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COMMENT

**"CLEAN WATER ACT COMPLIANCE AUDIT PROGRAM FOR PORK PRODUCERS":
HOW WAS SUCH AN AGREEMENT REACHED BETWEEN THE EPA AND THE
NATIONAL PORK PRODUCERS?**

I. INTRODUCTION

A recent agreement between the Environmental Protection Agency and the National Pork Producers Council puts into place a voluntary inspection program that may lead to reduced fines for pork producers who report and correct Clean Water Act violations.¹ This agreement represents the first of its kind between an agriculture group and the Environmental Protection Agency.² This Article explores the background that led to the agreement. The evolution from small family farming to large corporate livestock production, along with the environmental concerns such evolution has produced, is traced.³ The next section lays out some of the federal and state statutory and regulatory provisions that exist to address environmental issues connected with corporate livestock production, and it addresses other responses of state and local governments and of citizens.⁴ Given this background, the final section sets out how the National Pork Producers Council designed the assessment process that is used in the inspection program.⁵ Then, the Article discusses how and why the National Pork Producers Council and the Environmental Protection Agency reached an agreement, and it details how the agreement is to be implemented.⁶ Finally, the Article comments on whether the agreement is a good idea and whether this type of program should be expanded to other industries.⁷

II. ANIMAL FEEDING OPERATIONS

A. *Evolution from Family Farming to Animal Feeding Operations*

In the United States, small family farms have been the traditional method of producing all agricultural goods.⁸ However, there has been a decline in what would be considered the traditional family farm. Since the beginning of the twentieth century, the percentage of the population participating in farming has declined from twenty-five percent to two percent.⁹ While there has been a decrease in the number of people participating in farming, the size of farms has grown. Large farms now control a significant portion of the production of agricultural goods. "6 percent of U.S. farms operate[] 28 percent of the land in farms. 2 percent of farms account[] for 40 percent of sales, and 6 percent account[] for nearly 60 percent of the value of U.S. agricultural production."¹⁰ While all areas of agriculture have seen a movement from smaller to larger producers, hog farming has seen particularly dramatic changes. As recently as 1967 more than one million hog farms existed in the United States.¹¹ By 1984, that number had decreased to 600,000¹² and now is approximately 102,000.¹³ Yet, over the ten year period from 1987 to 1997, the number of hogs sold rose forty-eight percent, from 96.6

¹ Registration and Agreement for Clean Water Act Section 301 Compliance Audit Program for the Pork Production Industry, 63 Fed. Reg. 69,627 (1998).

² Perry Beeman, *Pork Producers, EPA Make a Pact*, DES MOINES REG., Nov. 28, 1998, at 2.

³ See *infra* Part II.

⁴ See *infra* Part III.

⁵ See *infra* Part IV(A).

⁶ See *infra* Part IV(B), (C).

⁷ See *infra* Part IV(D), (E).

⁸ Janet Perry et al., *Small Farms in the U.S.*, AGRICULTURAL OUTLOOK, May 1998, at 22.

⁹ Jan Stout, *The Missouri Anti-Corporate Farming Act: Reconciling the Interests of the Independent Farmer and the Corporate Farm*, 64 UMKC L. REV. 835, 838 (1996).

¹⁰ See Perry, *supra* note 8, at 22.

¹¹ MINORITY STAFF OF SENATE COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY, 105TH CONG., ANIMAL WASTE POLLUTION IN AMERICA: AN EMERGING NATIONAL PROBLEM 15 (Comm. Print 1997) [hereinafter MINORITY STAFF REPORT] (visited Nov. 17, 1999) <<http://www.senate.gov/~agriculture/animalw.htm>>.

¹² See Ken Silverstein, *Meat Factories*, SIERRA, Jan.-Feb. 1999, at 29, 31.

¹³ Alan Guebert, *New Census Shows Ag's Cold-blooded Efficiency*, COLUMBIA DAILY TRIB., Mar. 29, 1999, at 3B.

million head to 142.6 million head.¹⁴ Within this time, the number of operations with fewer than one thousand hogs decreased twenty-four percent, while those operations with more than five thousand hogs increased fifteen percent.¹⁵ Now, "3 percent of the nation's hog farms produce more than 50 percent of the nation's hogs."¹⁶ It is estimated that over the past fifteen years, "the number of hog farms has decreased by three-quarters."¹⁷

"[H]igher costs, smaller profits, increased competition and stricter environmental regulation" have led to the decline of the family farm and the rise of corporate farming.¹⁸ Corporate farming, especially in livestock, can better meet these increased demands by concentrating productions in a small area, thereby decreasing costs while increasing profits.¹⁹ Some corporations now use a totally integrated system that brings within the corporation's control everything from the feed supplier, to the production facility, to processing and wholesaling.²⁰

These corporations may either own or contract out the production facility.²¹ With hog farms, many corporations contract out production to existing hog farmers.²² Once a farmer receives a corporate contract, the farmer can often receive financing to build hog confinement barns and other infrastructure allowing the farmer to greatly expand production.²³ Often the corporation supplies the hogs and the feed and medical supplies needed to raise the hogs.²⁴

B. Waste Production of Animal Feeding Operations

Problems have developed with the rise of large animal feeding operations ("AFOs"). While the raising of livestock or poultry has always generated pollution concerns, concentrated production increases the concerns. Animals produce staggering amounts of waste. Each year in the United States, "130 times more animal manure is produced than human waste."²⁵ Hogs on average produce four times the waste that humans do.²⁶ A 2.5 million hog operation in Utah, when fully operational, will produce more waste than the entire city of Los Angeles.²⁷

The question becomes what to do with this waste. Generally, farmers collect animal waste and, after allowing the water to evaporate, spread the manure residue on crop land.²⁸ No other economically viable

¹⁴ *Id.*

¹⁵ See generally U.S. EPA, OFFICE OF INSPECTOR GENERAL, ANIMAL WASTE DISPOSAL ISSUES, ch. 1 (1997).

¹⁶ MINORITY STAFF REPORT, *supra* note 11.

¹⁷ Silverstein, *supra* note 12, at 30. For every new corporate operation, 10 traditional family farms have ceased operation. *Id.*

¹⁸ Stout, *supra* note 9, at 838.

¹⁹ Stout, *supra* note 9, at 842.

²⁰ See Stout, *supra* note 9, at 842. Vertical integration first came to dominate the poultry industry. Stout, *supra* note 9, at 842. Prior to vertical integration of the industry, every farmer had a few chickens that produced some additional income. See Stout, *supra* note 9, at 842. Now large corporations "control all aspects of the poultry industry from the egg right on through to the packaged product." Stout, *supra* note 9, at 842.

²¹ Stout, *supra* note 9, at 842.

²² Stout, *supra* note 9, at 843.

²³ John D. Burns, *The Eight Million Little Pigs—A Cautionary Tale: Statutory and Regulatory Responses to Concentrated Hog Farming*, 31 WAKE L. REV. 851, 854 (1996).

²⁴ *Id.*

²⁵ MINORITY STAFF REPORT, *supra* note 11. This means that for every person in the United States, five tons of animal waste are produced.

²⁶ Burns, *supra* note 23, at 852. Other examples of animal waste are equally staggering. For instance, a 200-head dairy operation will produce as much nitrogen as the sewage from a 5,000-10,000 person community. MINORITY STAFF REPORT, *supra* note 11. "The 1,600 dairies in the Central Valley of California produce more waste than a city of 21 million people." MINORITY STAFF REPORT, *supra* note 11. A typical broiler house of 22,000 birds produces as much phosphorous as contained in the sewage of a 6,000 person community. MINORITY STAFF REPORT, *supra* note 11. However, hogs are the "cream of the crop" when it comes to producing waste. "A ton of chickens, for example, will generate 9 tons of waste a year, beef cattle 17 tons, dairy cows 24 tons and pigs 32 tons." Michael Satchell, *Hog Heaven—and Hell*, U.S. NEWS & WORLD REPORT, Jan. 22, 1996, at 57.

²⁷ MINORITY STAFF REPORT, *supra* note 11.

²⁸ Mildred Haley et al., *World Hog Production: Constrained by Environmental Concerns?*, AGRICULTURAL OUTLOOK, Mar. 1998, at 15. "Water is used to flush the manure out of barns and into storage facilities." MINORITY STAFF REPORT, *supra* note 11. Most solids settle to the bottom of the lagoon. MINORITY STAFF REPORT, *supra* note 11. The water on top is rich in nitrogen and can be used for irrigation and fertilization. MINORITY STAFF REPORT, *supra* note 11. If the facility has multiple lagoons, the water can be cleaned of solids to a point such that the water can be used again to flush the barns. MINORITY STAFF REPORT, *supra* note 11.

method currently exists to dispose of the waste.²⁹ However, this response cannot keep up with the tremendous waste the larger facilities produce.³⁰ As facilities and production become more concentrated, facilities do not have enough crop land in the surrounding area for the waste to be applied.³¹ If overapplication occurs, the waste seeps into groundwater or washes into nearby waterways.³² Therefore, these facilities resort to holding the waste in lagoons and other types of storage facilities. Even from these holding areas, however, seepage or spills affecting water quality may occur.³³

All over the country, spills and overflows from hog waste lagoons repeatedly make the news. North Carolina, the country's second largest pork producer,³⁴ has the dubious honor of having the largest recorded spill from a hog factory. In 1995, the eight-acre lagoon at Oceanview Farms in Onslow County, North Carolina breached its dam, resulting in a 25-million gallon spill of hog waste³⁵ that flowed over a road, a neighboring tobacco field, and into the New River.³⁶ The spill was two feet deep in spots and flowed for over two hours.³⁷ The waste killed almost all-aquatic life in a seventeen-mile stretch of the river.³⁸ This spill was twice the size of the Exxon Valdez oil spill.³⁹

On the same day as the Oceanview spill, a one million-gallon spill occurred at another hog farm in North Carolina.⁴⁰ In August of 1995, two million gallons of hog waste spilled into tributaries of the Cape Fear River.⁴¹ In total, North Carolina had spills from hog farms in 1995 that totaled almost 35 million gallons of waste.⁴² These spills have not stopped; spills were reported in 1996,⁴³ 1997,⁴⁴ and 1998.⁴⁵

In Missouri, 1995 was also a banner year. Two major pork producers recorded eight spills in a period of thirty-six days.⁴⁶ The spills were blamed for killing more than 250,000 fish in nearby river tributaries into which the waste flowed.⁴⁷ In 1996, a small hog producer spilled waste that spoiled twelve miles of creek.⁴⁸ On

²⁹ Haley, *supra* note 28, at 15.

³⁰ Silverstein, *supra* note 12, at 30.

³¹ Haley, *supra* note 28, at 16. "[T]here are hundreds of counties [in the U.S.] where nutrients available from animal manures exceed 100 percent of crop system needs." Haley, *supra* note 27, at 16.

³² Silverstein, *supra* note 12, at 29, 30.

³³ Haley, *supra* note 28, at 16.

³⁴ See Silverstein, *supra* note 12, at 31. Iowa is the nation's number one pork producer. Silverstein, *supra* note 12.

³⁵ Joby Warrick, *Hog-waste Spill Fouls Land, River in Onslow*, NEWS & OBSERVER (Raleigh, N.C.), June 23, 1995, at A1.

³⁶ Satchell, *supra* note 26, at 55.

