



Town of New Lebanon
Zoning Re-write Committee Minutes - Unapproved
May 23, 2013

Present: Bruce Baldwin, Committee Chairman
KB Chittenden, Committee Member

Greg Hanna, Committee Member
Tony Murad, Committee Member
Ted Salem, Committee Member

Absent: Ray Herrmann, Committee Member

Others Present: Jagat Pandey, Jackie Pearce, Gerard Ferrone, Gary Millett, Kathleen Millett, Maryann Schroder, Robert Schroder, Cynthia Creech, Committee Member

Call to order:

Chairman Baldwin opened the regular meeting of the Town of New Lebanon Re-write Committee to order at 7:00 pm.

Discussion:

Artisanal Uses in the Commercial Zone: it would be helpful to have a CEO checklist for applications of this nature as well as for home occupations.

Noise Ordinances: The committee will reference the Comprehensive Plan for guidance on noise control and site plan review. Additionally, researching other town's noise ordinances would be helpful. It was noted that the Town of Kinderhook has recently been dealing with race track issues. Two types of noise were discussed (1) constant and (2) Burst and its effects on the entire community. Time limits should be enforced. Discussions took place regarding the 2003 case settlement between the Town and the Lebanon Valley Speedway and it was suggested that the settlement be reviewed by the Town Attorney. There are minutes from 1988-1995 where hours of the LVS were defined.

Jack Pandey: Discussed his contacts with Shop-Rite

Right to Farm Law: it was noted that CAFO Requirement should be looked at when developing guidelines for regulating farm operations within the residential Zones.

Concentrated Animal Feeding Operation

From Wikipedia, the free encyclopedia

*In the terminology of the United States Environmental Protection Agency (EPA), a **Concentrated Animal Feeding Operation (CAFO)** is an animal agricultural facility that has a potential pollution profile.*

Specifically, the EPA defines a CAFO as an animal feeding operation (AFO) that (a) confines animals for more than 45 days during a growing season, (b) in an area that does not produce vegetation, and (c) meets certain size thresholds. The EPA's definition of the term "captures key elements of the transformations" observed in the animal agriculture sector over the course of the 20th century: "a production process that concentrates large numbers of animals in relatively small and confined places, and that substitutes structures and equipment (for feeding, temperature controls, and manure management) for land and labor."

[For more information regarding CAFO please see attached]

The next meeting of the Town of New Lebanon Zoning Re-write committee will be held on June 18, 2013 at 7:00 pm. Topics for discussion will include: more definitions for artisanal uses; right to farm law (addressing new farms in county).

The meeting adjourned at 8:55 pm

Respectfully submitted,

Bruce Baldwin, Chairman
Zoning Re-Write Committee



Lebanon Valley Speedway



ROUTE 20
WEST LEBANON, N.Y. 12195

1/2 Mile High Banked Clay Track
Stock Car Races Every Saturday Night at 7:30 P.M.
Drag Races Every Sunday Afternoon at 2 P.M.

PHONE: (518) 794-9606
(518) 794-9965

Halfway between Albany and Pittsfield

March 3, 1982

Lebanon Valley Dragway has been running Jet Dragsters since 1968. It is an important part of our Dragway business and we wish to continue Jet Dragster Racing with an agreement between the Speedway and Town of New Lebanon.

Agreement

- A. Lebanon Valley Dragway will not run over (4) four Jet Dragsters at an event.
- B. The Speedway Management will approach the board before the season schedule is announced if more than four Jet Dragsters are planned.
- C. During 1982 Lebanon Valley Dragway will run 2 Jet Cars at only two events. These events will have a total of only 4 to 6 minutes of Jet Dragster Racing for the entire evening.
- D. Lebanon Valley Dragway will have all Jet Dragster Racing over by 11:00 p.m.

Respectively Submitted,

Howard Commander
Howard Commander

*E. SUNDAY START OF
10 AM AT DRAGWAY PROPERT.*

*F Agreement to Stand
until such time as
modification is agreed
to by both Parties*

①

AGREEMENT

AGREEMENT made this 13th day of September, 1982, between The Town of New Lebanon, a municipal and political subdivision of the State of New York, County of Columbia, herein referred to as the "Town", and the Lebanon Valley Auto Racing, Inc., by Howard Commander, President, of the Town of New Lebanon, County of Columbia, State of New York, hereinafter referred to as the "Dragway".

