judgment to Perdue against grower's claims arising under the Packers and Stockyards Act and several state trade and consumer protection laws); *Arkansas Valley Indus., Inc. v. Freeman*, 415 F.2d 713, 713–14 (8th Cir. 1969) (setting aside administrative enforcement action under the Packers and Stockyards Act against poultry producers because, the court found, the Act does not apply to them).

¹⁹⁷ Amended Complaint at 1–2, 7–8, *Morris v. Tyson Chicken, Inc.*, No. 4:15-cv-77-m (W.D. Ky. July 30, 2015).

¹⁹⁸ *Id.* at 7–9, 41–42. The allegations in the complaint echo the stories told by chicken growers in *The Meat Racket*. LEONARD, *supra* note 31 *passim*.

law fraud.”¹⁹⁹ Similar suits have been filed against Tyson in other states, setting the stage for multi-district mass litigation.²⁰⁰

2. Occupational Safety and Health Act Complaints

Second, with help from SPLC and Alabama Appleseed, workers have successfully filed complaints with OSHA alleging health and safety violations in the workplace. The Occupational Safety and Health Act (OSH Act) broadly requires employers to provide “employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees” (the General Duty Clause) and to “comply with occupational safety and health standards” that OSHA may promulgate.²⁰¹ Employers are also required under the OSH Act to “maintain accurate records, and to make periodic reports on, work-related deaths, injuries and illnesses other than minor injuries requiring only first aid treatment and which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job” and “of employee exposures to potentially toxic materials or harmful physical agents” for which OSHA has issued standards for monitoring.²⁰²

OSHA also has the authority to inspect workplaces without advance notice.²⁰³ “Current workers or their representatives may file a written complaint and ask OSHA to inspect their workplace if they believe there is a serious hazard.”²⁰⁴ Upon finding a violation, OSHA

¹⁹⁹ *Id.* at 9.

²⁰⁰ Email from Jessica Culpepper, Attorney, Food Safety and Health, to authors (July 29, 2015, 10:23 EST) (on file with authors).

²⁰¹ 29 U.S.C. § 654(a) (2012). OSHA has the authority to issue industry-specific standards for employee health and safety, but it has not yet done so for the poultry processing or meatpacking industries. *See generally* 29 C.F.R. §§ 1910.1–.5 (2007) (detailing OSHA industry standards and OSHA’s authority under the OSH Act). *See also OSHA Safety and Health Topics: Meat Packing Industry*, OSHA, <https://www.osha.gov/SLTC/meatpacking/standards.html> [<http://perma.cc/K9FG-2KJK>] (accessed Nov. 3, 2015) (citing no standards for line speed); *OSHA Poultry Processing Industry eTool: Standards & Compliance*, OSHA, <http://www.osha.gov/SLTC/etools/poultry/standards.html> [<http://perma.cc/4XNF-PG76>] (accessed Nov. 3, 2015) (also citing no standards for line speed).

²⁰² 29 U.S.C. § 657(c)(2)–(3).

²⁰³ 29 U.S.C. § 657(a); *see also* OSHA, ALL ABOUT OSHA 14 (2014) (available at https://www.osha.gov/Publications/all_about_OSHA.pdf [<http://perma.cc/53DF-ZHFX>] (accessed Nov. 3, 2015)) (“Inspections are initiated without advance notice.”).

²⁰⁴ ALL ABOUT OSHA, *supra* note 203, at 15. Note that OSHA will only consider complaints from “current workers.” This is a problem as former workers in poultry plants may feel more comfortable speaking out about conditions when they no longer need to fear retaliation. *See UNSAFE AT THESE SPEEDS*, *supra* note 162, at 35 (discussing the consideration of complaints only from current employees as a “key flaw in OSHA enforcement”).

may issue a citation²⁰⁵ and a fine,²⁰⁶ or even criminal penalties.²⁰⁷

OSHA has historically failed to adequately inspect meat and poultry worksites. According to the GAO, “OSHA conducted about 1,900 inspections of plants in the meat and poultry industry from 1995 to September 15, 2004. These inspections represented less than 1 percent of OSHA’s total inspections.”²⁰⁸ The GAO concluded that OSHA’s criteria for selecting which worksites to inspect can cause it to miss high-risk processing plants,²⁰⁹ which is one reason why filing complaints on behalf of workers to trigger OSHA investigations is so important.²¹⁰

More recently, such complaints have resulted in citations and fines levied against two poultry plants for “exposing workers to dangerous machinery, fall and musculoskeletal disorder hazards.”²¹¹ One complaint against chicken meat supplier Wayne Farms, filed by SPLC, resulted in eleven citations arising from workers being exposed to musculoskeletal injuries, failure to report injuries, failure to allow employees to access needed medical care, and workers being exposed to safety hazards from the equipment and workspace.²¹² It resulted in proposed fines of up to \$102,600.²¹³ In another case involving a different supplier, Case Farms, OSHA cited a poultry slaughterhouse for fifty-five violations and assessed over \$861,000 in fines.²¹⁴ Underscoring how often chicken processors flouted the law, the OSHA news re-

²⁰⁵ 29 U.S.C. § 658 (2012). A citation is a written notice to the employer of the violation. *Id.*

²⁰⁶ *Id.* § 666.

²⁰⁷ *Id.* § 666(e) (providing for criminal fines and imprisonment for willful violation by an employer causing death to an employee).

²⁰⁸ SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 33.

²⁰⁹ *Id.* at 41.

²¹⁰ Email from Thomas Fritzsche, Clinical Teaching Fellow, Kathryn O. Greenberg Immigration Justice Clinic Benjamin L. Cardozo School of Law, to authors (July 15, 2015, 11:58 EST) (on file with authors).

²¹¹ *See, e.g.*, News Release, OSHA, Alabama’s Wayne Farms Poultry Plant Cited for Exposing Workers to Musculoskeletal, Other Repeat, Serious Safety and Health Hazards (Oct. 29, 2014) (available at https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=news_releases&p_id=26922 [<http://perma.cc/AY6E-DAGM>] (accessed Nov. 4, 2015)) (reporting on OSHA’s citation for exposing poultry plant workers to dangerous machinery) [hereinafter OSHA, Alabama Wayne Farms News Release]; News Release, OSHA, Delaware Poultry-Processing Plant Exposed Workers to Serious Hazards Including Musculoskeletal Injuries (June 22, 2015) (available at <https://www.osha.gov/newsrelease/reg3-20150622.html> [<http://perma.cc/8L55-ZLRX>] (accessed Nov. 4, 2015)) (detailing a Delaware poultry plant’s citation for exposing employees on the deboning line to musculoskeletal injuries) [hereinafter OSHA, Delaware Wayne Farms News Release].

²¹² *Id.*

²¹³ OSHA, Alabama Wayne Farms News Release, *supra* note 211.

²¹⁴ News Release, OSHA, Chicken Processor Faces \$861K in Fines After OSHA Finds Workers Continue to be Exposed to Serious Amputation, Electrocution and Fall Hazards (Aug. 13, 2015) (available at <https://www.osha.gov/newsrelease/reg5-20150813.A.html> [<http://perma.cc/D54R-8N27>] (accessed Nov. 4, 2015)).

lease noted that “[i]n the past 25 years, Case Farms has been cited for more than 350 safety and health violations.”²¹⁵

However, as Alabama Appleseed and SPLC point out, even where fines and penalties are levied, they have minimal deterrent effect because the fines are too small and OSHA may not even ultimately collect them.²¹⁶ When fines are infrequent and insignificant, they will be absorbed as a cost of doing business and will not change practices in the industry. Nevertheless, with enough fines and publicity behind the fines, as well as public and Congressional pressure, it is possible that the industry could be forced to change. Moreover, filing complaints on behalf of workers forces the agency to pay attention, if even just to show that it is doing something to enforce the law against unscrupulous employers.

In a similar vein, we believe a possible strategy to place pressure on the agency is for organizations to request all of OSHA’s records of workplace safety complaints, inspections, and violations found in all federally-inspected slaughterhouses and processing plants, and then prepare annual reports which would be presented to Congress. Such actions would be fodder for newspaper stories and op-eds, letters from members of Congress to OSHA, further GAO and Office of Inspector General reports, and so on. None of the groups we contacted were aware of anyone that is currently pursuing such a strategy.

3. *Petitions for Rulemaking*

Finally, we feel that petitions for rulemaking could be useful in the OSHA context. Although OSHA has the authority to issue workplace safety standards specific to the poultry industry, it has not yet done so.²¹⁷ So far, OSHA has primarily relied on voluntary ‘cooperative programs,’ by which it ‘partners’ with meat and poultry corporations to improve worker health and safety and reduce injury rates.²¹⁸ Thus, OSHA has stood idly by over the past few decades while the USDA increased line speeds in poultry processing plants to maximize efficiency without any regard for worker welfare.²¹⁹ Without legally

²¹⁵ *Id.*

²¹⁶ UNSAFE AT THESE SPEEDS, *supra* note 163, at 13 (“Among the 20 inspections of Alabama poultry processing plants conducted by OSHA since October 2007, six plants were cited a total of 16 times for recordkeeping violations, but 10 of these citations were either deleted or the fines for the citations were reduced to zero.”); *see also id.* at 35 (discussing flaws in the OSHA complaint system and enforcement); BLOOD, SWEAT, AND FEAR, *supra* note 161, at 37.

²¹⁷ To be fair, during the Clinton administration OSHA did promulgate ergonomics standards to address musculoskeletal injuries in workplaces, which could have benefited poultry and meat processing workers; Congress repealed these standards the following year. UNSAFE AT THESE SPEEDS, *supra* note 162, at 10; BLOOD, SWEAT, AND FEAR, *supra* note 161, at 47–52.

²¹⁸ SAFETY AND HEALTH OF MEAT AND POULTRY WORKERS, *supra* note 159, at 35–36.