³⁷ *Id.*

³⁸ *Id.*

³⁹ When both spills occurred, there was national media coverage. Within a short period of time, the hog waste spill left the national limelight while Exxon Valdez continued to make national news for several months. For instance, the national magazine *U.S. News & World Report* ran five articles on the oil spill in the one year period following the Exxon Valdez spill but only ran one article about the Oceanview Farms spill. See Don L. Boroughs et al., *Muckrakers of the Far North Environment*, U.S. NEWS & WORLD REP., Aug. 7, 1989; Satchell, *supra* note 26; Michel Satchell et al., *Is Exxon Slipping the Hook in Alaska?*, U.S. NEWS & WORLD REP., Mar. 5, 1990; Michael Satchell & Betsy Carpenter, *A Disaster That Wasn't*, U.S. NEWS & WORLD REP., Sept. 18, 1989; Michael Satchell & Steve Lindbeck, *Tug of War Over Drilling: An Alaskan Disaster Raises the Stakes for Energy Reserves*, U.S. NEWS & WORLD REP., Apr. 10, 1989; Kenneth R. Sheets, *Would You Believe \$16.67 an Hour to Scrub Rocks?*, U.S. NEWS & WORLD REP., Apr. 17, 1989.

⁴⁰ See Wade Rawlins & Ben Stocking, *Chicken Waste Hits River*, NEWS & OBSERVER (Raleigh, N.C.), July 5, 1995, at A1.

⁴¹ See Stuart Leavenworth, *Million Gallons of Hog Waste Spill in Jones County*, NEWS & OBSERVER (Raleigh, N.C.), Aug. 13, 1996, at A3.

⁴² See Gail S. Shane, *Concentrated Animal Feeding Operations: Will Increased Enforcement and More Stringent Regulations Under the Clean Water Act Adequately Protect Public Health and the Environment?*, NAT'L ENVTL. ENFORCEMENT J., Apr. 1998, available in 13 No.3 NAAGNEEJ1 (Westlaw). Hog farms were not the only source of animal waste to cause environmental concerns for North Carolina in 1995. A poultry farm further polluted the Cape Fear River, releasing 8.6 million gallons of waste that knocked down trees as it flowed to the river. See Rawlins & Stocking, *supra* note 40.

⁴³ See Leavenworth, *supra* note 41. The lagoon unknowingly was built on top of an old drainage system. See Leavenworth, *supra* note 41. Another one million gallon spill happened a month earlier when rain from Hurricane Bertha caused waste to overflow from the storage system. See Leavenworth, *supra* note 41.

⁴⁴ Stuart Leavenworth, *State Probes New Hog-Waste Spills*, NEWS & OBSERVER (Raleigh, N.C.), Feb. 27, 1997, at A17 (two spills reported to state environmental regulators); *Inspectors Find "Mud" Near Hog-Waste Spill*, GREENSBORO NEWS & REC., July 11, 1997, at B2 (between 500 and 1000 gallons of hog waste spilled into New River tributary).

⁴⁵ James Elishiffer, *Spill on Legislator's Farm*, NEWS & OBSERVER (Raleigh N.C.), Jan. 6, 1998, at A3 (20,000 gallon spill poured into Neuse River).

⁴⁶ Terry Ganey, *State Seeks Damages From Hog Producers*, ST. LOUIS POST-DISPATCH, Oct. 21, 1995, at A1.

⁴⁷ *Id.*

⁴⁸ Mike Hendricks, *Small-farm Hog Waste Kills Fish*, KANSAS CITY STAR, Feb. 2, 1996, at C3.

the final day of 1997, another spill occurred on a Premium Standard Farms facility in central Missouri.⁴⁹ One report by the Missouri Department of Natural Resources "found that 63 percent of all confined-animal feeding operations larger than 1,000 'animal units' . . . had spills between 1990 and 1994."⁵⁰

C. Environmental Impact of Animal Feeding Operations

Most of the environmental concerns linked to animal waste involve the effect the waste has on water quality.⁵¹ Hog and other animal waste contains large amounts of nitrogen and phosphorous.⁵² These nutrients reach both surface and groundwaters through runoff from overapplication of waste residue to cropland and seepage or spills from storage facilities.⁵³ Overabundance of these nutrients in water speeds algae growth.⁵⁴ Too much algae growth will deplete oxygen and result in fish kills.⁵⁵ Animal waste, including hog waste, has been linked to pathogens such as cryptosporidium and giardia, which can have adverse effects on humans and can be spread via the water.⁵⁶ The nitrate from the waste can cause other human health concerns if levels

⁴⁹ Michael Mansur, *Hog Farm Spill Worries Environmentalists*, KANSAS CITY STAR, Jan. 6, 1998, at B3.

⁵⁰ Ted Williams, *Assembly Line Swine*, AUDUBON, Mar.-Apr. 1998, at 28. Besides North Carolina and Missouri, many other states have experienced spills of animal waste from hog farms. One report showed that the number of spills occurring in Iowa, Minnesota, and Missouri increased from 20 in 1992 to 40 in 1996. See Shane, *supra* note 42. These three states accounted for 36% of the total U.S. swine production in 1996. See Shane, *supra* note 42. In July 1995, north of Des Moines, a 1.5 million gallon spill from a hog farm flowed into the Iowa River. See Mike Hendricks, *Manure Spills Threaten Waterways*, KANSAS CITY STAR, Sept. 24, 1995, at A1. Along with this major spill, there were at least four smaller ones in Iowa in 1995. In 1996, spills were reported in Iowa and Indiana. See Perry Beeman, *Record Fine Assessed in Huge Manure Spill That Poisoned Creeks*, DES MOINES REG., Sept. 13, 1996, at 4 (100,000 gallons poured from storage pit into nearby creek killing nearly 600,000 fish); Michael Ehret, *Thousands of Fish Killed by Hog Farm Contamination*, INDIANAPOLIS STAR, Sept. 24, 1996, at E1 (farm with almost 4,000 hogs had pumped hog waste onto farm instead of storing it in a lagoon or spreading it on nearby fields). Iowa experienced three more spills in 1997. See Jerry Perkins, *Hog Manure Spill Causes Little Damage*, DES MOINES REG., Oct. 11, 1997, at 7 (750 gallon spill reported); Alex Tom, *Hog Manure Spill Kills Fish by the Thousands*, DES MOINES REG., July 28, 1997, at 1 (spill from facility killed all fish in four miles of nearby creek); *Tests Show Well Contaminated*, OMAHA WORLD-HERALD, Apr. 25, 1997, at 15 (hog manure spill implicated in well contamination). Also in 1997, spills were reported in Oklahoma, Illinois, and Minnesota. See *Hog Manure Spill May Have Caused Fish Kill*, STAR-TRIB. (Minneapolis-St. Paul), June 24, 1997, at 3B (100,000 gallon spill); Michael McNutt, *Hog Farm Fined \$5,000 for Wastewater Spill*, DAILY OKLAHOMAN, Dec. 18, 1997, at 1 (wastewater from 2,000 hog operation flowed into small stream, killing fish); Nancy Millman, *Spill Suit Cites Agriculture Director's Brother*, CHI. TRIB., July 18, 1997, at 2 (rain caused overflow of lagoon from 600 hog facility). 1998 brought spills to Minnesota and Iowa. See Perry Beeman, *Hog-Waste Spill in Minnesota Kills Prized Iowa Trout*, DES MOINES REG., Sept. 1, 1998, at 3 (over 100,000 gallons spilled and flowed into Iowa creek, killing fish); Mark Siebert, *Creek is Still Reeling From Hog-Lot Spills*, DES MOINES REG., Aug. 1, 1998, at 1 (spill was third to occur along the creek in a seven year period).

⁵¹ Air quality is another environmental concern connected with AFOs. Hog waste produces large amounts of hydrogen sulfide. Hydrogen sulfide at high enough levels can cause "headaches, vomiting, eye irritation, respiratory problems, achy joints, dizziness, fatigue, sore throats, swollen glands, tightness of the chest, irritability, insomnia, and even loss of consciousness." Williams, *supra* note 50, at 28. Besides the concerns regarding health safety, the stench alone can cause basic quality of life issues. These concerns led Missouri Attorney General Jay Nixon to petition for a repeal of the state odor control regulations exemption for swine producers. See Williams, *supra* note 50, at 32. It is interesting to note that "there is no federal law that directly regulates odors from CAFOs." Jerome M. Organ & Kristin M. Perry, *Controlling Externalities Associated with Concentrated Animal Feeding Operations: Evaluating the Impact of H.B. 1207 and the Continuing Viability of Zoning and the Common Law of Nuisance*, 3 MO. ENVTL. L. & POL'Y REV. 183, 187 (1996).

⁵² Burns, *supra* note 23, at 858-61. Nutrient loading can cause excessive growth of other aquatic organisms, such as pfiesteria piscimorte. See *infra* notes 59-65 and accompanying text.

⁵³ See Burns, *supra* note 23, at 861.

⁵⁴ See generally U.S. EPA, *supra* note 15, ch. 1.

⁵⁵ See generally U.S. EPA, *supra* note 15, ch. 1. Along with depleting the oxygen in water, algae growth also interferes with the renewal process water undergoes. See Burns, *supra* note 23, at 862. As the algae growth dies, that waste combines with other sediment already present. See Burns, *supra* note 23, at 862. With too much sediment, the water is unable to replenish the oxygen supply when the water is stirred by winds and currents. See Burns, *supra* note 23, at 862. All this oxygen depletion causes fish to suffocate. See Burns, *supra* note 23, at 862. Fish sometimes leap "onto shore in a vain attempt to find oxygen." See Burns, *supra* note 23, at 862.

⁵⁶ See generally U.S. EPA, *supra* note 15, ch. 1. Hogs have been shown to be carriers of various human diseases. See Williams, *supra* note 50, at 26. Along with cryptosporidiosis and giardia, pigs "can get and give . . . salmonella, . . . chlamydia, meningitis, . . . worms, and influenza." Williams, *supra* note 50, at 26. The flu pandemic that killed 21 million people worldwide "apparently originated in U.S. pigs." See Williams, *supra* note 50, at 26. Hog waste also contains "avian botulism and cholera, which annually kill thousands of migratory waterfowl." Satchell, *supra* note 26, at 59.

become too high in the water supply.⁵⁷ Hormones, pesticides, antibiotics, and heavy metals can also reach the water supply from hog factories.⁵⁸

Increased outbreaks of the microorganism *pfiesteria piscimorte* have generated great environmental concern on the East Coast.⁵⁹ *Pfiesteria* growth occurs in waters with excessive nutrient loading.⁶⁰ While not the sole source of *pfiesteria* growth, animal waste contains the nutrients upon which *pfiesteria* thrives.⁶¹ *Pfiesteria* especially thrives in waters with high phosphorous counts; hog waste is extremely high in phosphate.⁶² *Pfiesteria* most notably affects fish. *Pfiesteria* "produce[s] a nerve toxin that stuns or kills the fish. Then the cells feed on fish tissue."⁶³ *Pfiesteria* has also caused "stinging and burning sensations, blisters, and even temporary declines in neurological functions" of humans.⁶⁴ In North Carolina, hog farms have been implicated in several *pfiesteria* outbreaks.⁶⁵

III. STATUTORY, REGULATORY, AND RESPONSES

Traditionally, neither state nor federal government has provided much environmental regulation of the agricultural industry.⁶⁶ One can theorize why this has been so. Of course, there have been and still are many farmers.⁶⁷ Given this fact, politicians may be leery to pass statutes that provide for much regulation when so many voters may be affected. Also, particular agricultural industries are highly organized and have strong lobbying power.⁶⁸ Because of the large number of farms, agency enforcement of a national regulatory program also would be logistically difficult.⁶⁹

However, farming has not been totally exempted from state or federal regulation. Under the Clean Water Act, the federal government, in seeking to prevent all water pollution, has adopted regulations that apply to concentrated animal feeding operations ("CAFO").⁷⁰ Additionally, states have laws and regulations targeting

⁵⁷ See Stuart Leavenworth, *Tests Find Many Wells Contaminated*, NEWS & OBSERVER (Raleigh, N.C.), Dec. 12, 1996, at A1. Nine hundred forty-eight wells near livestock farms were tested in 1996 and more than one-third showed contamination with 1 in 10 having a high nitrate content that reached what officials considered unsuitable for drinking. *Id.* The testing implicated large hog farms as the source of the contamination in many of the cases. *Id.* High nitrate levels affect "the ability of human blood to transport oxygen, causing miscarriages and blue baby syndrome." Williams, *supra* note 50, at 31.