WITNESSETH:

WHEREAS, the Dragway has operated Jet Dragsters as part of the business conduct of the Dragway at certain premises situated in the Town of New Lebanon, being more particularly situated at U. S. Route 20, West Lebanon, New York, beginning on or about 1968, and intermittently thereafter up to and including 1981; and,

WHEREAS, the Town has not heretofore exercised any regulation or control over the operation of Jet Dragsters by the Dragway; and,

WHEREAS, certain issues have arisen concerning the operation of Jet Dragsters by the Dragway; and,

WHEREAS, the Dragway is desirous of continuing the operation of Jet Dragsters; and,

WHEREAS, the matter has come before the Town Board of the

HENRY F. ZWACK

ATTORNEY AT LAW

372 MAIN STREET

STEPHENTOWN, N.Y. 12108

16181 733-6634

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Town of New Lebanon for consideration; and,

WHEREAS, the Town Board of the Town of New Lebanon is desirous of exercising a reasonable control over the operation of Jet Dragsters by the Dragway,

NOW, THEREFORE, subsequent to a public hearing and special Town Board Meeting, duly called on the matter of operation of Jet Dragsters by the Dragway, being held on the 12th day of April, 1982, at the Town Hall, Town of New Lebanon, County of Columbia, State of New York, and in consideration of the mutual covenants, promises and agreements contained herein, and pursuant to the authority vested in the Town Board of the Town of New Lebanon under Article 4 and Article 9 of the Town Law of the State of New York, the parties hereto agree as follows:

[1] A Jet Dragster racing event is defined as a day and/or evening of racing; and, further, a run is defined as either one or two jet dragsters completing the distance from the start line to the finish line.

[2] During a calendar year, the Dragway will operate no more than two Jet Dragster racing events. During each event, the Dragway will limit the Jet Dragster racing to a time period of not more than three (3) minutes per run, inclusive of warm-up time; further, the Dragway will operate no more than three (3) runs per event.

Jet Dragster ~~event~~
an event

HC
Woods
Sellen

HENRY F. ZWACK
ATTORNEY AT LAW
372 MAIN STREET
SPRINGTOWN, N.Y. 12158
5181 759 5834

the Dragway will not

operate more than two (2) Jet Dragsters at each Jet Dragster racing event.

[4] Commencing calendar year 1983, and each calendar year thereafter, the Dragway will not operate more than four (4) Jet Dragsters at each Jet Dragster racing event, unless the Dragway petitions the Town Board prior to the announcement of the Dragway season schedule for a calendar year for permission to operate more than four (4) Jet Dragsters at a Jet Dragster racing event, or more than two (2) Jet Dragster ~~runs~~ ^{HC (4) EVENTS}. Such permission, or denial of permission shall be given in writing by the Town Board; if a denial shall set forth the facts upon which the denial is based.

^{HC Wilson's Striker}
[5] The Dragway will conclude all Jet Dragster racing ~~events~~ by 11:00 o'clock P.M.

[6] The Dragway will not commence any Jet Dragster racing events, or any other racing events, if occurring on a Sunday, before 10:00 o'clock A.M.

[7] This agreement shall be binding upon the parties, their successors and assigns. No modification or waiver of any of the terms of this agreement shall be valid and binding upon the parties unless it is in writing and executed with the same formality as this agreement. No waiver of any breach or default hereunder shall be deemed a waiver of any subsequent breach or default of the same or similar nature.

HENRY F. ZWACK
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SEPHENTOWN, N.Y. 12158
781 722 5634

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The Town of New Lebanon

By: Harold Sharp, Jr.
Harold Sharp, Jr.
Supervisor

Gregory Baumli
Gregory Baumli

Constance Gallup
Constance Gallup

George Miller
George Miller

Vincent Wadsworth
Vincent Wadsworth

Lebanon Valley Auto Racing, Inc.