²¹⁹ Linder, *supra* note 142, at 70 (describing how the USDA has abandoned the original intent of the federal meat and poultry inspection acts by ignoring worker welfare in pursuing policies to maximize line speeds). When proposing a new poultry inspection

enforceable, industry-specific safety standards, OSHA enforcement is limited to the General Duty Clause. In 2013, SPLC submitted a rulemaking petition to OSHA and the USDA requesting that the agency promulgate standards for work speeds in poultry and meatpacking plants.²²⁰ OSHA denied the petition, not because it disagreed with the overwhelming evidence of dangerous conditions in poultry plants, but because of “limited resources.”²²¹ Such a petition could be filed annually, in concert with efforts to garner media attention and lobby Congress for additional resources and commitment from OSHA on the issue. And while a lawsuit would be unlikely to succeed, it might cause OSHA to reconsider its stance. Combined with a serious campaign based on Freedom of Information Act requests, such efforts might have a salutary effect.

V. HUMAN HEALTH

In this Part, we address: the adverse health impacts of animal product consumption and the overwhelming evidence that the health problems that plague much of the developed world can be alleviated or even eliminated by cutting meat and other animal products from our diets; the public health risks posed by infectious diseases incubated by the intensive raising of chickens in factory farming; and what organizations are doing to address some of these issues.

A. *Fat, Sick, and Dying: the American Diet*

It has long been known that avoiding meat and animal products is strongly associated with greatly reduced risk of heart disease, some cancers, obesity, hypertension, and diabetes.²²² When the prestigious

system authorizing maximum line speeds of up to 175 birds per minute, FSIS “acknowledged the potential for an increase in section line speed to affect establishment employee safety.” *Modernization of Poultry Slaughter Inspection*, 79 Fed. Reg. 49,566, 49,596 (Aug. 21, 2014) (codified at 9 C.F.R. §§ 381, 500) (citing 77 Fed. Reg. 4423–25). FSIS can collaborate with OSHA to receive recommendations to address safety of poultry processing workers, but it “does not have the authority to require that establishments adopt these recommendations.” *Id.* at 49,597. It baldly (and in direct contradiction to the Alabama Appleseed/SPLC and HRW studies) claimed that “a prudent establishment would have such a program in place.” *Id.*

²²⁰ *SPLC Urges Federal Agencies to Protect Poultry, Meatpacking Plant Workers*, SPLC, <http://www.splcenter.org/get-informed/news/splc-urges-federal-agencies-to-protect-poultry-meatpacking-plant-workers> [<http://perma.cc/J5W8-JWN8>] (Sept. 2, 2013) (accessed Nov. 4, 2015).

²²¹ *Fight Continues for Poultry Workers After OSHA Refuses to Create Better Workplace Protections*, SPLC, <https://www.splcenter.org/news/2015/03/18/splc-fight-continues-poultry-workers-after-osha-refuses-create-better-workplace-protections> [<http://perma.cc/ZU2Q-QFC3>] (Mar. 17, 2015) (accessed Nov. 4, 2015).

²²² *See, e.g., Cancer Increasing Among Meat Eaters*, N.Y. TIMES, <http://query.nytimes.com/mem/archive-free/pdf?res=9502E1D81331E733A25757C2A96F9C946697D6CF> (Sept. 24, 1907) (accessed Nov. 4, 2015) (illustrating the correlation between meat consumption and higher mortality rates as early as 1907); *see also* Michael J. Orlich et al., *Vegetarian Dietary Patterns and Mortality in Adventist Health Study 2*, 173 J. AM. MED. ASS’N INTERN. MED. 1230, 1231 (2013) (studying 73,308 Seventh Day Adventist

American Dietetic Association reviewed all of the science on vegetarian diets, they declared that “[i]t is the position of the American Dietetic Association that appropriately planned vegetarian diets . . . may provide health benefits in the prevention and treatment of certain diseases.”²²³ They found that vegetarian diets were healthful for all stages of life, including infancy and pregnancy, and that vegetarians had lower rates of heart disease, cancer, diabetes, and obesity.²²⁴

As Dr. T. Colin Campbell explains in his best-selling nutrition book, *The China Study*:

More people die because of the way they eat than by tobacco use, accidents or any other lifestyle or environmental factor . . . There is nothing better the government could do that would prevent more pain and suffering in this country than telling Americans unequivocally to eat less animal products, less highly-refined plant products and more whole, plant-based foods.²²⁵

In an article that summarizes the results in his book, Dr. Campbell writes that “perhaps 80 to 90% [of all cancers, cardiovascular diseases, and other forms of degenerative illness can be prevented, at least until very old age, simply by adopting a plant-based diet.”²²⁶

The following discussion provides a very brief overview of the major categories of preventable chronic diseases (the so-called “diseases of affluence”²²⁷) that are related to meat consumption, especially chicken.

1. Cancer

A vegetarian diet is significantly correlated with a much lower risk of mortality from cancer and heart disease.²²⁸ In a broad-based analysis of all existing studies through 2012, researchers concluded that “[a]ll cancer incidences, except breast cancer, were significantly

men and women, many of whom were vegetarians, vegans, lacto-ovo-vegetarians, semi-vegetarians, or pesco-vegetarians, over a period of five years); Lap Tai Le & Joan Sabaté, *Beyond Meatless, the Health Effects of Vegan Diets: Findings from the Adventist Cohorts*, 6 NUTRIENTS 2131, 2142 (2014) (reviewing studies of the dietary habits and health outcomes of Seventh Day Adventists).

²²³ Am. Dietetic Ass’n, *Position of the American Dietetic Association: Vegetarian Diets*, 109 J. AM. DIET. ASS’N 1266, 1266 (2009).

²²⁴ *Id.* at 1266, 1274.

²²⁵ T. COLIN CAMPBELL & THOMAS M. CAMPBELL, *THE CHINA STUDY: THE MOST COMPREHENSIVE STUDY OF NUTRITION EVER CONDUCTED AND THE STARTLING IMPLICATIONS FOR DIET, WEIGHT LOSS AND LONG-TERM HEALTH* 305 (2006).

²²⁶ T. Colin Campbell, *Why China Holds the Key to Your Health*, VEG SOURCE, <http://www.vegsource.com/event/campbell.htm> [<http://perma.cc/ADN9-B86M>] (accessed Oct. 4, 2015).

²²⁷ See, e.g., CAMPBELL, *supra* note 225, at 279 (explaining the connection between meat consumption and “diseases of affluence”).

²²⁸ Tao Huang et al., *Cardiovascular Disease Mortality and Cancer Incidence in Vegetarians: A Meta-Analysis and Systematic Review*, 60 ANN. NUTR. METAB. 233, 233 (2012).

lower in vegetarians than in omnivores.”²²⁹ In one study with a sample size of over 27,000 men (also one of the few studies that looked at specific types of meat and animal products consumed), researchers looked at the incidence of lethal prostate cancer in relation to consumption of red meat, poultry, and eggs.²³⁰ These researchers found a statistically significant positive association (81% increased risk) between prostate cancer and the consumption of 2.5 eggs per week, compared to men who consumed less than half an egg per week.²³¹ Among men who were diagnosed with prostate cancer during the study, those who consumed 3.5 or more servings of poultry per week after being diagnosed had a 69% increased risk of lethal prostate cancer compared to men who consumed less than 1.5 servings per week.²³² The results of the study were surprising because the correlation between eggs and poultry and incidence of lethal prostate cancer was much higher than with consumption of red meat or other types of processed meats.²³³ A possible explanation is that compounds called heterocyclic amines (HCAs), which are formed when meat is cooked at high temperatures, are implicated in numerous cancers, and “[c]hicken is the primary source of HCAs in the U.S. diet, and pan-fried, oven broiled, and grilled chicken have particularly high amounts of HCAs.”²³⁴

2. Heart Disease

As with cancer, the risk of mortality from heart disease is significantly lower in vegetarians compared with omnivores.²³⁵ The issue appears to be protein consumption rather than fat consumption,²³⁶ so it

²²⁹ Duo Li, *Effect of the Vegetarian Diet on Non-Communicable Diseases*, 94 J. SCI. FOOD AGRIC. 169, 172 (2013).

²³⁰ Erin L. Richman et al., *Egg, Red Meat, and Poultry Intake and Risk of Lethal Prostate Cancer in the Prostate Specific Antigen-Era: Incidence and Survival*, 4 CANCER PREVENTION RES. 2110, 2110 (2011) (available at <http://cancerpreventionresearch.aacrjournals.org/content/early/2011/09/15/1940-6207.CAPR-11-0354.short#aff-2> (accessed Nov. 15, 2015)).

²³¹ *Id.*

²³² *Id.* at 2113.

²³³ *Id.*

²³⁴ *Id.* at 2117.

²³⁵ Li, *supra* note 228, at 172 (“Compared with omnivores, all-cause mortality and mortality from . . . ischemic heart disease, circulatory and cerebrovascular diseases, and type 2 diabetes were significantly lower in vegetarians.”); *see also* Huang et al., *supra* note 228, at 233 (concluding that vegetarians have a lower ischemic heart disease mortality and cancer incidence than non-vegetarians); Atsuko Matsuoka & John Sorenson, *Human Consequences of Animal Exploitation: Needs for Redefining Social Welfare*, XL(4) J. SOCIOLOGY & SOC. WELFARE 7, 19 (2013) (citing Rashmi Sinha et al., *Meat Intake and Mortality: A Prospective Study of Over Half a Million People*, 169 ARCH. INTERN. MED. 562 (2009)) (available at http://www.wmich.edu/hhs/newsletters_journals/jssw_institutional/institutional_subscribers/40.4.Matsuoka.pdf [<http://perma.cc/XX87-TGFT>] (accessed Nov. 15, 2015)) (studying over half a million people and finding that consumption of red and processed meats is linked with increased mortality from heart disease and cancer).

²³⁶ CAMPBELL, *supra* note 225, at 81 (“[A]nimal protein was more strongly correlated with blood cholesterol levels than saturated fat and dietary cholesterol.”).

comes as no surprise when the latest study does not associate fat consumption with disease—the researchers are studying the wrong nutrient.