⁵⁸ See Williams, *supra* note 50, at 31.

⁵⁹ See Carol Kinsley, *Hysteria Over Pfiesteria*, SUCCESSFUL FARMING, Jan. 1, 1998, at 25A. The summer of 1997 brought serious concerns to the Chesapeake Bay area as fish kills caused by *pfiesteria* were reported throughout the bay. The reports had an impact on both the seafood and tourist industries. See Dan Fesperman, *Bay's Economy, Future Feel Sting of Pfiesteria*, BALTIMORE SUN, Sept. 21, 1997, at 1A. *Pfiesteria* is a one-celled organism that is neither a plant nor an animal. Elaine Bueschen, *Pfiesteria Piscidia: A Regional Symptom of a National Problem*, 28 ENVTL. L. REP. 10317, 10317-18 (1998). Similar one-celled organisms, responsible for killing hundreds of pelicans and 160 dolphins, have also been found along the West Coast. *Id.*

⁶⁰ See Bueschen, *supra* note 59, at 10318.

⁶¹ See Bueschen, *supra* note 59, at 10318-19. Other sources of nutrient pollution include "sewage waste from septic tanks and treatment plants" and "air depositions from utilities and vehicles." Bueschen, *supra* note 59, at 10318.

⁶² See Burns, *supra* note 23, at 862.

⁶³ Kinsley, *supra* note 59, at 25A.

⁶⁴ Burns, *supra* note 23, at 862. Rashes, fatigue, severe nausea, and breathing difficulties have also been reported. See Bueschen, *supra* note 59, at 10319.

⁶⁵ See Bueschen, *supra* note 59, at 10318. An estimated 10 million fish died because of a *pfiesteria* outbreak linked to the massive 1995 spill. See Bueschen, *supra* note 59, at 10318. Poultry farm waste in Maryland has been implicated in the *pfiesteria* outbreaks in the Chesapeake Bay. See Bueschen, *supra* note 59, at 10318.

⁶⁶ In fact, the federal government has traditionally provided special protections for farms. Some examples of federal statutes that have been enacted to protect family farming include lower estate tax valuation for ongoing farm businesses, a special section of the Bankruptcy Act to provide for farmers seeking bankruptcy, and several federal farm benefit programs. Steven C. Bahls, *Preservation of Family Farms—The Way Ahead*, 45 DRAKE L. REV. 311, 310-21 (1997).

⁶⁷ A 1995 USDA survey estimated that there were more than 2,000,000 farms in the United States. See Perry, *supra* note 8, at 24 chart.

⁶⁸ An example of this is the National Pork Producers Council, which was able to negotiate the CAP agreement, discussed *infra* Part V. Another strong agricultural lobbying organization is the U.S. Poultry & Egg Association (visited Nov. 14, 1999)

<<http://www.poultryegg.org/>>. The American Meat Institute has an "influence-peddling budget" of \$8.5 million a year. Silverstein, *supra* note 12, at 33. From 1987 to 1996, the meat and poultry industries donated more than \$9 million to members of Congress, with more than one-third of that going to members of the agriculture committees. See Silverstein, *supra* note 12, at 32.

⁶⁹ David Zaring, *Agriculture, Nonpoint Source Pollution, and Regulatory Control: The Clean Water Act's Bleak Present and Future*, 20 HARV. ENVTL. L. REV. 515, 539 (1996).

⁷⁰ See *infra* Part IV(A).

CAFO pollution.⁷¹ Because of high profile waste spills and problems such as *pfisteria*, many states have passed new statutory laws and made regulatory adjustments to deal with agricultural pollution in some manner. These statutes vary; some try to control all CAFO operations, while others have specifically targeted the hog industry.⁷² Pursuant to statutory power, states have imposed fines on facilities found to be in violation of these regulations.⁷³

Along with statutory and regulatory control over CAFOs, other courses of action have been taken to control pollution from AFOs. Counties and local communities have attempted to use zoning ordinances or other codes to either prevent AFOs from locating in their community or to prevent pollution.⁷⁴ Citizens have filed lawsuits to prevent AFOs from locating in a particular area or to force AFOs to stop polluting the environment and clean up already existing pollution.⁷⁵

This section outlines and briefly discusses federal action to control pollution from animal feeding operations and briefly discusses examples of state, local, and citizen response in two states – North Carolina and Missouri. In addition, it touches on other responses that have been seen nationwide, including those by the pork industry.

A. Federal Response

1. Clean Water Act

Congress, in 1972, enacted the Federal Water Pollution Control Act (commonly known as the Clean Water Act) to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”⁷⁶ The Environmental Protection Agency (“EPA”) administers the Clean Water Act (“CWA”).⁷⁷ The CWA identifies two distinct sources of pollution—point sources (pipes, ditches, and the like)⁷⁸ and non-point sources (stormwater runoff and other hard-to-identify sources of pollution).⁷⁹ The CWA prohibits the discharge of any pollutant into navigable waters by a point source unless the source is issued a permit.⁸⁰ To obtain a permit under the National Pollutant Discharge Elimination System (“NPDES”), the discharger of the pollutant must comply with the requirements set out by Congress.⁸¹ Non-point source pollution is subject to the general

⁷¹ See *infra* Part IV(B) and (C). States have CAFO pollution control programs similar to that provided for under the EPA; programs that are stricter in design than the EPA’s; and other pollution control programs, such as ones designed to control erosion of agricultural lands. See Bueschen, *supra* note 59, at 10322-23.

⁷² For instance, in North Carolina, in response to the massive hog waste spills that occurred in 1995, the North Carolina Legislature targeted all CAFOs in some legislation, see 1996 N.C. Sess. Laws ch. 626, and just the hog industry in other legislation, see 1996 N.C. Sess. Laws ch. 626.

⁷³ See, e.g., Mike Glover, *DeCoster Farms Fined \$59,000*, BANGOR DAILY NEWS, Mar. 6, 1997, available in 1997 WL 4759187 (Iowa farmer held liable for 1995 hog manure spill); Mike Hendricks, *Spills Will Cost Hog Producer More Than \$1.4 Million*, KANSAS CITY STAR, Jan. 29, 1996, at A6 (\$250,000 fine and \$1.1 million in other costs to remedy spill responsible for killing thousands of fish); Kim L. Hooper, *Farmer Pays Fine for Spill of Waste*, INDIANAPOLIS STAR/INDIANAPOLIS NEWS, Apr. 24, 1998, at W01 (\$9,430 fine paid by hog farm responsible for spill); Tom Meersman, *Hog Farmer Pleads Guilty in June ‘97 Manure Spill*, STAR TRIB. (Minneapolis-St. Paul), Feb. 26, 1998, at 8B (hog farmer to pay \$2,500 criminal penalty, spend one month in jail, \$2,500 civil penalty, \$2,984 in expenses, and \$40,020 in expenses and restitution).

⁷⁴ See *infra* text accompanying notes 145-98.

⁷⁵ For example, Citizens Legal Environmental Action Network, a group of about 60 family farmers in northern Missouri, filed a suit against Premium Standard Farms for alleged violations of the Clean Air Act and the Clean Water Act. See Williams, *supra* note 50, at 26.

⁷⁶ 33 U.S.C. § 1251(a) (1994).

⁷⁷ *Id.* § 1251(d).

⁷⁸ The CWA defines a point source as:

[A]ny discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

⁷⁹ 33 U.S.C. § 1362(14) (1994).

⁸⁰ The CWA does not define a non-point source. However, the legislative history to the CWA includes this definition: “[A] non-point source of pollution is one that does not confine its polluting discharge to one fairly specific outlet.” S. REP. NO. 92-414, reprinted in 1972 U.S.C.C.A.N. 3668, 3760 (supplemental views of Senator Robert Dole).

⁸¹ 33 U.S.C. § 1311(a) (1994).

⁸² *Id.* § 1342.

prohibition on all discharges of pollution.⁸² However, the CWA provides little direction concerning non-point source pollution, with the EPA leaving most regulation to the states.⁸³

Those point sources defined as CAFOs are subject to NPDES requirements.⁸⁴ To be a CAFO, an operation must first be classified as an AFO.⁸⁵ An AFO is a facility where animals are confined and fed for at least forty-five days in a twelve-month period and crops are not normally grown on the lots or facility.⁸⁶ A CAFO is defined as an AFO with "1000 animal units" or an operation with "300 animal units" from which pollution is discharged "into navigable waters through a manmade ditch, flushing system or other similar man-made device."⁸⁷ The EPA may also designate that an AFO qualifies as a CAFO if there is a determination that the AFO is "a significant contributor of pollution to the waters of the United States."⁸⁸

If an operation is deemed a CAFO, the operation must have a permit to discharge any pollution.⁸⁹ When an operation receives a permit, it agrees to limit the amount and types of pollution from the operation.⁹⁰ Facilities often must agree to monitoring and reporting procedures.⁹¹ Failure to obtain a needed permit or a violation of the terms of the permit can subject the operation to various penalties.⁹² AFOs not subject to the permitting requirements are still subject to general non-point source discharge requirements.⁹³

Under the CWA, agricultural pollution is not subject to much control. Run-off pollutants caused by overapplication of manure residue are often classified as non-point sources and, as already noted, non-point sources are not stringently regulated under the national system.⁹⁴ Additionally, the system designed to classify AFOs as CAFOs is underinclusive.⁹⁵ In 1995, there were approximately 450,000 AFOs, but only 6600 would have been classified as CAFOs under the CWA definition.⁹⁶ Of these CAFOs, the EPA estimates that only about one-third had received permits as of early 1998.⁹⁷ While the EPA has enforced the regulations that apply to AFOs, these regulations have a limited affect on controlling pollution from animal factories.⁹⁸

⁸² *Id.* § 1311(a).

⁸³ CWA requires states to develop plans to identify and control non-point source pollution. *See* 33 U.S.C. § 1329 (1994). In the 1987 CWA Amendments, Congress adopted new methods to encourage states to identify and implement management practices to control significant sources of non-point source pollution. *See* Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7 (1987). Under these amendments, the CWA also requires that run-off passing through municipal and industrial storm sewers be subject to NPDES requirements. *Id.* § 1342(p).

⁸⁴ *Id.* § 1362(14).

⁸⁵ 40 C.F.R. § 122.23(b)(3) (1998).

⁸⁶ *Id.* § 122.23(b)(1).

⁸⁷ *Id.* § 122.23(b)(3) app. B. One animal unit is equivalent to 1 slaughter or feeder cow, .7 mature dairy cow, 2.5 swine weighing over 55 pounds, .5 horses, 55 turkeys, 10 sheep or lambs, 30 or 100 hens or broilers (depending on the type of waste treatment system in use) or 5 ducks. *See id.* § 122 app. B.

⁸⁸ *Id.* § 122.23(c). Factors for the EPA to consider in reaching this determination include the size of the AFO, the amount of waste reaching water, the location of the AFO, how the waste reaches the water, and the "slope, vegetation, rainfall and other factors" that may contribute to the waste reaching the water. *Id.*

⁸⁹ 33 U.S.C. § 1342(a) (1994). States may choose to substitute their own permitting system for that of the EPA's upon EPA approval of the state system. *See id.* § 1342(b). Forty-three states "have been authorized by the EPA" to issue permits. Shane, *supra* note 42.

⁹⁰ 33 U.S.C. § 1342(a)(1) (1994).

⁹¹ *Id.* § 1342(a)(2).