By: Howard Commander
Howard Commander
President

State of New York County of Columbia ss.:

On this 13 day of September, 1982, before me personally appeared HAROLD SHARP, JR. to me personally known and known to me to be the same person described in and who executed the within Instrument, and he duly acknowledged to me that he executed the same.

Harold Sharp
Notary Public

State of New York County of Columbia ss.:

On this 13 day of September, 1982, before me personally appeared GREGORY BAUMLI to me personally known and known to me to be the same person described in and who executed the within Instrument, and he duly acknowledged to me that he executed the same.

Harold Sharp
Notary Public

HENRY F. ZWACK
ATTORNEY AT LAW
373 MAIN STREET
LEBANON, N.Y. 12186
(518) 733-8834

Concentrated Animal Feeding Operation

From Wikipedia, the free encyclopedia

In the terminology of the United States Environmental Protection Agency (EPA), a **Concentrated Animal Feeding Operation (CAFO)** is an animal agricultural facility that has a potential pollution profile. Specifically, the EPA defines a CAFO as an animal feeding operation (AFO) that (a) confines animals for more than 45 days during a growing season, (b) in an area that does not produce vegetation, and (c) meets certain size thresholds. The EPA's definition of

There are roughly 257,000 AFOs in the United States, of which 15,500 meet the more narrow criteria for CAFOs. The EPA has delineated **three categories of CAFOs**, ordered in terms of capacity: large, medium and small. The relevant animal unit for each category varies depending on species and capacity. For instance, large CAFOs house 1,000 or more cattle, medium CAFOs can have 150-499 horses, and small CAFOs harbor no more than 16,500 turkeys.

The table below provides some examples of the size thresholds for CAFOs:

Animal Sector	Large CAFOs	Medium CAFOs	Small CAFOs
cattle or cow/calf pairs	1,000 or more	300–999	less than 300
mature dairy cattle	700 or more	200–699	less than 200
turkeys	55,000 or more	16,500–54,999	less than 16,500
laying hens or broilers (liquid manure handling systems)	30,000 or more	9,000–29,999	less than 9,000
chickens other than laying hens (other than a liquid manure handling systems)	125,000 or more	37,500–124,999	less than 37,500
laying hens (other than a liquid manure handling systems)	82,000 or more	25,000–81,999	less than 25,000

The categorization of CAFOs has an impact on whether a facility is subject to regulation under the Clean Water Act (CWA). According to the 2008 rule adopted by the EPA, "large CAFOs are automatically subject to EPA regulation; medium CAFOs must also meet one of two 'method of discharge' criteria to be defined as a CAFO (or may be designated as such); and small CAFOs can only be made subject to EPA regulations on a case-by-case basis." A small CAFO will also be designated a CAFO for purposes of the CWA if it discharges pollutants into waterways of the United States through a man-made conveyance such as a road, ditch or pipe. Alternatively, a small CAFO may be designated an ordinary animal feeding operation (AFO) once its animal waste management system is certified at the site.

Since it first coined the term, the EPA has changed the definition (and applicable regulations) for CAFOs on several occasions. Private groups and individuals use the term CAFO colloquially to

mean many types of both regulated and unregulated facilities, both inside and outside the United States. The definition used in everyday speech may thus vary considerably from the statutory definition in the CWA. CAFOs are commonly characterized as having large numbers of animals crowded into a confined space, a situation that results in the concentration of manure in a small area.

Development in the United States

Livestock production has become increasingly dominated by CAFOs in the United States and other parts of the world. Most of the poultry consumed by humans was raised in CAFOs starting in the 1950s, and most cattle and pork originated in CAFOs by the 1970s and 80s. CAFOs now dominate livestock and poultry production in U.S. and the scope of their market share is steadily increasing. In 1966, it took one million farms to house 57 million pigs; by the year 2001, it only took 80,000 farms to house the same number of pigs.

Key issues

Environmental impact

See manure lagoon, for further information on environmental and health impacts^{HI}

The EPA has focused on regulating CAFOs because they generate millions of tons of manure every year. When improperly managed, the manure can pose substantial risks to the environment and public health. In order to manage their waste, CAFOs have developed Agricultural wastewater treatment plans. The most common of these plans, is the anaerobic lagoon, which has significantly contributed to environmental and health problems attributed to the CAFO.