Although epidemiological research supports the idea that meat-eaters have higher rates of heart disease,²³⁷ the more interesting studies in the area of heart disease and diet have used lifestyle interventions to slow and even reverse the progression of disease. Dr. Caldwell Esselstyn, perhaps the most notable of the researchers in this area, found that when patient volunteers with coronary artery disease were placed on a vegan diet that also avoided added oils, sugary foods, and excess salt, their disease progression stopped and many even experienced disease reversal.²³⁸

Dr. Esselstyn chronicles his success in what may be the strongest of the many books written in support of a plant-based diet, *Prevent & Reverse Heart Disease: The Revolutionary, Scientifically Proven, Nutrition-Based Cure*. In the book, Dr. Esselstyn shows that a low-fat vegan diet can actually cure heart disease,²³⁹ which is the number one cause of death in America.²⁴⁰ He points out that on the diet recommended by the American Heart Association and the U.S. government, patients continue to see their heart disease get worse, and many of them die.²⁴¹ By contrast,

[a]nyone who follows the [low-fat vegan diet] program faithfully will almost certainly see no further progression of disease, and will very likely find that it selectively regresses. And the corollary, overwhelmingly supported by global population studies, is that persons without the disease who adopt these same dietary changes will never develop heart disease.²⁴²

²³⁷ See, e.g., Francesca L. Crowe et al., *Risk of Hospitalization or Death from Ischemic Heart Disease Among British Vegetarians and Non-Vegetarians: Results from the EPIC-Oxford Cohort Study*, 97 AM. J. CLIN. NUTR. 597, 597 (2013) (discussing the lower risk of cardiovascular disease in vegetarians) (available at <http://ajcn.nutrition.org/content/early/2013/01/30/ajcn.112.044073.full.pdf+html> (accessed Nov. 15, 2015)).

²³⁸ Caldwell B. Esselstyn Jr. et al., *A Way to Reverse CAD?*, 63 J. FAM. PRAC. 356, 359 (2014).

²³⁹ CALDWELL ESSELSTYN, *PREVENT & REVERSE HEART DISEASE: THE REVOLUTIONARY, SCIENTIFICALLY PROVEN, NUTRITION-BASED CURE* 6 (2007) (“[T]hose who complied with my program achieved total arrest of clinical progression and significant selective reversal of coronary artery disease. In fully compliant patients, we have seen angina disappear in a few weeks and abnormal stress test results return to normal.”).

²⁴⁰ *Id.* at 4 (“Coronary artery disease is the leading killer of men and women in Western civilization. In the United States alone, more than half a million people die of it every single year. Three times that number suffer known heart attacks. And approximately three million more have ‘silent’ heart attacks, experiencing minimal symptoms and having no idea, until well after the damage is done, that they are in mortal danger.”).

²⁴¹ *Id.* at 58 (“[T]hat level of fat consumption has never been shown to arrest or reverse coronary artery disease. Quite the contrary, research has shown that while cutting fat consumption to that level from even higher levels may help to slow the disease’s progression, the disease, nonetheless, will progress.”).

²⁴² *Id.* at 10.

Similar results have been replicated in other studies.²⁴³ In *The China Study*, Dr. Campbell discussed lifestyle intervention studies that restricted patients' intake of animal products, prescribed regular exercise, and provided stress management tools. The experimental patients in these studies also demonstrated significant improvement in their cholesterol levels and chest pain compared to a control group.²⁴⁴ Some studies have found beneficial health effects of eating a vegan diet—pounds shed and improved measures of blood pressure, blood lipids, and blood sugar—after only seven days.²⁴⁵

3. Obesity, Diabetes, and Other Diseases of Affluence

Research studies show that when people are put on a low-fat vegetarian diet in order to reverse their heart disease, an incidental benefit of the diet was weight loss. When researchers delved into the issue, they found “that vegetarians, on average, are 10 percent leaner than omnivores. Vegans are even leaner, weighing, on average, 12 to 20 pounds less than lacto-ovo vegetarians (i.e., vegetarians who eat eggs and dairy products) or omnivores.”²⁴⁶ Conversely, a meat-heavy diet is strongly associated with obesity as compared to a vegetarian or vegan diet, which can prevent obesity.²⁴⁷ Adopting a vegetarian diet and thus reducing risk of obesity can be particularly beneficial for children.²⁴⁸

Because of the link between obesity and diabetes, it should not be surprising that a vegetarian diet produces “very significant” advantages for prevention and treatment of diabetes.²⁴⁹ But the benefits of a

²⁴³ See, e.g., Dean Ornish et al., *Intensive Lifestyle Changes for Reversal of Coronary Heart Disease*, 280 J. AM. MED. ASSN. 2001, 2001 (1998) (studying an experimental group that, when placed on a vegetarian diet with other lifestyle changes as compared to a control group prescribed only lipid-lowering drugs without lifestyle changes, experienced greater progression-halting and disease reversal effects over five years).

²⁴⁴ CAMPBELL, *supra* note 225, at 129–30.

²⁴⁵ John McDougall et al., *Effects of 7 Days on an Ad Libitum Low-Fat Vegan Diet: The McDougall Program Cohort*, 13 NUTR. J. 13:99 (2014) (available at <http://www.nutritionj.com/content/13/1/99> (accessed Nov. 15, 2015)).

²⁴⁶ PCRM, *HEALTHY EATING FOR LIFE FOR CHILDREN 7* (John Wiley & Sons, Inc. 2002).

²⁴⁷ See, e.g., *Diets High in Meat Consumption Associated with Obesity*, JOHNS HOPKINS BLOOMBERG SCH. OF PUB. HEALTH, <http://www.jhsph.edu/news/news-releases/2009/wang-meat-consumption-obesity.html> [<http://perma.cc/E6RB-E8Q3>] (Sept. 3, 2009) (accessed Oct. 4, 2015) (examining the association between meat consumption and obesity); Timothy Key et al., *Health Effects of Vegetarian and Vegan Diets*, 65 PROC. OF THE NUTR. SOC'Y 35, 37 (2006).

²⁴⁸ Joan Sabaté & Michelle Wien, *Vegetarian Diets and Childhood Obesity Prevention*, 91 AM. J. CLINICAL NUTR. 1525S, 1529S (2010); PCRM, *supra* note 246, at 19 (“Imagine the effects that a lifetime of healthy, vegan eating would have on the next generation. Children would be slimmer, healthier, and much less likely to be threatened with heart disease, cancer, food allergies, diabetes, or obesity. A vegan diet is the most powerful protection against chronic disease we can offer our children.”).

²⁴⁹ David J.A. Jenkins, *Type 2 Diabetes and the Vegetarian Diet*, 78 AM. J. CLIN. NUTR. 610S, 610S (2003). See also CAMPBELL, *supra* note 225, at 149–53 (discussing various studies connecting meat consumption with obesity and diabetes).

low-fat vegetarian diet do not stop there. Dr. Esselstyn explains that “[i]f you eat to save your heart, you eat to save yourself from other diseases of nutritional extravagance: from strokes, hypertension, obesity, osteoporosis, adult-onset diabetes, and possibly senile mental impairment, as well.”²⁵⁰ The argument that dementia, senility, and Alzheimer’s are caused by meat-eating aligns with the argument vis-à-vis heart disease: clogged arteries to one’s heart can lead to a heart attack and clogged arteries to one’s brain can lead to decreased brain function.²⁵¹

All of this research confirms the work of Dr. Campbell in *The China Study*, which we mentioned in the introduction to this Section and which we highly recommend to anyone who would like a more thorough treatment of the link between diet and cancer, heart disease, diabetes, and obesity. According to Dr. Campbell, all of the relevant science supports his conclusion that “[p]eople who ate the most animal-based foods got the most chronic disease. Even relatively small intakes of animal-based foods were associated with adverse effects. People who ate the most plant-based foods were the healthiest and tended to avoid chronic disease.”²⁵² Dr. Campbell concludes that while fewer animal products are better than more, none is the ideal amount.²⁵³

B. Outbreaks and Epidemics: The Twin Problems of Contamination and Drug Use

The link between poultry consumption and cancer, heart disease, obesity, and other ailments is inherent; there is likely nothing the government can do to make chicken any more healthy over the long term. However, there are huge public health problems that could be dealt with through government regulation, if the government had the will. Among those is the deadly combination of contaminated meat and drugs fed to chicken and other animals raised for food, which we discuss in the following Sections.

*1. There’s Sh*t in the Meat*

There are several aspects of modern poultry slaughter that make fecal contamination inevitable. Many of these aspects are deeply intertwined with the animal and worker welfare issues discussed above. The first factor is the conditions in which chickens are housed and raised for meat. Chickens are housed by the tens of thousands in broiler houses that are often not cleaned out more than once every few years. As discussed above, the animals can barely move, so they live

²⁵⁰ ESSELSTYN, *supra* note 239, at 7–8.

²⁵¹ *Id.* at 97.

²⁵² CAMPBELL, *supra* note 225, at 7.

²⁵³ *Id.* (“[T]he diet that has time and again been shown to reverse and/or prevent these diseases is the same whole foods, plant-based diet that I had found to promote optimal health in my laboratory research and in the China Study. The findings are consistent.”).

their lives in their own waste and in the waste of generations of chickens past. As Dr. E.M. Foster, Emeritus Director of the Food Research Institute at the University of Wisconsin, explains: the chickens “are in six inches of feces by the time they’re six weeks old. They’re going to have salmonella all over.”²⁵⁴

The second contaminating factor is the scalding tank, which removes the feathers from the chicken carcass. At this point the chickens are supposed to be dead, but as discussed in Part I, “many birds enter [the tank] still alive and expelling waste.”²⁵⁵ As a result all the animals end up potentially contaminated.²⁵⁶

The third contaminating factor is the machines used to remove the chickens’ intestines; faulty machinery can rupture the intestines, spilling excretia onto the machinery and on the carcass. It can also fail to fully remove all of the intestines, leaving some attached to the carcass as it continues down the line.²⁵⁷

The fourth and perhaps most significant contaminating factor is the chilling tanks which are used to lower the temperature of chicken carcasses to reduce pathogen development and improve shelf life. Even though the chicken carcasses have supposedly been washed at this point in the processing line, fecal material and bacteria are often still present and contaminate the water and other carcasses.²⁵⁸ “[C]ritics have dubbed the tank ‘fecal soup’ because contaminated birds are min-

²⁵⁴ Linder, *supra* note 142, at 91 (quoting George Anthon, *Contamination Rate Reaches 80% at Some U.S. Poultry Plants*, DES MOINES REG., Apr. 12, 1987, at 1A, 9A (quoting Dr. E.M. Foster, Emeritus Director of the Food Research Institute, University of Wisconsin)).