⁹² *Id.* § 1342(h). One exception provided by the regulations is for discharges that are caused by 25-year, 24-hour storm events. *See* 40 C.F.R. § 412.15 (1998). However, even for this exception to apply, the facility must be properly designed, constructed, and maintained. *Id.*

⁹³ 33 U.S.C. § 1311(a) (1994).

⁹⁴ Congress specifically excluded from the definition of point source pollution any "agricultural stormwater discharges and return flows from irrigated agriculture." 33 U.S.C. § 1362(14). However, one court has held that the application of manure residue on farm land is a point source even though the pollution then reaches navigable waters by runoff from stormwaters. *See* Concerned Area Residents for the Env't v. Southview Farm, 34 F.3d 114, 118 (2d Cir. 1994). The EPA has expressly disagreed with the Second Circuit's interpretation and limited that decision to the facts in the case. *See* Shane, *supra* note 42.

⁹⁵ *See* Shane, *supra* note 42.

⁹⁶ *See* U.S. GENERAL ACCOUNTING OFFICE, ANIMAL AGRICULTURE: INFORMATION ON WASTE MANAGEMENT AND WATER QUALITY ISSUES, Pub. No. GAO/RCED-95-200BR (1995).

⁹⁷ *Id.*

⁹⁸ *See* Silverstein, *supra* note 12, at 30.

2. Other Federal Action

On October 18, 1997, Vice President Al Gore announced a Clean Water Initiative recognizing the need for improved water pollution control.⁹⁹ One of the key elements of Gore's initiative addressed the pollution caused by AFOs.¹⁰⁰ Gore called for the EPA to "expedite its new strategy from [sic] animal feeding operations that produce polluted runoff, and include in that strategy specific commitments to revise outdated regulations."¹⁰¹ The initiative directed the EPA and the Department of Agriculture to issue a Clean Water Action Plan ("CWAP") within 120 days that addressed all issues in Gore's announcement, including those issues surrounding AFO pollution.¹⁰²

The EPA and the Department of Agriculture issued the CWAP in March 1998.¹⁰³ This plan acknowledges that many achievements with regard to water quality have occurred since the passage of the CWA, but also notes that much remains to be addressed.¹⁰⁴ To achieve the goal of cleaner water, the CWAP calls for all levels of government to "revise standards where needed and make existing programs effective."¹⁰⁵ The plan calls for revised standards to reduce pollution from AFOs.¹⁰⁶ The EPA and the USDA were directed to develop a "broad national strategy to minimize the environmental and public health impacts of [AFOs]."¹⁰⁷

On September 11, 1998, these agencies jointly released a draft of such a strategy ("Strategy").¹⁰⁸ The Strategy seeks to "minimize water quality and public health impacts from AFOs" by establishing a "national performance expectation for all AFOs."¹⁰⁹ For smaller AFOs, the Strategy proposes a voluntary program to meet the national performance expectation.¹¹⁰ AFOs that are already subject to the NPDES permit program under the CWA will be subject to even tighter control.¹¹¹ These AFOs are recognized for "represent[ing] the greatest risks to the environment and public health."¹¹² The Strategy strives to implement all national goals in such a manner so as to "complement the long-term sustainability of livestock production."¹¹³ Regulation of AFOs by the USDA, EPA, and state and tribal agencies will be coordinated.¹¹⁴ These entities are to use

⁹⁹ Vice President's Initiatives, 62 Fed. Reg. 60,448 (1997).

¹⁰⁰ *Id.* Other issues addressed by the Vice President include: (i) identifying steps to reduce the need for fish consumption advisories; (ii) identifying the major sources of nitrogen and phosphorous in water and actions to address these sources; and (iii) developing a strategy to stem the continued loss of wetlands and achieving a gain of 100,000 acres of wetlands by the year 2005. *Id.* at 60,449.

¹⁰¹ *Id.* at 60,448.

¹⁰² *Id.* These agencies were to work with other agencies and seek public input in creating the action plan. *Id.* The EPA and the USDA were also to seek input from state and local agencies, tribal governments, and Members of Congress. *Id.*

¹⁰³ Clean Water Action Plan, 63 Fed. Reg. 14,109 (1998).

¹⁰⁴ *Id.* The plan notes three areas of concern that still exist: "40 percent of the nation's waterways assessed by states are still unsafe for fishing and swimming. . . . [R]unoff from city streets, rural areas, and other sources continues to degrade the environment and puts drinking water at risk. Fish in many waters still contain dangerous levels of mercury, polychlorinated biphenyls (PCBs) and other toxic contaminants." *Id.* at 14,109-110.

¹⁰⁵ *Id.* at 14,109. Along with revising standards as needed, the action plan also focuses on three other approaches to achieving clean water. *Id.* These approaches are: (i) focusing on restoring and sustaining the health of watersheds; (ii) conserving and stewardship of cropland, pasture, rangeland, and forests; and (iii) disseminating "clear, accurate, and timely information" to the public, government, and others concerning health of watersheds, safety of beaches, drinking water, and fish. *Id.*

¹⁰⁶ *Id.* at 14,111.

¹⁰⁷ *Id.*

¹⁰⁸ U.S. DEPARTMENT OF AGRICULTURE AND U.S. DEPARTMENT ENVIRONMENTAL PROTECTION AGENCY, DRAFT UNIFIED STRATEGY FOR ANIMAL FEEDING OPERATION STRATEGY (1998) [hereinafter DRAFT STRATEGY] (visited Sept. 20, 1999) <<http://www.nhq.nrcs.usda.gov/cleanwater/afo/index.html>>.

¹⁰⁹ *Id.* § 1.2. The center point of the national performance expectation is that all AFOs should "develop and implement technically sound and economically feasible Comprehensive Nutrient Management Plans (CNMPs) to minimize impacts on water quality and public health." *Id.* § 3.1. CNMPs will address "feed management, manure handling and storage, land application of manure, land management, record keeping, and management of other utilization options." *Id.* § 3.2. The CNMPs are to be site-specific, should be periodically reviewed, and should keep pace with "technical innovation and new approaches to manure and nutrient management." *Id.*

¹¹⁰ *Id.* § 4.1. Approximately 95% of AFOs will be covered by the voluntary program. *Id.* fig. 2. The voluntary program will seek to encourage "owners and operators in developing and implementing CNMPs." *Id.* § 4.1. Those AFOs that voluntarily implement CNMPs will be eligible to receive financial assistance. *Id.*

¹¹¹ *Id.* § 4.2. Tighter control will be implemented through the NPDES permit program and will focus on incorporating the CNMP into the permit requirements. *Id.* § 4.5.

¹¹² *Id.* § 1.2.

¹¹³ *Id.*

¹¹⁴ *Id.*

“diverse tools including voluntary, regulatory and incentive-based approaches” to ensure that all AFOs meet national environmental goals.¹¹⁵

About the same time that the draft strategy was announced by the EPA and the USDA, the EPA also announced the “Compliance Assurance Implementation Plan for Concentrated Animal Feeding Operations.”¹¹⁶ A major goal under this plan is to inspect many CAFOs within the next three years.¹¹⁷ Those CAFOs that would be subject to inspection include: (i) facilities that have been the subject of citizen or government tips or complaints; (ii) facilities located in priority watersheds; (iii) facilities located in watersheds with high AFO or CAFO density; and (iv) facilities located near surface waters or having potential for large amounts of animal waste to reach surface water.¹¹⁸ The EPA also seeks to expand the number of NPDES permits issued, to increase the scope of permit conditions under the CWA, and to revise regulations and effluent limitation guidelines.¹¹⁹

B. North Carolina

1. State Clean Water Act

North Carolina, the nation’s largest meat producer¹²⁰ and second largest pork producer,¹²¹ elected under the CWA to implement and enforce its own NPDES permit program.¹²² Accordingly, North Carolina has enacted statutes and regulations that reach CAFOs.¹²³ Another North Carolina statute governs the locations of hog farms.¹²⁴ Outside of these controls, AFOs receive favorable treatment under North Carolina’s “right-to-farm” laws that protect farming in general from the application of local zoning ordinances and certain nuisance suits.¹²⁵

North Carolina made significant changes to its NPDES permitting and enforcement scheme following the huge spill of 1995.¹²⁶ Until 1996, North Carolina regulated producers of hog waste under a system that followed the national requirements.¹²⁷ Under this system, most facilities were deemed to be in compliance with waste management standards.¹²⁸ Yet, as with the federal government, North Carolina did not have the resources to ensure that facilities in fact met all waste management standards.¹²⁹ Most problems with the waste management system remained undetected until a spill occurred.¹³⁰ And even when a problem was detected, the regulations allowed for the producer to apply for a permit and avoid penalties.¹³¹

¹¹⁵ *Id.*

¹¹⁶ 116. U.S. ENVIRONMENTAL PROTECTION AGENCY, COMPLIANCE ASSURANCE IMPLEMENTATION PLAN FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (1998) (visited Sept. 20, 1999) <<http://es.epa.gov/oeca/strategy.html>>.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.* The plan also seeks to implement “strong compliance monitoring programs, effective enforcement, better data/information on CAFOs for targeting compliance assistance and inspections, and plans for developing a feedback mechanism to EPA, States and other Federal Agencies.” *Id.*

¹²⁰ See U.S. EPA, *supra* note 15, ch.1.

¹²¹ See Satchell, *supra* note 26, at 55.

¹²² N.C. GEN. STAT. § 143B-282(a)(1)(u) (1998).

¹²³ See generally N.C. GEN. STAT. §§ 143-211 to 143-215.74I (1998); N.C. ADMIN. CODE tit. 15A, r. 2H.0122 (1994).

¹²⁴ See N.C. GEN. STAT. §§ 106-800 to -805 (1998). The statute also restricts the application of manure residue on farm land. N.C. GEN. STAT. § 106-803 (1995).

¹²⁵ See N.C. GEN. STAT. §§ 106-701 to -702 (1995).

¹²⁶ See 1996 N.C. Sess. Laws 626.

¹²⁷ See N.C. GEN. STAT. §§ 143-211 to -215.9 (1994).

¹²⁸ See N.C. ADMIN. CODE tit. 15A, r. 2H.0217 (1994).

¹²⁹ See Burns, *supra* note 23, at 874. Facilities that needed to receive a NPDES permit had to submit a plan to the North Carolina Department of Environmental and Natural Resources (DNR). See Burns, *supra* note 23, at 870. However, under the former system, DNR had “inspected and approved fewer than one percent of the plans submitted, and fewer than ten percent of the facilities [had] even submitted their plans.” Burns, *supra* note 23, at 874.

¹³⁰ See Burns, *supra* note 23, at 874. Only after the huge waste spills in 1995 were all hog farms in the state first visited. See Burns, *supra* note 23, at 874.

¹³¹ See N.C. ADMIN CODE tit. 15A, r. 2H.0123(a)(1)-(1)(2)(a) (1994).