Water quality

The large amounts of animal waste from CAFOs present a risk to water quality and aquatic ecosystems. According to the EPA, states with high concentrations of CAFOs experience on average 20 to 30 serious water quality problems per year as a result of manure management issues.

Animal waste includes a number of potentially harmful pollutants. According to the EPA, pollutants associated with CAFO waste principally include:

1. "nutrients such as nitrogen and phosphorus;
2. organic matter;
3. solids, including the manure itself and other elements mixed with it such as spilled feed, bedding and litter materials, hair, feathers and animal corpses;
4. pathogens (disease-causing organisms such as bacteria and viruses);
5. salts;
6. trace elements such as arsenic;

7. odorous/volatile compounds such as carbon dioxide, methane, hydrogen sulfide, and ammonia;
8. antibiotics;
9. pesticides and hormones."

The two main contributors to water pollution caused by CAFOs are soluble nitrogen compounds and phosphorus. The [eutrophication](#) of water bodies from such waste is harmful to wildlife and water quality in aquatic system like streams, lakes, and oceans.^[12]

Because [groundwater](#) and surface water are closely linked, water pollution from CAFOs can affect both sources if one or the other is contaminated.^[13] Surface water may be polluted by CAFO waste through the runoff of nutrients, organics, and pathogens from fields and storage. Waste can be transmitted to groundwater through the [leaching](#) of pollutants.^[14] Some facility designs, such as lagoons, can reduce the risk of groundwater contamination, but the microbial pathogens from animal waste may still pollute surface and groundwater, causing adverse impacts on wildlife and human health.^[15]

A CAFO is responsible for one of the biggest environmental spills in U.S. history. In 1995, a 120,000-square-foot (11,000 m²) lagoon ruptured in North Carolina, releasing 25.8 million US gallons (98,000 m³) of effluvia into the New River.^[16] The spill resulted in the killing of 10 million fish in local water bodies. The spill also contributed to an outbreak of [Pfiesteria piscicida](#), which caused health problems for humans in the area including skin irritations and short term cognitive problems.^[17]

Air quality [\[edit\]](#)

CAFOs also contribute to the reduction of ambient [air quality](#). CAFOs release several types of gas emissions— ammonia, hydrogen sulfide, methane, and particulate matter—all of which have varying human health risks. The amount of gas emissions depends largely on the size of the CAFO. The primary cause of gas emissions from CAFOs is the decomposition of animal manure being stored in large quantities.^[18] Globally, [ruminant](#) livestock are responsible for about 115 Tg/a of the 330 Tg/a (35%) of [anthropogenic greenhouse gas](#) emissions released per year.^[18] Livestock operations are responsible for about 18% of greenhouse gas emissions globally and over 7% of greenhouse gas emissions in the U.S.^[19] Methane is the second most concentrated greenhouse gas contributing to global climate change,^[20] with livestock contributing nearly 30% of anthropogenic methane emissions.^[21] Only 17% of these livestock emissions are due to manure management, with the majority resulting from [enteric fermentation](#), or gases produced during digestion.^[21] The Intergovernmental Panel on Climate Change (IPCC) acknowledges the significant impact livestock has on methane emissions and climate change and recommends eliminating environmental stressors and modifying feeding strategies, including sources of [feed grain](#), amount of [forage](#), and amount of digestible nutrients as strategies for reducing emissions.^[22] If no change is made and methane emissions continue increasing in direct proportion to the number of livestock, global methane production is predicted to increase 60% by 2030.^[23] Greenhouse gases and [climate change](#) affect the air quality with adverse health effects including [respiratory disorders](#), lung tissue damage, and allergies.^[24] Reducing the increase of greenhouse gas emissions from livestock could rapidly curb global warming.^[25] In addition,

people who live near CAFOs frequently complain of the odors, which come from a complex mixture of ammonia, hydrogen sulfide, carbon dioxide, and [volatile and semi-volatile organic compounds](#).