²⁵⁵ *Id.* at 93. See also USDA FOOD SAFETY & INSPECTION SERV., IMPROVEMENTS FOR POULTRY SLAUGHTER INSPECTION TECHNICAL REPORT 7 (May 16, 2008) (“[C]ross-contamination can also occur during scalding from microorganisms present on the external and internal surfaces of the carcass and in the scalding water.”); GAIL EISNITZ, SLAUGHTERHOUSE 167 (2007) (“In the scald tank, fecal contamination on skin and feathers gets inhaled by live birds . . .”).

²⁵⁶ Petition from Mark Kennedy, Director Legal Affairs, Physicians Comm. for Responsible Med., to USDA FSIS at 6 (Mar. 14, 2013) [hereinafter PCRM Petition]. PCRM sampled 120 chicken products (various parts), purchased in ten cities from nine different states and various large chain grocery stores. *Id.* at 8. The study included twenty-five brands, including large brands (e.g., Perdue, Foster Farms), organic brands, and brands advertising themselves as “natural.” *Id.* The results were alarming: 48% of all chicken samples tested positive for feces; 49% of skinless chicken breasts were contaminated (compared with 28% of skin-on chicken breasts); 46% of antibiotic-free chicken product samples; and 48% of antibiotic-fed chicken samples. *Id.*

²⁵⁷ *Id.* at 6–7.

²⁵⁸ Linder, *supra* note 142, at 91 (citing Inspection of Poultry and Poultry Products, 26 Fed. Reg. 4453, 4453 (1961)); 9 C.F.R. § 381.66(d)(2) (1994); Chiller Water Reserve, 48 Fed. Reg. 41,427, 41,428 (1980); USDA MARKETING RESEARCH SERVICE, WATER ABSORPTION BY EVisCERATED BROILERS DURING WASHING AND CHILLING, MARKETING RESEARCH REPORT No. 438 (1960) (discussing a study on the effects of chilling broiler chickens); EISNITZ, *supra* note 255, at 168; Daniel P. Puzo, *Can USDA Bird Bath Clean up Poultry Problems?*, L.A. TIMES, Mar. 17, 1994, at 32.

gled with those without physical contamination, potentially spreading bacteria throughout the whole lot.”²⁵⁹

USDA microbiologist Gerald Kuester sums up the situation colorfully: “With the advent of modern slaughter technologies, there are about fifty points during processing where cross-contamination can occur. At the end of the line, the birds are no cleaner than if they had been dipped in a toilet.”²⁶⁰ Although a bit hyperbolic, Dr. Kuester appears to be correct. According to a USDA study conducted in 2009, 87% of chicken carcasses tested in processing plants just before being packaged for sale were positive for generic *E. coli*, which resides in the feces of the chickens.²⁶¹

The most recent estimates from the Centers for Disease Control (CDC) indicate that “each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases.”²⁶² Government analysis in 2013 found that “[f]ish and poultry remained responsible for the greatest share of these outbreaks over these 11 years—accounting for about 17 percent of outbreaks each—followed closely by beef, which was responsible for 14 percent of outbreaks.”²⁶³ And for a variety of reasons that we discuss below, these bacterial strains are—more and more—antibiotic-resistant.²⁶⁴ Antibiotic resistance is a major threat to human health as it greatly increases the risk of a food-borne pathogen outbreak that cannot be halted by any available medicines.

The Poultry Products Inspection Act of 1957 (PPIA) requires that the USDA’s Food Safety and Inspection Service (FSIS) inspect chicken and other domesticated birds when they are slaughtered and processed into food for human consumption in order to safeguard the public from contaminated and/or adulterated meat and meat products.²⁶⁵ FSIS’s

²⁵⁹ Puzo, *supra* note 258, at 32 (quoted in Linder, *supra* note 142, at 91 n.372).

²⁶⁰ EISNITZ, *supra* note 255, at 168–69 (quoting USDA microbiologist Gerald Kuester).

²⁶¹ PCRMs Petition, *supra* note 256, at 7 (citing SF Altekruze et al., *Enumeration of Escherichia Coli Cells on Chicken Carcasses as a Potential Measure of Microbial Process Control in a Random Selection of Slaughter Establishments in the United States*, 75 APPL. ENV. MICROBIOL. 3522, 3523 (2009)).

²⁶² *Estimating Foodborne Illness: An Overview*, CENTERS FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/foodborneburden/estimates-overview.html> [<http://perma.cc/J5NN-2853>] (updated April 17, 2014) (accessed Nov. 15, 2015).

²⁶³ Gretchen Goetz, *11 Years of Data Show Poultry, Fish, Beef Have Remained Leading Sources of Food-Related Outbreaks*, FOOD SAFETY NEWS, <http://www.foodsafetynews.com/2013/06/20-years-of-foodborne-illness-data-show-poultry-fish-beef-continue-to-be-leading-sources-of-outbreaks/#.VD8Zc2dBG8Q> [<http://perma.cc/3TLG-MDJ6>] (June 28, 2013) (accessed October 6, 2015).

²⁶⁴ See Gregg S. Davis, *Intermingled Klebsiella pneumonia Populations Between Retail Meats and Human Urinary Tract Infections*, CLINICAL INFECTIOUS DISEASES 1, 3–4 (July 22, 2015) (available at <http://cid.oxfordjournals.org/content/early/2015/07/09/cid.civ428.full.pdf+html>) (finding that 47% of “locally purchased retail” chicken tested positive for antibiotic-resistant strains of *K. pneumonia*, a pathogen that can cause urinary tract infections, bloodstream infections, and pneumonia).

²⁶⁵ 21 U.S.C. §§ 451–470.

policies regarding inspection have fallen short of the clear language in the PPIA and have recently gotten even worse. Even under FSIS's previously authorized maximum line-speeds of birds per minute, a full visual inspection of the carcasses was difficult to achieve.²⁶⁶ Then, FSIS embarked on a long-running policy to increase line speeds and *reduce* the number of federal inspectors on the chicken slaughter line. FSIS first tried to hand off its responsibility to remove adulterated carcasses to processing plant employees, a move that was held to be in violation of the PPIA by a federal court of appeals.²⁶⁷ However, the same court later upheld FSIS's decision to switch to visual (as opposed to organoleptic) inspections and increased line speeds.²⁶⁸ Under those systems (which are still in place), slaughter and evisceration line speeds run at 140 birds per minute.²⁶⁹

Notwithstanding the fact that our meat supply in this country is filthy and people are getting sick and dying, in 2012 the USDA proposed rules to reduce the number of on-the-line inspectors to one, positioned right before the chilling tank, and to authorize poultry processors to operate slaughter and evisceration lines at 175 birds per minute (known as the New Poultry Inspection System (NPIS) rule).²⁷⁰ Outrage from worker, animal, and consumer safety groups was overwhelming.²⁷¹ In the final NPIS rule, FSIS backed off on the speed increase, but proceeded with the currently authorized line speeds of up to 140 birds per minute and with only requiring one on-the-line inspector.²⁷² That said, FSIS is allowing twenty facilities from a pilot program to continue operating at 175 birds per minute.²⁷³

This all makes no sense since the pilot program was a failure according to the government's own studies and inspectors. Citing to the USDA's own two-year analysis of the pilot inspection program, the Government Accountability Project (GAP) points out that carcass inspectors "were incapable of detecting fecal contamination on 88 out of 89 birds with fecal contamination going down the line."²⁷⁴ USDA in-

²⁶⁶ Linder, *supra* note 142, at 86–87.

²⁶⁷ *Am. Fed'n of Gov't Emp. v. Glickman*, 215 F.3d 7, 11 (D.C. Cir. 2000).

²⁶⁸ *Am. Fed'n of Gov't Emp. v. Veneman*, 284 F.3d 125, 130 (D.C. Cir. 2002).

²⁶⁹ *Modernization of Poultry Slaughter Inspection*, 79 Fed. Reg. 49566, 49567 (Aug. 21, 2014).

²⁷⁰ *Modernization of Poultry Slaughter Inspection*, 77 Fed. Reg. 4408, 4414, 4422 (Jan. 27, 2012).

²⁷¹ Kimberly Kindy, *More than 100 Groups Argue Against USDA Poultry Processing Plan*, WASH. POST, <http://www.washingtonpost.com/blogs/federal-eye/wp/2014/03/06/more-than-100-groups-argue-again-usda-poultry-processing-plan/> [<http://perma.cc/5VXL-KCNN>] (Mar. 6, 2014) (accessed Nov. 15, 2015).

²⁷² *Modernization of Poultry Slaughter Inspection*, 79 Fed. Reg. at 49,567.

²⁷³ *Id.* at 49,570.

²⁷⁴ Comment from Amanda Hitt et al., Director of the Food Integrity Campaign, Government Accountability Project, to USDA FSIS at 8 (May 29, 2012) (available at <http://chickenjustice.org/wp-content/uploads/2013/07/GAP-comment-petition.pdf> [<http://perma.cc/F4PC-SQCE>] (accessed Nov. 15, 2015)) [hereinafter GAP Comment]. The verification inspectors, through sampling, found fecal contamination on 0.08% of carcasses while carcass inspectors found fecal contamination on only 0.0009% of carcasses. *Id.* at

spectors told GAP that plant managers often tell employees to remove “suspicious looking” chickens from the line when they see inspectors preparing to take a “random” sample.²⁷⁵ As one inspector stated, “the government’s plan to implement the pilot . . . inspection program in all poultry plants would be a mistake with very serious negative consequences. I believe that more unwholesome and potentially harmful products will reach consumers.”²⁷⁶

2. *This is Your Chicken on Drugs*

Yet another practice in the industry intensifying the potential consequences of a food-borne illness outbreak is the nontherapeutic²⁷⁷ administration of antibiotics and other drugs.²⁷⁸ For decades, the poultry industry has been putting antibiotics (and a cocktail of other drugs and additives) into the food and water of chickens. It does this both because it makes the chickens grow bigger and faster, and because it keeps the animals alive in conditions so filthy that they would otherwise suffer massive death losses.²⁷⁹ HSUS, in its report on antibiotics use in factory farming, explains that because chickens are raised in intensive, unhygienic environments; constantly stressed from their physical surroundings; and suffering from pathologies caused by their rate of growth, feeding them antibiotics allows them to keep putting energy towards growing meat rather than fighting infections endemic in these

8 & n.11. For its part, the USDA’s response is that the verification inspector’s sampling should show higher rates of carcass defects because it includes scheduled testing as well as its unscheduled testing, which occurs “when excessive carcass defects have been identified.” 79 Fed. Reg. at 49576.