Once the horrific spills occurred in 1995, the North Carolina state legislature quickly moved to enact new legislation to address the problem of hog waste.¹³² The state passed legislation creating a new permitting system for AFOs.¹³³ Under the new system, all animal operations must obtain a permit before disposing of waste.¹³⁴ To receive a permit, the operation must submit "an animal waste management plan" which demonstrates that all lagoons or other waste holding systems are able to withstand a "25 year, 24-hour storm."¹³⁵ Additionally, the new system requires that the operator prove to the state that the waste management system is adequate.¹³⁶ Under the new system, the state also must conduct "annual reviews of all animal operations."¹³⁷ The goal of the new legislation is to inspect and issue permits for all farms, new and old, by 2002 and have all these farms operating with approved waste management systems.¹³⁸

2. Direct CAFO Regulation

The Swine Farm Siting Act was passed in 1995 and amended in 1996 by the North Carolina legislature to address problems caused by the location of large hog operations.¹³⁹ Any swine facility or waste lagoon must be set back 1500 feet from any occupied residence, 500 feet from any property boundary, and 2500 feet from any school, hospital, or church.¹⁴⁰ Additionally, land application of waste must be at least fifty feet from any property boundary on which an occupied residence is located and fifty feet from any perennial stream or river.¹⁴¹ Under the 1996 amendments, the legislature provided for civil suits to enforce the siting requirements.¹⁴² The amendments also required that builders of swine facilities notify property owners in the vicinity of the proposed project.¹⁴³ Finally, the legislature enacted a moratorium that suspended the construction of any new waste management systems such as lagoons until March 1, 1999.¹⁴⁴

3. State Laws

North Carolina, like many states, has a right-to-farm act.¹⁴⁵ The statute limits the right of citizens to bring nuisance actions against agricultural operations that have been in existence for more than one year.¹⁴⁶ As originally enacted, the statute also limited the right of counties or other local entities to zone.¹⁴⁷ However, in response to the 1995 spill, counties now may enact zoning ordinances that impact hog operations with greater than 4000 hogs.¹⁴⁸

¹³² See 1996 N.C. Sess. Laws 626. Even before the legislature acted, Governor Jim Hunt ordered emergency inspections of waste lagoons, which resulted in detection of 124 lagoons at risk of overflowing or bursting. See Joby Warrick, *124 of State's Hog Farm Lagoons at Danger Level Survey Shows*, NEWS & OBSERVER (Raleigh, N.C.), July 28, 1995, at A1.

¹³³ Senate Bill 1217 was passed by the state legislature and adopted on June 21, 1996. See 1996 N.C. Sess. Laws 626.

¹³⁴ See N.C. GEN. STAT. § 143-215.10C(a) (1998).

¹³⁵ See *id.* §§ 143-215.10C(b), (d). While North Carolina has not defined what constitutes a "25-year, 24-hour storm" event, the federal government has provided some guidance:

The term[] . . . "25 year, 24 hour rainfall event" shall mean a rainfall event with a probable recurrence interval of once in . . . twenty-five years . . . as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

40 C.F.R. § 412.11(e) (1999).

¹³⁶ See Burns, *supra* note 23, at 876.

¹³⁷ N.C. GEN. STAT. § 143-215.10D (1998).

¹³⁸ See Burns, *supra* note 23, at 879.

¹³⁹ See N.C. GEN. STAT. §§ 106-800 to 805 (1998).

¹⁴⁰ *Id.* § 106-803(a).

¹⁴¹ *Id.* § 106-803(a).

¹⁴² 1997 N.C. Sess. Laws 458 (codified at N.C. GEN. STAT. § 106-804 (1998)).

¹⁴³ N.C. GEN. STAT. § 106-805 (1998).

¹⁴⁴ See 1997 N.C. Sess. Laws 458. This moratorium was extended for another six months and expired September 1, 1999. 1999 N.C. Sess. Laws 188. Other states (e.g. Kentucky, Minnesota, Mississippi, Nebraska) have also imposed moratoriums on new or expanding hog operations. See Haley, *supra* note 28, at 15.

¹⁴⁵ See N.C. GEN. STAT. §§ 106-700 to -701 (1998).

¹⁴⁶ See *id.* § 106-701(a).

¹⁴⁷ See *id.* § 106-701(d).

¹⁴⁸ See 1997 N.C. Sess. Laws 458 (codified at N.C. GEN. STAT. § 153A-340 (1998)).

C. Missouri

1. State Clean Water Act

Missouri is another state with statutory and regulatory control over AFOs. Like North Carolina, Missouri has elected under the CWA to administer the NPDES permit program.¹⁴⁹ In response to concerns over pollution from hog factories, the state legislature significantly revised the permit program in 1996.¹⁵⁰ The permitting process applies to the largest operations: class I facilities, certain class II facilities, and other facilities determined on a case-by-case basis.¹⁵¹ Class IA facilities are burdened with the tightest controls.¹⁵² These controls include well monitoring, special employee requirements, special design structures on facilities, and reporting requirements (including notifying adjoining property owners within twenty-four hours when a facility has a discharge).¹⁵³ Other provisions include the creation of an indemnity fund that will be used by the state to close facilities that have fallen under the control of the state.¹⁵⁴ The fund is "financed by a fee on class IA facilities of ten cents per animal unit."¹⁵⁵

2. Set-Back Statute

The use of set-back laws represents another control on AFOs in Missouri. On a statewide basis, Missouri requires a buffer between facilities, including lagoons, and public buildings or occupied residences.¹⁵⁶ "The buffer distance increases with the increase in the number of animal units at the facility."¹⁵⁷ However, facilities in operation before the law was enacted are not subject to this requirement.¹⁵⁸ Nearby residents can agree to waive the buffer zone.¹⁵⁹ Additionally, no buffer is required with regard to land on which animal waste has been applied.¹⁶⁰

3. Zoning

State law permits counties in Missouri to enact zoning upon the approval of a majority of voters.¹⁶¹ However, the law precludes zoning that covers crop land, livestock operations, or any facility used for those

¹⁴⁹ See MO. REV. STAT. § 644.011 (1994).

¹⁵⁰ See H.B. 1207, 88th Leg., 2d Reg. Sess. (Mo. 1996). The changes enacted by the legislature with regard to concentrated animal feeding operations are extensively discussed in Organ, *supra*, note 51.

¹⁵¹ See MO. CODE REGS. ANN. tit. 10, § 20-6.300(2) (1998). Class I facilities are those facilities with 1,000 or more animal units, while class II facilities have between 300 and 999 animal units. See MO. CODE REGS. ANN. tit. 10, § 20-6.300(1)(B)(6) (1998). The Missouri definition of an animal unit is comparable to the definition of "animal unit" under the EPA regulations. See *supra* note 87. Only those class II facilities which "discharge through a man-made conveyance" are subject to the permit process. MO. CODE REGS. ANN. tit. 10, § 20-6.300(2)(A)(2) (1998). Several factors are considered on a case-by-case basis. These include: (i) whether the facilities are properly constructed, (ii) the operating practices of the facility, (iii) the need for special design features, (iv) whether an unauthorized discharge has occurred or may occur, and (v) whether a discharge has resulted in a violation of water quality standards. See MO. CODE REG. ANN. tit. 10, § 20-6.300(2)(B) (1998).

¹⁵² See MO. REV. STAT. § 640.710 (Supp. 1996). Class IA facilities are those with 7,000 or more animal units. See MO. CODE REGS. ANN. tit. 10, § 20-6.300(1)(A)(6)(A) (1998).

¹⁵³ See MO. REV. STAT. § 640.700 (Supp. 1996).

¹⁵⁴ See *id.* § 640.740.

¹⁵⁵ *Id.* § 640.745.

¹⁵⁶ See *id.* § 640.710.

¹⁵⁷ Organ, *supra* note 51, at 188 (citing MO. REV. STAT. § 640.710 (Supp. 1996)). Buffer distances are required between confinement buildings or lagoons and any public building or occupied residence as follows: (1) For concentrated animal feeding operations with at least one thousand animal units, one thousand feet; (2) For concentrated animal feeding operations with between three thousand and six thousand nine hundred ninety-nine animal units inclusive, two thousand feet; and (3) For concentrated animal feeding operations of seven thousand or more animal units, three thousand feet. See MO. REV. STAT. § 640.710(2) (Supp. 1996).

¹⁵⁸ See MO. REV. STAT. § 640.710(3) (Supp. 1996).

¹⁵⁹ See *id.* § 640.710(3).

¹⁶⁰ See Organ, *supra* note 51, at 189.

¹⁶¹ For Second and Third Class Counties, the county commission may adopt zoning ordinances upon the vote of the majority of voters. See MO. REV. STAT. § 64.510 (1994). Cities, towns, and villages can enact zoning ordinances pursuant to statutory authority. See MO. REV. STAT. §§ 89.010-.140 (Supp. 1998).

purposes.¹⁶² If a county has not adopted county-wide zoning, a township in that county may adopt zoning for areas outside the township.¹⁶³ As with counties, townships cannot enact zoning over cropland, farm buildings, or structures.¹⁶⁴ However, the enabling state law is silent regarding zoning over livestock.¹⁶⁵ Additionally, townships can enact zoning regulations that impose higher standards than those required under other statutes.¹⁶⁶

Lincoln Township in Missouri adopted zoning measures that called for set-backs for lagoons and livestock feedlots stricter than the state requirements.¹⁶⁷ A pork producer sought a declaratory judgment and an injunction against the township to prevent enforcement of the zoning law.¹⁶⁸ The producer argued that the lagoon was a farm structure, and hence, not subject to township zoning under the state statute.¹⁶⁹ Additionally, the producer argued that the township could not regulate livestock feedlots.¹⁷⁰ The Missouri Supreme Court agreed with the producer on both of these points.¹⁷¹ First, the court noted that the definition of farm was understood to cover the raising of livestock.¹⁷² The court then construed "structure" to include both the feedlots and the lagoons.¹⁷³ Because state law precluded township zoning over farm structures, the court held that the producer was entitled to relief as a matter of law.¹⁷⁴

4. Health Ordinance

Linn County, Missouri passed a health ordinance in August 1997 in an attempt to regulate CAFOs. The health ordinance was enacted pursuant to state authorization allowing ordinances that seek to protect "public health and prevent the entrance of infectious, contagious, communicable or dangerous diseases."¹⁷⁵ Under this state law, no protection is provided for agricultural uses.¹⁷⁶ The specific ordinance created buffer zones between AFOs and homes and towns.¹⁷⁷ In October 1998, the Livingston County Circuit Court upheld the validity of the ordinance from a farmer's challenge.¹⁷⁸ An appeal is likely.

D. Other Responses

1. Nuisance Suits and Right To Farm Acts

Common law nuisance actions have been used to attack hog farms. These suits are based on the claim that the AFO "interferes with the comfortable use or enjoyment of life or property."¹⁷⁹ Many states, including North Carolina¹⁸⁰ and Missouri,¹⁸¹ have right-to-farm laws on the books that prevent citizens from bringing nuisance

¹⁶² See MO. REV. STAT. § 64.620(2) (1994).

¹⁶³ See *id.* § 65.650.

¹⁶⁴ See *id.* § 65.677.

¹⁶⁵ See *id.* § 65.677.

¹⁶⁶ See *id.* § 65.695.

¹⁶⁷ See *Premium Standard Farms, Inc. v. Lincoln Township*, 946 S.W.2d 234, 235 (Mo. 1997). Another example of an attempt to use county or local ordinances can be found in Iowa. See *Haley*, *supra* note 28, at 16-17. Humboldt County passed ordinances that required county approval of facilities and financial assurance by the operations and implemented regulations that control manure application. See *Haley*, *supra* note 28, at 16-17.

¹⁶⁸ See *Premium Standard Farms*, 946 S.W.2d at 236.

¹⁶⁹ *Id.* at 238.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 238-39.

¹⁷² *Id.* at 239.

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 240.

¹⁷⁵ MO. REV. STAT. § 192.300 (Supp. 1996).

¹⁷⁶ *Id.* § 192.300.

¹⁷⁷ See Bill Bell, Jr., *Judge Upholds a Health Ordinance That Targets Large, Smelly Hog Farms*, ST. LOUIS POST-DISPATCH, Oct. 30, 1998, at B2.

¹⁷⁸ *Id.* The Missouri Pork Producers backed the farmer in the suit. *Id.*

¹⁷⁹ *Shane*, *supra* note 42.

¹⁸⁰ See *supra* text accompanying notes 141-44.