²⁷⁵ GAP Comment, *supra* note 274, at 9 (quoting USDA Inspector Affidavit).

²⁷⁶ *Id.* at 1 (quoting USDA Inspector Affidavit).

²⁷⁷ The term *nontherapeutic* is defined as “any use of antimicrobials in food animals in the absence of clinical disease or documented disease exposure.” PEW, PUTTING MEAT ON THE TABLE, *supra* note 83, at 21. Thus, any use of the drug as an additive for growth promotion, feed efficiency, weight gain, routine disease prevention in the absence of documented exposure, or other routine purpose is considered nontherapeutic.

²⁷⁸ ASPCA REPORT, *supra* note 22, at 11 (citing Pew Campaign on Human Health and Industrial Farming, *Latest Foodborne Illness Show Links Between Antibiotic Use and Resistant Bacteria in U.S. Poultry Supply*, HEALTH INITIATIVES, <http://www.pewhealth.org/other-resource/latest-foodborne-illnesses-show-links-between-farm-antibiotic-use-and-resistantbacteria-in-us-poultry-supply-85899511760> [<http://perma.cc/8TPJ-KBAG>] (Oct. 16, 2013) (accessed Oct. 6, 2015); *see also* Brian Grow et al., *Farmaceuticals: Documents Reveal How Poultry Firms Systematically Feed Antibiotics to Flocks*, REUTERS, <http://www.reuters.com/investigates/special-report/farmaceuticals-the-drugs-fed-to-farm-animals-and-the-risks-posed-to-humans/> [<http://perma.cc/ZL9L-WPK8>] (Sept. 15, 2014) (accessed Oct. 6, 2015) (“Internal records examined by Reuters reveal that some of the nation’s largest poultry producers routinely feed chickens an array of antibiotics—not just when sickness strikes, but as a standard practice over most of the birds’ lives.”).

²⁷⁹ HSUS, REPORT: HUMAN HEALTH IMPLICATIONS OF NON-THERAPEUTIC ANTIBIOTIC USE IN ANIMAL AGRICULTURE 1 (available at <http://www.humanesociety.org/assets/pdfs/farm/HSUS-Human-Health-Report-on-Antibiotics-in-Animal-Agriculture.pdf> [<http://perma.cc/8667-QMVE>] (accessed Oct. 6, 2015)) [hereinafter HSUS ANTIBIOTICS REPORT].

conditions.²⁸⁰ The drugs used are important for fighting diseases ranging from *Campylobacter* and *Salmonella* to avian influenza.²⁸¹ As much as “70% of antimicrobials used in the United States are fed to chickens, pigs, and cattle for non-therapeutic purposes.”²⁸²

An investigation by Reuters corroborates the HSUS’s report. By studying the feed tickets issued by mills to chicken growers that detail the ingredients of the chicken feed (made to the supplier’s exact specifications), Reuters found that antibiotics important to human medicine were commonly used by all of the major poultry companies.²⁸³ These drugs included tylosin, which is “critically important” for human health according to the U.S. Food and Drug Administration (FDA); virginiamycin, which is “highly important”; and bacitracin, which is frequently used in human medicine to treat common skin infections.²⁸⁴

Antibiotics are not the only additives in poultry that should cause consumers of chicken products great concern. Peer-reviewed research has found caffeine, diphenhydramine (the active antihistamine in Benadryl), acetaminophen (the active ingredient of Tylenol), and arsenic in poultry.²⁸⁵ Arsenic is fed to poultry to help ward off infections in intense confinement and to enhance the pink color of the flesh.²⁸⁶ As many as 70% or more of chickens raised for meat in the U.S. are fed arsenic.²⁸⁷ The other drugs fed to chickens reveals much about the horrible state of their confinement: Benadryl and Tylenol are given to reduce stress and anxiety (and thus improve growth and the texture of the meat), and caffeine is given to prevent the chickens from sleeping when they could be eating.²⁸⁸

Feeding low levels of antibiotics to chickens and other animals exposed to bacteria and viruses drives the evolution of highly resistant strains of these diseases, often referred to as ‘superbugs.’ Thus, feeding antibiotics to animals on the farm to increase their growth and the industries’ profits has led to far more severe food-borne illnesses, including an increased likelihood of both hospitalization and death of

²⁸⁰ *Id.* at 2.

²⁸¹ *Id.* at 3–5.

²⁸² *Id.* at 1.

²⁸³ Grow et al., *supra* note 278.

²⁸⁴ *Id.*

²⁸⁵ Nicholas Kristof, *Arsenic in Our Chicken?*, N.Y. TIMES, http://www.nytimes.com/2012/04/05/opinion/kristof-arsenic-in-our-chicken.html?_r=0 (Apr. 4, 2012) (accessed Oct. 6, 2015).

²⁸⁶ *Id.*

²⁸⁷ Press Release, Ctr. for Biological Diversity, *After Intense Pressure, Feds Ban 97 Percent of Arsenic Products in Animal Feed* (Oct. 1, 2013) (available at http://www.biologicaldiversity.org/news/press_releases/2013/arsenic-10-01-2013.html [<http://perma.cc/A7TL-PGHA>] (accessed Aug. 6, 2015)).

²⁸⁸ Kristof, *supra* note 285. The studies detailed in this article tested chicken feather meal, because the feathers accumulate chemicals that the birds have been exposed to; therefore, the studies could not say at what levels these chemicals were present in chicken meat. *Id.*

human victims.²⁸⁹ For example, antibiotic-resistant strains of *Campylobacter* alone affect 10,000 Americans annually; complications associated with resistant strains of *Campylobacter* can lead to brain and blood infections and death.²⁹⁰ According to a CDC meta-study of reported food-borne illness outbreaks over an eleven-year period, among outbreaks where the food source responsible was recorded, *Listeria* from poultry was responsible for the most deaths.²⁹¹ This is a very serious public health problem of global proportions: as drug-resistant strains of bacteria develop very quickly, these superbugs have outpaced human medicine's ability to develop new antibiotics to match them.²⁹²

The evidence strongly demonstrates that the emergence of these deadly diseases is directly attributable to agricultural uses of antibiotics. An independent expert panel jointly convened by the Food and Agriculture Organization of the United Nations, World Health Organization, and World Organization for Animal Health "concluded that there is clear evidence of adverse human health consequences due to resistant organisms resulting from non-human [i.e., agricultural] usage of antimicrobials. These consequences include infections that would not have otherwise occurred, increased frequency of treatment failures (in some cases death) and increased severity of infections."²⁹³ The FDA has similarly stated that "the most significant pathway for human exposure" of superbugs is "through the ingestion of antimicrobial resistant bacteria from animal-derived foods."²⁹⁴ Superbugs are present on meat because of fecal contamination; according to one

²⁸⁹ *Id.*; see also Alicia D. Anderson et al., *Public Health Consequences of Use of Antimicrobial Agents in Agriculture, The Resistance Phenomenon in Microbes and Infections Disease Vectors: Implications for Human Health and Strategies*, in INST. OF MED. (US) FORUM ON EMERGING INFECTIONS, THE RESISTANCE PHENOMENON IN MICROBES AND INFECTIOUS DISEASE VECTORS: IMPLICATIONS FOR HUMAN HEALTH AND STRATEGIES FOR CONTAINMENT, WORKSHOP SUMMARY (SL Knobler et al. eds., 2003) (available at <http://www.ncbi.nlm.nih.gov/books/NBK97132/> [<http://perma.cc/BDJ9-GKNQ>] (accessed Oct. 6, 2015)) (explaining the increased likelihood that human bacterial pathogens found in food animals will develop resistance to antibiotics).

²⁹⁰ HSUS ANTIBIOTICS REPORT, *supra* note 279, at 3.

²⁹¹ L. Hannah Gould et al., *Surveillance for Foodborne Disease Outbreaks—United States, 1998–2008*, 62 SURVEILLANCE SUMMARIES 1, 6 (June 28, 2013) (available at http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6202a1.htm?s_cid=ss6202a1_w [<http://perma.cc/UF4C-GC29>] (accessed Nov. 15, 2015)).

²⁹² See, e.g., WORLD HEALTH ORG., WHO GLOBAL STRATEGY FOR CONTAINMENT OF ANTIMICROBIAL RESISTANCE 37–39 (2001) (available at http://www.who.int/drugresistance/WHO_Global_Strategy_English.pdf [<http://perma.cc/K79U-69P9>] (accessed Nov. 15, 2015)) (noting that, among other things, antibiotic use in animals is "limiting the effective available treatment options" for both animals and humans).

²⁹³ WORLD HEALTH ORG., JOINT FAO/OIE/WHO EXPERT WORKSHOP ON NON-HUMAN ANTIMICROBIAL USAGE AND ANTIMICROBIAL RESISTANCE: SCIENTIFIC ASSESSMENT 1 (2003) (available at http://whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.7.pdf?ua=1 [<http://perma.cc/N6F8-EN8V>] (accessed Nov. 15, 2015)).