¹⁸¹ See MO. REV. STAT. § 537.295 (1994).

suits against farmers.¹⁸² The laws generally state that "when an agricultural operation (including a CAFO) lawfully maintains its operation or facility, nuisance suits cannot be instituted unless, as some laws provide, certain circumstances are present, *e.g.*, an operation is found to be negligent."¹⁸³ Even with these types of restrictions, people can still bring nuisance suits and they sometimes win.¹⁸⁴ Yet, because the results of a nuisance suit are only binding on the parties to the suit, such actions have not proven useful in controlling, on a large scale, pollution problems caused by AFOs.¹⁸⁵

2. Family Farming Acts

States have passed statutes that both directly and indirectly seek to protect family farming and discourage large corporate farms from entering the state. This past November, South Dakota voters adopted one of the most drastic limitations on large corporate farms.¹⁸⁶ Voters amended South Dakota's state constitution to prohibit any corporation or syndicate from owning or maintaining livestock.¹⁸⁷ Other states with direct limitations on corporate farming include Kansas,¹⁸⁸ Nebraska,¹⁸⁹ and Minnesota.¹⁹⁰ States have also sought to protect the small farmer by regulating contracts to ensure that the small farmer has the same bargaining position as the large corporation.¹⁹¹

However, even in states with anti-corporate farming laws, big corporations have found ways to build facilities. For instance, in Missouri, a statute bars any corporation "not already engaged in farming" from either engaging in farming or acquiring an interest in a farm.¹⁹² The statute provided several exceptions that were intended to benefit the family farm.¹⁹³ Three large corporate hog producers have used these exceptions to enter

¹⁸² See Shane, *supra* note 42.

¹⁸³ Shane, *supra* note 42.

¹⁸⁴ In November of 1996, a Pettis County, Missouri judge found that a hog farm was a nuisance, shut down the operation, and awarded the plaintiffs \$117,500 in damages. See Michael Mansur, *Hog Farm Opponents Get Relief in Courts*, KANSAS CITY STAR, Nov. 6, 1998, at A1.

¹⁸⁵ ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION LAW, SCIENCE, AND POLICY 87 (2nd ed. 1996).

¹⁸⁶ See S.D. CONST. art. XVII, §§ 21-24.

¹⁸⁷ See S.D. CONST. art. XVII, §§ 21-24.

¹⁸⁸ See KAN. STAT. ANN. § 17-5903 (1997).

¹⁸⁹ See NEB. CONST. art. XII, § 8.

¹⁹⁰ See MINN. STAT. ANN. § 500.24 (Supp. 1999).

¹⁹¹ See Steven C. Bahls, *Preservation of Family Farms—The Way Ahead*, 45 DRAKE L. REV. 311, 315 (1997). These regulations tend to include "required mediation or arbitration, a required notice period before cancellation of the contract by the contractor, a producer's right to cause a breach after notice, and an implied covenant of good faith[] . . . prompt payment and prohibit[ion] [on] unfair practices." *Id.*

¹⁹² MO. REV. STAT. § 350.015 (Supp. 1998).

¹⁹³ *Id.* § 350.015. There are twelve listed exceptions which include:

(1) A bona fide encumbrance taken for purposes of security; (2) A family farm corporation or an authorized farm corporation as defined in section 350.010; (3) Agricultural land and land capable of being used for farming owned by a corporation as of September 28, 1975 . . . ; (4) A farm operated wholly for research or experimental purposes . . . ; (5) Agricultural land operated by a corporation for the purposes of growing nursery plants, vegetables, grain or fruit used exclusively for brewing or winemaking or distilling purposes and not for resale, for forest cropland or for the production of poultry, poultry products, fish or mushroom farming, production of registered breeding stock for sale to farmers to improve their breeding herds, for the production of raw materials for pharmaceutical manufacture, chemical processing, food additives and related products, and not for resale; (6) Agricultural land operated by a corporation for the purposes of alfalfa dehydration; (7) Any interest, when acquired by an educational, religious, or charitable not for profit or pro forma corporation or association; (8) Agricultural land or any interest therein acquired by a corporation other than a family farm corporation or authorized farm corporation, as defined in section 350.010, for immediate or potential use in nonfarming purposes. . . .

(9) Agricultural lands acquired by a corporation by process of law or voluntary conveyance in the collection of debts, or by any procedure for the enforcement of a lien or claim thereon, whether created by mortgage or otherwise; (10) The provisions of sections 350.010 to 350.030 shall not apply to the raising of hybrid hogs in connection with operations designed to improve the quality, characteristics, profitability, or marketability of hybrid hogs through selective breeding and genetic improvement where the primary purpose of such livestock raising is to produce hybrid hogs to be used by farmers and livestock raisers for the improvement of the quality of their herds; (11) A bank or trust company acting as administrator or executor under the terms of a will or trustee under the terms of a testamentary or inter vivos trust created by the owner of a family farm, or an inter vivos or testamentary trust, the principal of which is shares of a family farm corporation or authorized farm corporation or authorized farm corporation. . . . (12) Agricultural land that on June 1, 1998, was in compliance with section 350.016.

the market.¹⁹⁴ Additionally, the state passed legislation in 1993 that enables corporate hog producers to evade other sections of the anti-corporate statute, including the ability to sell the corporation to another corporation.¹⁹⁵

In 1997, Oklahoma responded to the seven-fold increase in hog production by passing set-back requirements that vary based on the size of the operation.¹⁹⁶ Colorado voters approved a provision in 1998 to monitor large hog lots to ensure compliance with stringent environmental standards.¹⁹⁷ Minnesota has more than forty townships with feedlot ordinances or moratoriums that regulate hog production.¹⁹⁸

IV. CAP PROGRAM

On November 25, 1998, the EPA and the National Pork Producers Council ("NPPC") announced a program to provide incentives to pork producers to come into compliance with CWA requirements.¹⁹⁹ The "Clean Water Act Compliance Audit Program for Pork Producers" ("CAP Program") is a voluntary compliance program under which pork producers would receive reduced penalties for the prompt disclosure and correction of any violations discovered during an inspection.²⁰⁰ The program utilizes an assessment protocol developed by the NPPC, in which a team of independent inspectors conducts on-site assessments of all aspects of a facility.²⁰¹ Sites at which pork producers successfully complete the requirements under the agreement will be allowed to display a seal received from the NPPC.²⁰²

This agreement is a step in a new direction for the EPA. The NPPC has developed a process of inspecting facilities and reporting and correcting violations.²⁰³ This system alone could have allowed producers to take advantage of existing EPA self-policing and reporting processes.²⁰⁴ However, under the self-policing process, there is no guarantee that a producer will receive reduced penalties. The agreement between the EPA and NPPC is the first time that EPA has provided, in advance, a guarantee that reduced penalties will be given to a specific industry. This section first details how the NPPC developed the assessment protocol and how an agreement was reached between the EPA and NPPC. Then it details the CAP Program and discusses the benefits such a program brings to the EPA. Finally, this section discusses whether such an agreement should be extended to other industries.

A. Development of the Assessment Protocol

Early in 1997, the Board of Directors of the NPPC directed its environmental staff to begin development of a program that would be more extensive than the environmental education initiatives that the NPPC had provided to farmers from time to time.²⁰⁵ The goal of the new program would be to bring training to the site of

MO. REV. STAT. § 350.015 (Supp. 1998).

¹⁹⁴ See Stout, *supra* note 9, at 847.

¹⁹⁵ See MO. REV. STAT. § 350.016 (1994).

¹⁹⁶ OKLA. STAT. ANN. tit. 2, § 9-210.1 (West Supp. 1998). This provision was part of a larger act that was passed to address environmental concerns caused by the proliferation of large hog operations. See 1997 Okla. Sess. Laws 612 (codified at OKLA. STAT. ANN. tit. 2, §§ 9-200 to -215 (West Supp. 1998)).

¹⁹⁷ Colorado voters passed Amendment 14 on Nov. 3, 1998, requiring the Air Quality Control Commission and the Water Quality Control Commission to develop regulations for housed commercial swine feeding operations by March 1, 1999. COLORADO DEP'T PUB. HEALTH & ENV'T, *Housed Commercial Swine Feeding Operations Development Homepage* (visited Nov. 15, 1999) <http://www.cdphe.state.co.us/ap/hog_hom.html>.

¹⁹⁸ See Charles Johnson, *Hog Wars*, FARM J., Feb. 1998, at 23.

¹⁹⁹ EPA PRESS RELEASE, *EPA and Pork Producers Agree to Voluntary Compliance Initiative to Protect America's Waters*, Nov. 25, 1998 [hereinafter EPA PRESS RELEASE].

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ Telephone Interview with Andy Baumert, Director, Environmental Services, National Pork Producers Council (Mar. 2, 1999).

²⁰⁴ See Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. 66,706 (1995).

²⁰⁵ Telephone Interview with Andy Baumert, Director, Environmental Services, National Pork Producers Council (Mar. 2, 1999). The environmental education initiatives were basically classes that farmers could attend to receive information and training about environmental issues. *Id.* The NPPC is not the only group that has sought to assist pork producers. On December 17, 1997, a group of pork producers, representatives of five state agencies, USDA and EPA representatives, and the Assistant Administrator of the Office of Water issued a joint recommendation. See Shane, *supra* note 42. "Environmental groups and local governments were invited into the process but did not remain participants." Shane, *supra* note 42. This "National Environmental Dialogue on Pork Production" sets forth a

operation and to conduct on-site assessments to evaluate all aspects of the pork facility.²⁰⁶ The central piece of the new program, the on-site assessments, was to be more than just an environmental compliance verification.²⁰⁷ The inspectors would evaluate all aspects of a given hog farm, including operations and facilities, and would offer management practices to assist farmers in better addressing environmental issues.²⁰⁸ In June 1997, the NPPC gathered approximately thirty people to design a protocol under which the assessment would be conducted.²⁰⁹ This development team conducted a pilot test of the initial assessment protocol at the Swine Research Facility at Iowa State University in September 1997.²¹⁰ After this initial test and further refinement, the development team initiated a full-scale test at facilities in four states during the late months of 1997.²¹¹

In early 1998, the development team began working on a protocol to train individuals to perform the assessments.²¹² Under the protocol, to be certified as an inspector, an individual must spend a day and a half in classroom training, conduct a mock assessment, and successfully complete a written test.²¹³ After this initial training, the person accompanies a certified inspector on two assessments.²¹⁴ The person then must successfully write reports on these inspections before becoming fully certified.²¹⁵ Currently, individuals have received training and become certified in fourteen states.²¹⁶ While the NPPC does not plan to conduct training in every state, all regions of the country will have inspectors available.²¹⁷ The assessment program is available to any pork producer no matter where located.²¹⁸

B. Agreement Reached with EPA

As the NPPC conducted training in the various states, the NPPC met with state regulatory agencies, extension services, NRCS, and other groups.²¹⁹ The NPPC also took the opportunity to visit with EPA regional staff.²²⁰ Because of the positive feedback that the NPPC received from both state agencies and EPA regional staff, the NPPC decided to seek affirmation of the assessment protocol from the national EPA office.²²¹ The NPPC believed that the assessment protocol was a credible process and wanted to get some recognition for farmers who successfully completed the assessment.²²² The NPPC turned over the protocol as developed to the

framework for pork producers to follow to control pollution, including provisions providing that all pork facilities obtain registration; that new facilities and enlargements use siting factors accounting for environmental concerns; that engineering standards in building new facilities be approved; that manure residue be applied to crop land only after adequate soil sampling and testing has been done; that emergency response plans be developed; and that periodic inspections be conducted. *See* Shane, *supra* note 42. The joint recommendation also suggests that operators who follow such guidelines should receive some protection from nuisance suits. *See* Shane, *supra* note 42.

²⁰⁶ Telephone Interview with Andy Baumert, Director, Environmental Services, National Pork Producers Council (Mar. 2, 1999).