²⁹⁴ FDA, GUIDANCE FOR INDUSTRY: EVALUATING THE SAFETY OF ANTIMICROBIAL NEW ANIMAL DRUGS WITH REGARD TO THEIR MICROBIOLOGICAL EFFECTS ON BACTERIA OF HUMAN HEALTH CONCERN 3 (2003) (available at <http://www.fda.gov/downloads/>

study, 39% of raw chicken meat samples contained antibiotic-resistant strains of *Enterococcus faecalis*, a type of bacteria used to “gauge fecal contamination and the spread of antibiotic-resistant traits.”²⁹⁵ The threat from antibiotics administration in the poultry industry is particularly serious; not surprisingly, poultry receive more antibiotics than pigs and cattle “due to the scale and intensification of the poultry industry.”²⁹⁶

As an indication of how difficult it will be to ban these drugs as long as there is a profit motive spurring their use, these drugs are “readily available online or through direct purchase from the manufacturer or distributor . . . without a prescription or veterinarian’s oversight,”²⁹⁷ and are administered to the animals in their feed and water. In other words, even if FDA were to agree to stop approving them for use in animal feed, such a decision would be unlikely to work. To wit, even when classes of antibiotics and other drugs have been banned for use in poultry production, testing of poultry products reveals that poultry producers are still administering them.²⁹⁸ Furthermore, the FDA’s approach thus far to the problem of antibiotics misuse and the threat that superbugs pose to human health has been to ask drug manufacturers to stop labeling and the meat industry to voluntarily stop using the drugs as growth promoters for animals raised for food. But, this decision is literally (and most likely intentionally) useless, since the drugs are also used to stop the spread of disease.²⁹⁹

C. *Strategies for Change*

Once again we see that most of the problems we have discussed are inherent to chicken consumption. However, the problems of bacterial contamination and drug use are a function of a USDA and FDA that are not protecting the American public, and there have been broad and creative efforts to address these problems by attempting to

AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/ucm052519.pdf [http://perma.cc/AMD2-CZ5R] (accessed Oct. 7, 2015)).

²⁹⁵ ENVTL .WORKING GRP., SUPERBUGS INVADE AMERICAN SUPERMARKETS 6 (2013) (available at <http://www.ewg.org/meateatersguide/superbugs/> [http://perma.cc/56MC-A36P] (accessed Nov. 15, 2015)).

²⁹⁶ HSUS ANTIBIOTICS REPORT, *supra* note 279.

²⁹⁷ PEW, PUTTING MEAT ON THE TABLE, *supra* note 83, at 15.

²⁹⁸ Kristof, *supra* note 285.

²⁹⁹ FDA, GUIDANCE FOR INDUSTRY: NEW ANIMAL DRUGS AND NEW DRUG COMBINATION PRODUCTS ADMINISTERED IN OR ON MEDICATED FEED OR DRINKING WATER OF FOOD-PRODUCING ANIMALS 3 (2013) (available at <http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/UCM299624.pdf> [http://perma.cc/NAN4-2S9T] (accessed Oct. 7, 2015)); *see also* Martha Rosenberg, *Is the FDA Really Phasing Antibiotics Out of Meat?*, COUNTERPUNCH, <http://www.counterpunch.org/2013/12/24/is-the-fda-really-phasing-antibiotics-out-of-meat/> [http://perma.cc/K6E9-KTCR] (Dec. 24, 2013) (accessed Nov. 5, 2015) (noting that industry is unlikely to phase out the use of antibiotics because they are used to prevent the spread of disease); Bruce Friedrich, *Antibiotics for Livestock*, N.Y. TIMES, (Dec. 27, 2013) (available at <http://www.nytimes.com/2013/12/28/opinion/antibiotics-for-livestock.html> (accessed Oct. 30, 2015)).

force oversight agencies to do their jobs. Below, we discuss four examples.

First, the Animal Legal Defense Fund (ALDF) submitted a petition for rulemaking with FSIS that requests both mandatory labeling to disclose routine antibiotic use in farm animals and clarification regarding the standard for when “antibiotic free” type labels can be used on meat products.³⁰⁰ Given that producers do not currently disclose to consumers the rampant abuse of antibiotics in chickens and other animals for meat, the petition asks that the agency require that any products from chickens who were given antibiotics for any reason be labeled “From Poultry Raised With Antibiotics.”³⁰¹ The assumption of the petition is that consumers will prefer not to purchase drugged chicken, and that will cause drug use to decline.

Second, two rulemaking petitions were filed requesting that FSIS declare certain common-yet-dangerous contaminants to be adulterants. The first, submitted in March 2014 by the Physicians Committee for Responsible Medicine, requests that FSIS issue an interpretive rule declaring feces in meat and poultry to be an adulterant.³⁰² The petition explains that the USDA’s current policy, which only addresses fecal contamination visible to the naked eye and even then only requires processing plants to wash it off, allows contaminated food to enter the food system in violation of the Federal Meat Inspection Act and the PPIA.³⁰³ The second, filed in October 2014 by the Center for Science in the Public Interest, requests that FSIS issue an interpretive rule declaring antibiotic-resistant strains of salmonella in meat and poultry to be adulterants.³⁰⁴ The petition “document[s] a total of 19 outbreaks related to all strains of [antibiotic-resistant] *Salmonella* in FSIS-regulated products [including eight in poultry, which] were

³⁰⁰ Petition from Alison M. Langlais, on behalf of Animal Legal Defense Fund, to USDA FSIS (June 3, 2013) (available at http://www.fsis.usda.gov/wps/wcm/connect/12aeca93-4d3e-4ac7-b624-d5fc0b0dbae0/Petition_Animal_Legal_Defense_Fund_060313.pdf?MOD=AJPERES [<http://perma.cc/KK6B-YZPY>] (accessed Nov. 15, 2015)).

³⁰¹ *Id.* at 6.

³⁰² Petition from Mark Kennedy, Director of Legal Affairs, Physicians Comm. for Responsible Med., to USDA FSIS at 2 (Mar. 14, 2013) (available at http://www.fsis.usda.gov/wps/wcm/connect/ae39c611-7524-44bc-b305-fbf8040ff443/Petition_Physicians_Committee.pdf?MOD=AJPERES [<http://perma.cc/SN3G-UXXN>] (accessed Nov. 15, 2015)).

³⁰³ *Id.* at 9.

³⁰⁴ Petition from Center for Science in the Public Interest, to USDA FSIS (Oct. 1, 2014) (available at <http://www.fsis.usda.gov/wps/wcm/connect/25551672-a5db-4a11-9253-05f92f6b49a4/Petition-CSPI-ABRSalmonella-2014.pdf?MOD=AJPERES> [<http://perma.cc/LAW5-293S>] (accessed Nov. 15, 2015)); *see also* Petition from Urvashi Rangan et al., on behalf of Food Safety and Sustainability Center et al., to USDA FSIS at 4 (June 26, 2014) (available at <http://www.fsis.usda.gov/wps/wcm/connect/6122594c-93db-46db-beb6-dc250bc43b6d/Petition-Consumers-Union-062614.pdf?MOD=AJPERES> [<http://perma.cc/TY79-GR36>] (accessed Oct. 7, 2015)) (stating that consumers are misled by ‘natural’ labeling of meat and poultry products because a majority of consumers surveyed believed that ‘natural’ means no subtherapeutic doses of antibiotics were used, which is not the case).

linked to 2,358 illnesses, 424 hospitalizations, and 8 deaths.”³⁰⁵ The petition points out that despite these dangers from antibiotic-resistant *Salmonella*,³⁰⁶ FSIS has not declared these strains to be an adulterant, which is inconsistent with the Agency’s declaration with regard to several strains of *E. coli* in 2011.³⁰⁷ If these substances were considered ‘adulterants’ by FSIS, the law would require federal inspectors to condemn any poultry carcasses, parts, and products found to be contaminated, preventing them from entering the food supply.³⁰⁸

Third, several important lawsuits have been brought regarding contamination and antibiotics. For example, Food and Water Watch sued FSIS, claiming that the Agency’s decision to allow increased line speeds and fewer federal inspectors³⁰⁹ would increase the risk of chicken adulteration in violation of FSIS’s duties under the PPIA.³¹⁰ A district court judge ruled against the plaintiffs on standing grounds,³¹¹ but the plaintiffs are appealing that decision.³¹²

Finally, a coalition of animal, environmental, and farm worker organizations³¹³ has filed two related lawsuits to challenge the FDA’s approval of eleven new applications of a drug, ractopamine, which is added to the feed of pigs, cattle, and turkeys.³¹⁴ The coalition alleges that the FDA approved the new applications with either a cursory or no environmental impact assessment, in violation of the National Environmental Policy Act (NEPA).³¹⁵ NEPA requires federal agencies to undergo an “environmental assessment” for any action that may affect the environment; if an action will “significantly affect” the environment, then a detailed “environmental impact statement” must be undertaken.³¹⁶ The allegations in the first complaint focus on food safety risks and environmental impact, including the impact on endangered species when manure from animals fed ractopamine is pumped into lagoons or into the earth.³¹⁷ The allegations in the second complaint focus on the food safety and adverse effects on animals given the drug,

³⁰⁵ Center for Science in the Public Interest, *supra* note 304, at 3.

³⁰⁶ Recall from above that poultry is a major contributor to *Salmonella* outbreaks. See *infra* Part V.B.

³⁰⁷ Center for Science in the Public Interest, *supra* note 304.

³⁰⁸ 21 U.S.C. § 455.

³⁰⁹ Food & Water Watch, Inc. v. Vilsack, 79 F. Supp. 3d 174, 183 (D.D.C. 2015).

³¹⁰ *Id.* at 184.

³¹¹ *Id.* at 199.

³¹² Food & Water Watch, Inc. v. Vilsack, No. 15-5037 (D.C. Cir. appeal docketed Feb. 18, 2015) (pending on appeal as of this writing).

³¹³ The coalition includes ALDF, the Center for Food Safety, Center for Biological Diversity, HSUS, the Sierra Club, and United Farm Workers of America.

³¹⁴ Complaint for Declaratory and Injunctive Relief at 1, Center for Food Safety v. Hamburg, No. 4:14-cv-4932 (N.D. Cal. Nov. 6, 2014) [hereinafter Center for Food Safety Complaint]; Complaint for Declaratory and Injunctive Relief at 2, HSUS v. Hamburg, No. 4:14-cv-4933 (N.D. Cal. Nov. 6, 2014) [hereinafter HSUS Complaint].

³¹⁵ Center for Food Safety Complaint, *supra* note 311, at 1; HSUS Complaint, *supra* note 311, at 2.

³¹⁶ 42 U.S.C. §§ 4332, 4342.

³¹⁷ Center for Food Safety Complaint, *supra* note 314, at 8–12.

including aggression and hyperactivity, as well as worker safety risks from handling ractopamine-fed animals and general exposure to the drug from working in CAFOs.³¹⁸ Even though these cases do not involve chickens, we highlight them as examples of creative litigation that can bypass the long wait and inherent difficulties of petition-based litigation, as well as an illustration of how advocates focusing on each of these areas separately can work together to form a common cause.