²⁰⁷ *Id.*

²⁰⁸ *Id.*

²⁰⁹ *Id.* The Board authorized the spending of \$1.5 million to develop the site assessment protocol. *Id.* The NPPC sought assistance from the NRCS, the Cooperative Extension, Iowa State University, the University of Missouri, North Carolina State University, and a variety of agricultural engineers and production management specialists. *Id.* Additionally, the NPPC hired Tetra Tech as a third-party "watchdog" to verify that all aspects of the assessment protocol were statistically sound. *Id.* Tetra Tech, Inc., a company based in Pasadena, California with over 100 offices throughout the world, provides specialized management consulting and technical services in resource management (especially water), infrastructure, and communications.

²¹⁰ *Id.*

²¹¹ *Id.* Six farms were selected in each of Minnesota, Iowa, Missouri, and North Carolina. Facilities were chosen so as to represent all types of swine production methods—from large integrated operation to small operations with as few as sixty sows, from facilities with lagoons to those with concrete lined storage tanks. *Id.*

²¹² *Id.*

²¹³ *Id.*

²¹⁴ *Id.*

²¹⁵ *Id.*

²¹⁶ *Id.* Individuals have been trained and tested to become certified inspectors in Utah, Colorado, Nebraska, Kansas, Oklahoma, Missouri, Iowa, Minnesota, Wisconsin, Michigan, Indiana, Ohio, Pennsylvania, and Alabama. *Id.*

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

²²² *Id.*

EPA and sought its advice on what changes were needed.²²³ The EPA asked for no changes to the assessment protocol.²²⁴ The NPPC and EPA negotiators were then able to agree upon a program, based on the assessment protocol, that would bring benefits to those farmers who participated.²²⁵ The EPA and NPPC formally announced the Compliance Audit Program on November 25, 1998.²²⁶

Many factors probably induced the EPA to agree to the CAP Program. The largest factor is that this program will ensure that many pork producers are in environmental compliance by giving the producers incentives to find and correct CWA violations.²²⁷ Carol Browner, an EPA Administrator, stated that the CAP program is one part of "finish[ing] the job of cleaning up America's waterways."²²⁸ The EPA has long provided the incentive of reduced penalties to facilities that self-police and report environmental violations.²²⁹ The major difference in the CAP Program is that it provides a guarantee for such reductions before the self-policing and correction has occurred.²³⁰ In exchange for the EPA guarantee, the NPPC has planned assessments at approximately 10,000 farms in a relatively short time frame.²³¹

The CAP Program also fits into the draft strategy for AFOs announced by the EPA and USDA in September 1998.²³² The assessment protocol designed by the NPPC addresses all the key components concerning AFOs identified by the agencies in the Strategy.²³³ The Strategy also announced that it would seek to encourage industry leadership.²³⁴ "USDA and EPA will work with industry . . . to identify opportunities for greater industry involvement in pollution prevention."²³⁵ The assessment protocol developed by the NPPC and the resulting CAP Program can be seen as an example of this.

C. How the CAP Program Operates

The CAP Program involves a contract ("CAP Agreement") between the EPA and a specific pork producer in which the pork producer agrees to be inspected by an independent team of inspectors.²³⁶ Those producers who own and operate several facilities must enter into a separate agreement for each facility (the "registration").²³⁷ Registration must occur either before or within 30 days of the commencement of the "On-

²²³ *Id.*

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ Registration and Agreement for Clean Water Act Section 301 Compliance Audit Program for the Pork Production Industry, 63 Fed. Reg. 69,627 (1998).

²²⁷ See EPA PRESS RELEASE, *supra* note 199.

²²⁸ EPA PRESS RELEASE, *supra* note 199. This also could be a response to Vice President Gore's Clean Water Initiative, in which he encouraged federal agencies to "emphasize innovative approaches to pollution control" including the use of "cooperative partnerships with . . . private parties." Vice President's Initiatives, 62 Fed. Reg. 60,448 (1997).

²²⁹ See Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. 66,706 (1995).

²³⁰ See *infra* text accompanying notes 255-63.

²³¹ See EPA PRESS RELEASE, *supra* note 199. Producers must register existing facilities for the CAP Program by Sept. 30, 2001. See *infra* Part V(D). The short time frame for registering facilities under the CAP Program fits the 3-year goal the EPA set in the "Compliance Assurance Implementation Plan for Concentrated Animal Feeding Operations." See *supra* text accompanying note 117. If the EPA had to inspect the pork facilities itself, the EPA would have to dedicate its approximately 100 federal inspectors to the task of inspecting the 10,000 plus hog farms that the CAP Program expects to reach. See Michael Mansur, *Hog Farm Deal Brings Praise*, SCOM, KANSAS CITY STAR, Dec. 3, 1998, at A12. Additionally, there are questions whether EPA inspectors could even access all facilities. "Inspectors first have to gain access to a plant, which usually involves announcing inspections in advance, giving the plant operation an opportunity to conceal violations." PERCIVAL ET AL., *supra* note 185, at 1040.

²³² See *supra* text accompanying notes 108-15.

²³³ See *supra* note 109 and accompanying text.

²³⁴ See DRAFT STRATEGY, *supra* note 108, § 5.0.

²³⁵ See DRAFT STRATEGY, *supra* note 108, § 5.0.

²³⁶ Registration and Agreement for Clean Water Act Section 301 Compliance Audit Program for the Pork Production Industry, 63 Fed. Reg. 69,627, 69,628 (1998). A state which has been approved to administer the EPA permitting program may elect to administer this program. See EPA, *Clean Water Act Compliance Audit Program For Pork Producers, Attachment A* (visited Nov. 16, 1999) <<http://www.epa.gov/oeca/ore/porkcap>> [hereinafter Registration].

²³⁷ See Registration, *supra* note 236.

Farm Environmental Assessment” (“assessment”).²³⁸ For most facilities, registration must be completed before September 30, 2001.²³⁹

To receive the reduced penalties provided under the CAP Program, the producer must conduct an assessment of the facility.²⁴⁰ A team of independent inspectors will perform this assessment under the NPPC-developed protocol.²⁴¹ The team will consist of at least two inspectors drawn from the Natural Resources Conservation Service, the USDA Extension Service, qualified engineers, university faculty members, and private consultants.²⁴²

The inspection process begins with the collection of basic information regarding the facility from the producer.²⁴³ This information must contain location and contact information, a general description of the production operation, neighboring land use, waste management practices, including land application practices, and biosecurity procedures.²⁴⁴ Then, the inspection team will conduct an on-site assessment.²⁴⁵ The producer must provide a person familiar with the facility to accompany the team during the inspection.²⁴⁶ Specific areas that will be assessed include production area surface drainage and perimeter drains; building foundation and pit walls; condition of building interiors, including pens, aisles, and animals; manure collection and transfer practices; under-building manure storage and sanitation practices; condition of outdoor surface drainage and perimeter drains; sanitation and maintenance of shed and lot areas; outdoor manure and wastewater storage structures; treatment lagoon design and operation and maintenance; evaluation of alternative manure handling and storage technologies; and land application practices.²⁴⁷ The inspection team, upon completion of the on-site assessment, must “analyze the information gathered and prepare an assessment report.”²⁴⁸ The report will include any critical environmental issues discovered, the corrective measures needed, and any improvements that may reduce the risk of harm to water quality.²⁴⁹

After the inspection, the producer must create a final report for submission to the EPA.²⁵⁰ The final report will provide to the EPA a summary of the assessment and a “detailed description of any violations being reported.”²⁵¹ Any violations being reported that involve discharges into waters must include the dates, times, locations, and quantities discharged, if known.²⁵² The report must include what corrective measures are needed and the estimated time to complete such corrections.²⁵³ The producer must provide a certification that the final report was completed in good faith and that the information contained therein is accurate to the producer’s best knowledge.²⁵⁴

If violations are reported, either the producer or the EPA can prepare a “Consent Agreement/Order” that will serve as a “complete settlement of all civil and administrative claims and causes of action” for claims that

²³⁸ See Registration, *supra* note 236, pt. II(2).

²³⁹ See Registration, *supra* note 236, pt. II(4). A facility on which construction is not completed by Sept. 30, 2001 has until Sept. 30, 2003, as long as the facility is not located at the site of a current facility, unless the facility is “substantially independent” of the existing facility or the construction is to completely replace the waste management system of an existing facility. See Registration, *supra* note 236, pt. II(4).

²⁴⁰ See Registration, *supra* note 236, pt. III(9).

²⁴¹ EPA, *Clean Water Act Compliance Audit Program For Pork Producers, Attachment B* (visited Nov. 16, 1999) <<http://ex.epa.gov/oeca/ore/porkcap/capb.html>> [hereinafter Assessment Protocol]. The assessment process is funded and managed by the NPPC. *Id.*

²⁴² See Assessment Protocol, *supra* note 241, pt. 1. The hope is that each team will have at least one member from the Natural Resources Conservation Service or from the USDA. See Assessment Protocol, *supra* note 241, pt. 1. All team members will have been trained and tested as to the use of the protocol. See *supra* text accompanying notes 212-15.

²⁴³ See Assessment Protocol, *supra* note 241, pt. 2.

²⁴⁴ See Assessment Protocol, *supra* note 241, pt. 2.

²⁴⁵ See Assessment Protocol, *supra* note 241, pt. 3.

²⁴⁶ See Assessment Protocol, *supra* note 241, pt. 3.

²⁴⁷ See Assessment Protocol, *supra* note 241, pt. 3.

²⁴⁸ See Assessment Protocol, *supra* note 241, pt. 4.

²⁴⁹ See Assessment Protocol, *supra* note 241, pt. 3. The report should be sent to the producer within two to three weeks of the completion of the inspection. See Assessment Protocol, *supra* note 241, pt. 3.

²⁵⁰ See Registration, *supra* note 236, pt. III(14).

²⁵¹ See Registration, *supra* note 236, pt. III(14)(C).

²⁵² See Registration, *supra* note 236, pt. III(14)(C).

²⁵³ See Registration, *supra* note 236, pt. III(14)(C).

²⁵⁴ See Registration, *supra* note 236, pt. III(14)(D). The producer must also include a certification from one of the inspectors from the inspection team certifying that the inspection process followed the assessment protocol. See Registration, *supra* note 236, pt. III(14)(D).

could have arisen under the CWA in connection with the reported violations.²⁵⁵ The producer will pay fines based on a reduced penalty system and will waive its right to contest the EPA determination of a violation.²⁵⁶ These fines range from \$250 to \$10,000 for each individual violation, with a maximum penalty of \$40,000.²⁵⁷ If the producer does not correct the violation within the specific time periods of the final Consent Agreement/Order, the producer may be subject to full liability for the violation.²⁵⁸

Not all violations discovered in the inspection process are eligible for the reduced penalty provision. Violations that are "made known to or discovered by EPA or a State" and violations that are the subject of a citizen suit, or ongoing federal or state administrative or judicial enforcement action, are not eligible for the CAP Program.²⁵⁹ The goal stated within the CAP Program is to provide incentives for producers to discover violations and not provide a means for producers to merely react to third-party discovery and complaint.²⁶⁰ In fact, in Missouri, most large operations would not be eligible for the reduced penalties because of ongoing state enforcement proceedings.²⁶¹

The CAP Program in no manner relieves "the producer of its obligation to comply with all applicable CWA permits or regulations or other applicable federal, state, or local environmental laws or regulations."²⁶² Any violation of such laws or regulations outside of those violations included in the final report will be subject to the full penalties available.²⁶³ What is not clear is what occurs when a violation of a more stringent state standard has occurred and that violation has been reported under the CAP Agreement. The agreement states that a producer's liability is resolved but it is unclear whether this just means liability for violations of EPA regulations or whether this also covers liability for violations of any regulation.

D. Is the CAP Program a Good Idea?

On its face, the agreement reached between the NPPC and the EPA seems like a good idea. It provides a way of potentially ensuring that approximately ten thousand pork producers are in compliance with Clean Water Act regulations within the next three years.²⁶⁴ If the ultimate goal of the EPA is to ensure that water quality is restored and maintained, anything that speeds the process seems beneficial.