VI. FRIENDS IN HIGH PLACES

As we prepared each Section of this Article, we were struck by how hard animal protection, environmental, worker, and consumer organization lawyers and activists are working to address problems that, in a just society, would be addressed by the government. Consider the most basic examples of this governmental failure: how can it be that chicken producers are allowed to befoul our water and air, force workers to accept an environment that guarantees injuries and deaths, and put out a product that is covered in excrement and tainted with bacteria and drugs that will sicken and kill consumers—and all while there are federal laws designed to stop these problems?

The short answer is the power of the chicken industry in America. For the issues that should be solvable through proper administration of the relevant statutes, the problem seems to be one of deep agency capture—that is, the agencies that are supposed to be regulating the industry have become beholden to it, because the power of industry surpasses the power of the public interest.³¹⁹

A. *The USDA and Agribusiness: A “Revolving Door”*³²⁰

It would be hard to fathom an agency more subject to the phenomenon of regulatory capture than the USDA. Writing for *The New York Times* in the wake of a Mad Cow disease outbreak in the U. S., investigative journalist Eric Schlosser explained that the USDA’s spokesperson had devised a publicity plan to deal with Mad Cow being found in the U. S. while she was the head of public relations for the National

³¹⁸ HSUS Complaint, *supra* note 314, at 10–14.

³¹⁹ *Protecting the Public Interest: Understanding the Threat of Agency Capture: Hearing Before the Subcomm. on Admin. Oversight and the Courts of the S. Comm. Judiciary*, 111th Cong. 39 (2010) (statement of Nicholas Bagley, Assistant Professor of Law, University of Michigan Law School) (“[I]ndustry groups will generally have enormous organizational advantages over the dispersed and apathetic public when it comes to lobbying Federal agencies. With some regularity, industry groups can exploit that organizational advantage to pressure regulators to attend to their private interests at the expense of the public interest.”); *see also* Friedrich, *supra* note 37, at 199 (arguing that the USDA does an inadequate job of enforcing the HMSA).

³²⁰ EISNITZ, *supra* note 255, at 243 (quoting Tom Devine of the Government Accountability Project).

Cattlemen's Beef Association, and then implemented it in her new job at the USDA.³²¹ Schlosser summed up:

[Y]ou'd have a hard time finding a federal agency more completely dominated by the industry it was created to regulate. Dale Moore, [the Secretary of Agriculture's] chief of staff, was previously the chief lobbyist for the cattlemen's association. Other veterans of that group have high-ranking jobs at the department, as do former meat-packing executives and a former president of the National Pork Producers Council.³²²

The degree to which the USDA has been captured by the meat and poultry industries is the subject of at least one detailed report³²³ and plays a significant role in many books.³²⁴ The report, which was released by the Agribusiness Accountability Initiative at the end of President George W. Bush's first term, explains that "Big Agribusiness has been able to pack USDA with appointees who have a background of working in the industry, lobbying for it, or performing research or other functions on its behalf. These appointees have helped to implement policies that undermine the regulatory mission of USDA in favor of the bottom-line interests of agribusiness."³²⁵

The problem transcends both administrations and parties: "The increasing dominance of USDA policymaking by agribusiness interests and personnel can be traced to two sources: the growing concentration of ownership in food production and processing, and the growing political influence exercised by the large players in the industry."³²⁶ Of course, neither of these factors is related to political party. As just a few examples, President Ronald Reagan's first Secretary of Agriculture was hog farmer John Block, who staffed his agency with meat industry lobbyists including high-level officials with the American Meat Institute and National Cattlemen's Association.³²⁷ President Bill Clinton was strongly supported throughout his terms as Governor of Arkansas by that state's second most successful businessman, Don Ty-

³²¹ Eric Schlosser, *The Cow Jumped Over the USDA*, N.Y. TIMES, <http://www.nytimes.com/2004/01/02/opinion/the-cow-jumped-over-the-usda.html> (Jan. 2, 2004) (accessed Nov. 5, 2015).

³²² *Id.*

³²³ PHIL MATTERA, *USDA INC.: HOW AGRIBUSINESS HAS HIJACKED REGULATORY POLICY AT THE UNITED STATES DEPARTMENT OF AGRICULTURE* 6 (2004) (available at <http://www.nffc.net/Issues/Corporate%20Control/USDA%20INC.pdf> [<http://perma.cc/SG5Y-VNTN>] (accessed Oct. 7, 2015)).

³²⁴ See, e.g., DAVID R. 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* 62-69 (2013); WENONAH HAUTER, *FOODOPOLY: THE BATTLE OVER THE FUTURE OF FOOD AND FARMING IN AMERICA* 120 (2012); JONATHAN SAFRAN FOER, *EATING ANIMALS* 135-43 (2009); MARION NESTLE, *SAFE FOOD: THE POLITICS OF FOOD SAFETY* (2010) [hereinafter *SAFE FOOD*]; MARION NESTLE, *FOOD POLITICS: HOW THE FOOD INDUSTRY INFLUENCES NUTRITION AND HEALTH* (2002) [hereinafter *FOOD POLITICS*].

³²⁵ MATTERA, *supra* note 323, at 10.

³²⁶ *Id.* at 12.

³²⁷ NESTLE, *FOOD POLITICS*, *supra* note 324, at 48.

son.³²⁸ So perhaps it is no surprise that Clinton's first Secretary of Agriculture, Mike Espy, had to resign because he was taking gifts from Tyson Foods and other regulated companies.³²⁹ Clinton's second Secretary of Agriculture served for eighteen years on the House Agriculture Committee,³³⁰ a committee that never met an agribusiness handout it did not like.³³¹ Once he left his job running the USDA, he went to work for a Washington lobby firm.³³² President Obama's Secretary of Agriculture is Tom Vilsack. Secretary Vilsack is the two-term governor of Iowa, which is the number one pork-producing state in the country³³³ and is one of the few states where it is illegal to conduct an undercover investigation of agricultural facilities.³³⁴ Vilsack was named Governor of the Year by a biotech lobbying group.³³⁵ New York University nutrition professor Marion Nestle calls the packing of USDA with meat industry officials "a tradition cherished to this day."³³⁶

Below we discuss two specific instances where the industry has diverted agency policies, at great risk and detriment to the public.

1. *The Industry's Influence Over the Nutritional Guidelines*

The effect of USDA agency capture is most studied and discussed in the realm of human health and consumer safety, where nonprofit organizations and consumer advocates fight a losing battle with USDA over nutritional guidelines and pathogens on meat. Two books by Marion Nestle explain the situation. In *Food Politics: How the Food Industry Influences Nutrition and Health*, Dr. Nestle argues that both the USDA and Congress are so beholden to meat industry interests that they are forced to sacrifice the public health.³³⁷ Against the best (and overwhelming) scientific advice, she notes that "[a]s a population, Americans are eating more animal-based foods—and more food in general—to the point where half of us are overweight, even our children

³²⁸ HAUTER, *supra* note 324, at 120.

³²⁹ *Id.* at 124–25; EISNITZ, *supra* note 255, at 247; LEONARD, *supra* note 31, at 269.

³³⁰ HAUTER, *supra* note 324, at 125.

³³¹ See generally THE CTR. FOR PUB. INTEGRITY, SAFETY LAST: THE POLITICS OF E. COLI AND OTHER FOOD-BORNE KILLERS 84–89 (1998) (listing Congressional recipients of campaign contributions from meat and poultry processing interests).

³³² MATTERA, *supra* note 323, at 28.

³³³ *2012 Census Highlights*, USDA, http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Hog_and_Pig_Farming/#top_states [<http://perma.cc/9FDR-WMGN>] (updated Mar. 19, 2015) (accessed Nov. 15, 2015).

³³⁴ Iowa Code §§ 717A.1–A.4 (2012).

³³⁵ Press Release, Biotechnology Industry Organization, Iowa's Vilsack Named BIO Governor of the Year (Sept. 20, 2001) (available at <http://www.bio.org/media/press-release/iowas-vilsack-named-bio-governor-year> [<http://perma.cc/UA26-FGDP>] (accessed Nov. 15, 2015)).

³³⁶ See NESTLE, *FOOD POLITICS*, *supra* note 324, at 48 (discussing high-level USDA positions being filled with industry representatives).

³³⁷ *Id.*

are obese, and diseases related to diet are leading causes of death and disability.”³³⁸

And yet the government refuses to tell Americans to stop eating so much meat.³³⁹ Professor Nestle begins her book with an anecdote: In 1986, she came to Washington, D.C., to manage production of the *Surgeon General's Report on Nutrition and Health*.³⁴⁰ She explains: “My first day on the job, I was given the rules: No matter what the research indicated, the report could not recommend ‘eat less meat’ as a way to reduce intake of saturated fat.”³⁴¹ From that first government document to now, the meat industry has fought hard to ensure that dietary advice not reflect the best science, at the expense of our nation’s health.³⁴²

The fight has continued over the most recent iteration of the nutritional guidelines. Every five years, a panel of experts called the Dietary Guidelines Advisory Committee convenes to produce a report for the Secretaries of the USDA and the Department of Health and Human Services; the agencies then formulate dietary guidelines and other government-sanctioned nutrition and dietary recommendations (i.e., the Food Pyramid) based on the recommendations of the Committee’s report. This year, the report began with the grave statistic that half of all American adults (117 million people) have one or more chronic diseases due in part to diet and lack of exercise.³⁴³ More than two-thirds of American adults and almost one-third of children are overweight or obese.³⁴⁴ The report concluded that “a diet higher in plant-based foods, such as vegetables, fruits, whole grains, legumes, nuts, and seeds, and lower in calories and animal-based foods is more health promoting and is associated with less environmental impact than is the current U.S. diet.”³⁴⁵ The meat industry vehemently op-

³³⁸ *Id.* at xiii.

³³⁹ In fact, the government cannot even tell its *own employees* to eat less meat. When the industry and its cronies in Congress went up in arms over an internal USDA memo encouraging staff to participate in Meatless Mondays for their own health, the USDA backpedaled and retracted the memo. Mark Bittman, *No Meatless Mondays at the USDA*, N.Y. TIMES, <http://opinionator.blogs.nytimes.com/2012/07/31/no-meatless-mon-days-at-the-usda/> [<http://perma.cc/RE29-AT7C>] (July 31, 2012, 9:00 PM) (accessed Oct. 4, 2015).

³⁴⁰ NESTLE, FOOD POLITICS, *supra* note 324, at 3.

³⁴¹ *Id.*

³⁴² See Michele Simon, *The Dirty Secret Behind Dairy Junk Foods*, EAT, DRINK, POLITICS, <http://www.eatdrinkpolitics.com/2014/07/10/the-dirty-secret-behind-dairy-junk-foods/> [<http://perma.cc/M5Q5-AYUN>] (July 10, 2014) (accessed Nov. 5, 2015) (detailing USDA work with meat and dairy interests to promote food that is making Americans fat and sick).

³⁴³ DIETARY GUIDELINES ADVISORY COMMITTEE, ADVISORY REPORT TO THE SECRETARY OF HEALTH AND HUMAN SERVICES, AND THE SECRETARY OF AGRICULTURE (DIETARY GUIDELINES ADVISORY REPORT) 2 (2015) (available at <http://www.health.gov/dietary-guidelines/2015-scientific-report/PDFs/Scientific-Report-of-the-2015-Dietary-Guidelines-Advisory-Committee.pdf> [<http://perma.cc/7C89-RY8U>] (accessed Nov. 15, 2015)).

³⁴⁴ *Id.* at 2.

³⁴⁵ *Id.* at 7.

posed the report.³⁴⁶ The dietary guidelines have not yet been finalized; time will tell how the agencies will utilize the clear evidence and unwavering recommendations in the Committee's report that Americans need to eat less meat. However, given past examples of the USDA caving to meat industry pressure, and particularly given the USDA's conflict of interest as an agency with a mission focused on promoting agriculture, it is hard to be optimistic.

2. *The USDA's Failure to Ensure Food Safety*

A few years after she published *Food Politics*, Professor Nestle released *Safe Food: The Politics of Food Safety*, an indictment of meat and poultry safety in America.³⁴⁷ The book focuses on unsafe meat and includes significant discussion of the fact that agency capture has made American meat especially unsafe. To wit, Nestle explains: "Meat and poultry producers . . . generously support both political parties, form close personal relationships with members of Congress and officials of regulatory agencies, and often use the so-called revolving door to exchange their executives' positions for those in government and vice versa."³⁴⁸

As just one remarkable example of early influence, before 1978, the USDA required any chicken with fecal contamination inside the body cavity to be condemned.³⁴⁹ The poultry industry successfully petitioned the agency to reclassify fecal matter from contamination to a "cosmetic blemish," so that rather than condemning the entire carcass, poultry processing facilities could just wash off the visible fecal matter.³⁵⁰ And, as described above, since then the USDA has only continued to facilitate the industry's ability to process as many chickens as quickly as possible.

Nestle calls out "decades of industry and government indifference, dithering, and outright obstructionism,"³⁵¹ which lead to a horribly

³⁴⁶ See, e.g., Erica Shaffer, *Meat Industry Reacts to Dietary Guidelines Advisory Report*, MEAT + POULTRY, http://www.meatpoultry.com/articles/news_home/Regulatory/2015/02/Meat_industry_reacts_to_dietar.aspx?ID=%7BFA37E411-7C2B-4453-978D-B0A98FFDFF8B%7D&e&cck=1 [<http://perma.cc/X5QH-WJJH>] (Feb. 19, 2015) (accessed Nov. 15, 2015); Comment from Susan L. Backus & Betsy L. Booren, Ph.D., on behalf of North American Meat Institute, to USDA et al. (May 8, 2015) (available at http://www.health.gov/dietaryguidelines/dga2015/comments/uploads/CID23937_2015-0508_NAMI_DGA_Scientific_Report_Comments.pdf [<http://perma.cc/BYJ5-YRJ4>] (accessed Nov. 15, 2015)).

³⁴⁷ NESTLE, SAFE FOOD, *supra* note 324; see also HAUTER, *supra* note 324 (discussing similar material in Part IV, deregulating food safety, but from Hauter's perspective at the top of one of the most effective USDA adversaries, Food & Water Watch).

³⁴⁸ NESTLE, SAFE FOOD, *supra* note 324, at 62.

³⁴⁹ EISNITZ, *supra* note 255, at 167.

³⁵⁰ *Id.*

³⁵¹ NESTLE, SAFE FOOD, *supra* note 324, at 27. As noted above, foodborne illnesses from meat, poultry, and fish have caused millions of Americans to be sickened, and thousands to die each year.

unsafe meat counter.³⁵² Things have become so bad that the agency has basically given up on trying to make meat safe, and it now issues recommendations for how to cook meat so that the inevitable contamination will not kill us: “[F]ederal agencies now advise us to follow safety guidelines that used to be reserved for travelers to developing countries.”³⁵³ In short, America’s meat safety system is “breathtaking in its irrationality,”³⁵⁴ and Americans are dying as a result.

B. EPA and Capture

The problem of agency capture can also be seen in the EPA’s failure to address environmental harms caused by the poultry industry, particularly with regard to water and air pollution. The EPA is not just abdicating its responsibility, but is actively defending polluters from legitimate regulation under the laws the agency is supposed to be enforcing. In 2008, a Pew Commission panel that included a former Kansas governor, a former Secretary of Agriculture, and farmers and ranchers, made recommendations for improvement;³⁵⁵ none of which came to pass under President Obama’s EPA.³⁵⁶ In the same year, the GAO issued a damning report that focused on the Clean Water Act and Clean Air Act,³⁵⁷ and similarly the Obama administration made progress on none of it.³⁵⁸ In short, we could not agree more with Environmental Integrity Project’s Tarah Heinzen, who told one reporter that the “EPA has really gone awry by looking the other way regarding pollution from this industry. It shouldn’t have to fall to citizens to petition EPA to do its job.”³⁵⁹

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”³⁶⁰ And the goal of the CAA is to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”³⁶¹ The EPA claims that its “mission is to protect human health and the environment.”³⁶² The agency also claims that its first and third purposes for existence are: “to en-

³⁵² *Estimating Foodborne Illness: An Overview*, CTDS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/foodborneburden/estimates-overview.html> [<http://perma.cc/J5XF-X57K>] (accessed Nov. 15, 2015).

³⁵³ NESTLE, SAFE FOOD, *supra* note 324, at 30.

³⁵⁴ *Id.* at 55.

³⁵⁵ PEW COMM’N ON INDUS. FARM ANIMAL PROD., *supra* note 83.

³⁵⁶ *See infra* note 182 and accompanying text.

³⁵⁷ GAO, *supra* note 95, at 6.

³⁵⁸ *See infra* note 182 and accompanying text.

³⁵⁹ Katie Valentine, *Groups Sue EPA over Failure to Regulate Emissions from Factory Farms*, THINK PROGRESS, <http://thinkprogress.org/climate/2015/01/30/3617172/epa-cafos-lawsuit/> [<http://perma.cc/7PJP-DZU3>] (Jan. 30, 2015) (accessed Aug. 7, 2015).

³⁶⁰ CWA § 101(a); 33 U.S.C. § 1251.

³⁶¹ CAA § 101(b)(1); 42 U.S.C. § 7401.

³⁶² *Our Mission and What We Do*, EPA, <http://www2.epa.gov/aboutepa/our-mission-and-what-we-do> [<http://perma.cc/Z6KT-7E4E>] (updated Sept. 29, 2015) (accessed Nov. 15, 2015).

sure that all Americans are protected from significant risks to human health and the environment” and “to ensure that ‘federal laws protecting human health and the environment are enforced fairly and effectively.’”³⁶³ In light of how the poultry industry has polluted the Nation’s water and air unfettered by any regulation under these statutes, it is hard to imagine a more complete failure than the EPA’s lack of oversight of industrial farms. The only explanation we can fathom for the EPA’s complete and total dereliction of its statutory duty is that it has been captured by the animal agriculture industry.³⁶⁴

VII. CONCLUSION

What we are left with, after this brief foray into the cruelty to animals, environmental harms, human rights violations, and public health problems inherent to the poultry industry in twenty-first century America, is a sense that, while some of the problems of poultry production are insoluble, some of them could be significantly ameliorated if the agencies that oversee the relevant laws were to fulfill their statutory mandates.

In the category of problems that can only be addressed through widespread societal adoption of a diet without chicken flesh we find: that billions of individuals who are no different from our non-human animal family members are slaughtered for food; the basic inefficiency and contribution of chicken production to climate change and other environmental ills; the contribution of that inefficiency to global poverty and water scarcity; and the effect of chicken consumption on heart disease, cancer, diabetes, obesity, and other ailments.

In the category of problems that could be seriously ameliorated or even eliminated with effective government oversight of existing laws we find: the egregious cruelty of chicken slaughter in the U.S.; the water and air pollution of the chicken industry domestically; exploitation of chicken farmers and the abuse of workers in slaughterhouses; and all of the issues surrounding bacteria and drugs in chicken flesh.

In the Sections above we have attempted to highlight some of the work being done to rein in the poultry industry’s abuses, but we have barely scratched the surface of the creative work happening in the litigation shops of nonprofit organizations. There is much important work being done via state and federal litigation, state and federal lobbying, and grassroots activism that we could cover for the purposes of this Article.

In the end, we are convinced that the best action for anyone interested in mitigating the cruelty, inefficiency, waste, and human rights

³⁶³ *Id.*

³⁶⁴ For an anecdote that supports this thesis, see Wilson, *supra* note 93, at 471–73 (examining the CAA agreement). A journal article focusing on EPA capture and the regulatory dead zone that is CAFO regulation would make a great topic for further exploration.

abuses of the chicken industry is to stop eating animals, especially chickens.

But we also support any and all efforts to force the chicken industry to lessen its contribution to cruelty, environmental harm, human rights abuses, and human health problems. Although the best and most creative advocacy work is frustrated by the problems of agency inaction, capture, and a hostile Congress, such work is crucial because it exposes the problems and begins to internalize the currently external costs of turning chickens into marketable meat.

In short, we believe a two-pronged approach that encourages and enables more people to reduce their meat consumption while also pursuing institutional changes is necessary. We hope that this Article will be followed by many more that explore in greater depth the areas that we have been able to delve into only briefly.