However, concerns should be raised. First, there is no guarantee that as many pork producers will take part in this process as the NPPC hopes. This program is voluntary. While reduced fines for self-reported and corrected violations are an incentive, for small producers this may not be enough. Even though the inspection process itself is free, there may still be significant expenses incurred in bringing an operation into compliance with governmental regulations. And currently, many pork farmers are strapped for cash. Pork prices fell to ten cents a pound in December 1998 when the break-even point for producers was estimated to be thirty-five to forty cents a pound.²⁶⁵ Therefore, even though a producer may desire to be in compliance, the producer might not have the monetary resources to comply within the three year window provided by this agreement.

Another concern is that reduced penalties appear to be of most benefit to the largest producers. It makes sense, given the size of the operations, that large producers may have more environmental concerns than smaller ones. Even if that is not the case, the economic benefit is more substantial. For instance, say that two facilities, one large and one small, have serious waste spills over a period of ten days. Further assume that these spills occur because of non-compliance with CWA regulations. If discovered by the government, the total maximum fine could reach one hundred thousand dollars (ten thousand dollars per day).²⁶⁶ Under the CAP Program, this

²⁵⁵ See Registration, *supra* note 236, pt. III(5), (15).

²⁵⁶ See Registration, *supra* note 236, pt. III(15)(B), (C).

²⁵⁷ See Registration, *supra* note 236, pt. III(16).

²⁵⁸ See Registration, *supra* note 236, pt. III(20).

²⁵⁹ See Registration, *supra* note 236, pt. III(9).

²⁶⁰ See Registration, *supra* note 236, pt. III(9).

²⁶¹ See Mansur, *supra* note 231. Brian Maas, the director of water enforcement for the EPA, stated that the CAP Program is just one method the EPA is using to cut water pollution from hog farms. See Mansur, *supra* note 231. He also stated that the program would not affect the filing of lawsuits based on violations discovered outside of the CAP process. See Mansur, *supra* note 231.

²⁶² See Registration, *supra* note 236, pt. VI(1).

²⁶³ See Registration, *supra* note 236, pt. VI(1).

²⁶⁴ See EPA PRESS RELEASE, *supra* 199.

²⁶⁵ See Frank Fuhrig, *Why Did Pork Prices Go Belly Up?*, STATE J.-REG. (Springfield, Ill.), Feb. 7, 1999, at 1.

²⁶⁶ 33 U.S.C. § 1319(d) (1994).

fine would be capped at forty thousand dollars. For the largest producers raising many thousands of hogs a year, the forty thousand dollar maximum fine may be only a small price to pay. Yet, for a small producer, this may be more than an entire year's profits. If the small producer cannot pay either the full penalty or the reduced one, what incentive does reducing the fine provide a small producer to self-report a violation? Such a small producer may decide to wait and see if the government ever discovers the violation.

The fine reduction also seems to give an undeserved break to the large producer, especially the corporate producer. Many of these producers have the resources to stay current on environmental regulations, yet have either chosen not to stay informed or to refrain from implementing the knowledge they have gained. These large producers usually have either in-house counsel or counsel on retainer who could help them sort through the myriad state and federal regulations in existence. Most small producers do not have such resources. The government should develop programs that encourage the producers to use their own resources to bring facilities into compliance. Yet, the CAP Program is now giving these operations a break for correcting problems that could have been prevented in the first place.

This also raises the concern that a small producer does not always have the financial resources or the time to learn the needed information to stay in compliance with the many existing regulations. This concern over inability to gain needed information was one of the motivations that led the NPPC to develop the assessment protocol in the first place.²⁶⁷ By taking an assessment process to actual production facilities, the NPPC could educate individual producers on how to identify problems and correct them. This process could help level the playing field between the large and small producer by making sure that each has all current information needed to be in compliance.

This leveling of the playing field is one reason that the assessment protocol may be a good idea. While the small producer may not want to take advantage of all aspects of the program, the agreement between the EPA and the NPPC does not limit the producer to using the assessment protocol only in conjunction with entering the CAP Agreement with the EPA. The producer can undergo the inspection process and learn of needed corrections. This may lead the producer to implement the suggestions and bring a facility into compliance. While the producer may not see an advantage in entering into the CAP Agreement with the EPA, the producer may still see the advantage of undergoing the assessment process. If one of the major goals of environmental regulation is to bring entities into compliance, then this process could help to bring this about.

Another advantage concerns small producers. Many small producers are not heavily regulated at the present moment and many do not even have to obtain a NPDES permit. Out of the approximately 102,000 hog facilities in the United States, currently only 6600 of the nation's pork producers are subject to federal NPDES permitting requirements.²⁶⁸ Yet, the standards used to develop the assessment protocol are those that are required under the CWA and CAA. If producers meet these standards, they may be doing more than is legally required. So this may bring greater environmental protection than is legally required at the present time. Again, if the overall goal of the government is to protect the environment, this goal seems to be enhanced under the CAP Program.

While justice may be better served by holding large producers accountable for past mistakes, in reality, it may be years before these mistakes would ever be discovered. The EPA has a very small staff of inspectors to seek out and find violators of CWA regulations.²⁶⁹ And the EPA has not only more than one hundred thousand hog facilities to inspect, but it also has oversight authority of every other potential polluter in the United States, such as paper mills and sewage treatment plants. Even if the EPA could inspect all facilities, the EPA does not have the blanket right to enter a facility to do the inspection.²⁷⁰ Given these barriers, it makes sense that the government would seek ways to motivate producers to self-police and correct. The CAP Program of reduced penalties may be just one way of providing such motivation. While we may wish that the hog producers would take remedial action without such motivating techniques, this program does appear to be a way to bring about more environmental compliance.

Anything that helps bring operations into environmental compliance has to be seen as a positive. It was the goal of the CWA to make waters fishable and swimmable by 1983 and to eliminate discharge of pollutants into

²⁶⁷ Telephone Interview with Andy Baumert, Director, Environmental Services, National Pork Producers Council (Mar. 2, 1999).

²⁶⁸ See *supra* text accompanying notes 13 and 96.

²⁶⁹ See Mansur, *supra* note 231.

²⁷⁰ See PERCIVAL ET AL., *supra* note 185, at 1040.

navigable waters by 1985.²⁷¹ While great strides have been made, the ultimate goal has yet to be realized.²⁷² This shortcoming exists even though civil and criminal penalties have been sharply increased.²⁷³ Given the government's limited resources, innovative programs that speed up the process of reaching the CWA's goals are desirable. The CAP Program developed by the NPPC and EPA is an example of such innovation. This innovation should be given the opportunity to see whether compliance is facilitated.

It should be noted that the program in no way allows the producer to maintain anything less than full compliance with the CWA at all times. The EPA is not lowering standards for a specific industry. Additionally, hog producers are allowed only one chance to take advantage of the CAP Program. Once the assessment process is complete and corrections are put into place, producers may not take advantage of the CAP Program for additional violations. Therefore, when the operation is in compliance, the operator is more likely to be motivated to continue compliance to avoid the steep civil and criminal penalties that exist.

E. Should the CAP Program Be Expanded to Other Industries?

In determining whether other industries should be offered an opportunity similar to the CAP Program, an argument could be made that if an opportunity is not provided, the EPA is giving preferential treatment to the pork industry. Yet, for the following reasons, the EPA should hesitate to rapidly expand this program to other industries. This program is a new concept. Before it is widely expanded, time is needed to see what affect the CAP Program will have on the environment. It may be that the CAP Program will not bring about any greater protection of the environment. To broadly apply an innovation before results are known does not seem wise. When the government engages in innovation, limited application seems prudent.

A major concern in extending this program to other industries is that large differences exist between the pork industry and other industries. This program may only work for an industry structured similarly to the pork industry. However, this is a limited pool. For instance, the automobile or steel industries are significantly different in structure from the pork industry. These differences may only enhance some of the concerns detailed above with regard to the CAP Program.

The pork industry is made up of many producers, both big and small. Other industries, such as the automobile industry, are not similarly situated. While there are many automobile facilities across the country, each with environmental concerns to be dealt with, these facilities are under the control of a small number of corporations. By providing a program like the CAP Program to this industry sector, the industry would receive reduced penalties for wrongful behavior. Because of the industry structure, this program is not as useful as an educational tool as it will be in the pork industry. Plus, because of the small number of manufacturers, EPA inspectors may be able to more directly enforce environmental regulations. Current programs provided for in CWA regulations that allow for reduced penalties are probably sufficient to motivate the industry to self-police.

Another concern is how to actually expand a program like this one to other industries. As already noted, there are many differences between each industry sector; therefore, a program would have to be tailored to the individual environmental concerns raised in a particular industry. Yet, if such a program is implemented one industry at a time, various industries are likely to be treated differently. If a particular industry segment has a strong, central organization such as the NPPC to speak for it, it is likely that the industry will be better able to negotiate for treatment that greatly benefits that industry. This could result in certain industries receiving economic breaks that other industries are unable to negotiate into a program. Given the notion that the government should treat each entity equally, it would seem unfair that an industry with an organized representative may gain an advantage over another industry without an organized representative.

One aspect of the agreement between the NPPC and EPA is that the NPPC developed the assessment protocol that is to be used as the basis for the inspections. However, this assessment protocol, for obvious reasons, will not translate to every industry. If the industry does not have an entity to design a similar protocol based on that industry's needs, does this mean that the industry will not even have the opportunity to reach an agreement with the EPA? One answer would be to require the government to design assessment protocols for

²⁷¹ 33 U.S.C. §§ 1251(a)(1), (2) (1994).

²⁷² President Clinton noted, when announcing the Clean Water Initiative, that 40 percent of the nation's surveyed waterways were still too polluted for fishing and swimming. *President Clinton's Remarks Announcing the New Clean Water Initiative*, 34 WEEKLY COMP. PRES. DOC. 8 (Feb. 23, 1998).

²⁷³ See PERCIVAL ET AL., *supra* note 185, at 1051.

each industry. However, as is always a problem, there are limited governmental resources to support such a program. Until it is certain that the CAP Program is going to result in substantial environmental protection, precious governmental resources should not be expended to develop such protocols. This is especially so when an industry already is prohibited, by law, from polluting the nation's waterways.

It does seem logical to extend this opportunity to industries very similar to the pork industry. Obvious targets are industries within the agricultural sector, especially other livestock industries. Given the concern that pork producers may be receiving some type of preferential treatment from the EPA, it seems like separate branches of the same industry should be treated the same. The poultry industry is a great example of one branch where this type of agreement should be reached. The poultry industry, through one of its central bodies, has developed an assessment protocol very similar to that developed by the NPPC.²⁷⁴ While there has been some negotiation between EPA and the poultry industry, one has to wonder why an agreement has not yet been reached.

V. CONCLUSION

The CAP Program represents an attempt by both the NPPC and EPA to fight the environmental problems associated with hog production facilities. These problems have been making the news almost daily. Given the limited resources that the EPA has at hand to deal with environmental concerns, it seems wise for the EPA to try an innovative approach such as the CAP Program. While it may seem that hog producers are receiving preferential treatment from the EPA, the EPA should hesitate to rapidly expand this program to other industries. Before such expansion is allowed, the EPA must first ascertain what the affects of the CAP Program will be. Yet, the appearance of preferential treatment does raise some concern; therefore, other livestock production industries, such as the poultry industry, should be given a similar opportunity to enter into a CAP Program. Once the EPA ascertains that such a program is successful at reducing environmental harm, the EPA should then seek to expand the program to other industries.

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²⁷⁴ See "Environmental Framework and Implementation Strategy for Poultry Operations A Voluntary Program Developed and Adopted By the Poultry Industry" (visited Nov. 16, 1999) <<http://www.poultryegg.org/hot/strate~1.htm>>.