Economic impact [\[edit\]](#)

Increased role in the market [\[edit\]](#)

The economic role of CAFOs has expanded significantly in the U.S. in the past few decades, and there is clear evidence that CAFOs have come to dominate animal production industries. The rise in large-scale animal agriculture began in the 1930s with the modern mechanization of swine slaughterhouse operations.^[26]

The growth of corporate contracting has also contributed to a transition from traditional "[family farming](#)" to large industrial [factory farming](#). This has dramatically changed the animal agricultural sector in the United States. According to the National Agricultural Statistics Service, "In the 1930s, there were close to 7 million farms in the United States and as of the 2002 census, just over 2 million farms remain."^[27] From 1969 to 2002, the number of family farms dropped by 39%,^[28] yet the percentage of family farms has remained high. As of 2004, 98% of all U.S. farms were family-owned and -operated.^[29] The current growth of CAFOs is considered one of the most influential factors to the disappearance of family farming.^[citation needed] Most meat and dairy products are now produced on large farms with single-species buildings or open-air pens.^[30]

The development of modern animal agriculture has increased the efficiency of raising meat and dairy products. Improvements in [animal breeding](#), mechanical innovations, and the introduction of specially formulated feeds (as well as [animal pharmaceuticals](#)) have contributed to the decrease in cost of animal products to consumers.^[31] The development of new technologies has also helped CAFO owners reduce production cost and increase business profits with less resources consumption. The growth of CAFOs has corresponded with an increase in the consumption of animal products in the United States. According to author Christopher L. Delgado, "milk production has doubled, meat production has tripled, and egg production has increased fourfold since 1960" in the United States.^[32]

Along with the noted benefits, there are also criticisms regarding CAFOs' impact on the economy. Many farmers in the United States find that it is difficult to earn a high income due to the low market prices of animal products.^[33] Such market factors often lead to low profit margins for production methods and a competitive disadvantage against CAFOs. Alternative animal production methods, like "free range" or "family farming" operations^[34] are losing their ability to compete, though they present few of the environmental problems associated with CAFOs.

Negative production externalities [\[edit\]](#)

Environmentalists have long argued that the "retail prices of industrial meat, dairy, and egg products omit immense impacts on human health, the environment, and other shared public assets."^[35] The [negative production externalities](#) of CAFOs have been described as including "massive waste amounts with the potential to heat up the atmosphere, foul fisheries, pollute

drinking water, spread disease, contaminate soils, and damage recreational areas"^[35] that are not reflected in the price of the meat product. Environmentalists contend that "citizens ultimately foot the bill with hundreds of billions of dollars in taxpayer subsidies, medical expenses, insurance premiums, declining property values, and mounting [cleanup costs](#)."^[35] Some economists agree that CAFOs "operate on an inefficient scale."^[36] It has been argued, for instance, that "diminishing returns to scale quickly lead to costs of animal confinement that overwhelm any benefits of CAFOs."^[36] These economists claim that CAFOs are at an unfair competitive advantage because they shift the costs of animal waste from CAFOs to the surrounding region (an unaccounted for "externality").

The evidence shows that CAFOs may be contributing to the drop in nearby property values. There are many reasons for the decrease in property values, such as loss of amenities, potential risk of water contamination, odors, air pollution, and other health related issues. One study shows that property values on average decrease by 6.6% within a 3-mile (4.8 km) radius of a CAFO and by 88% within 1/10 of a mile from a CAFO.^[37] Proponents of CAFOs, including those in farm industry, respond by arguing that the negative externalities of CAFOs are limited. One executive in the pork industry, for instance, claims that any odor or noise from CAFOs is limited to an area within a quarter-mile of the facility.^[38] Proponents also point to the positive effect they believe CAFOs have on the local economy and tax base. CAFOs buy feed from and provide fertilizer to local farmers.^[39] And the same executive claims that farmers near CAFOs can save \$20 per acre by using waste from CAFOs as a fertilizer.^[40]

Environmentalists contend that "sustainable livestock operations" present a "less costly alternative."^[41] These operations, it is argued, "address potential health and environmental impacts through their production methods." And though "sustainably produced foods may cost a bit more, many of their potential beneficial environmental and social impacts are already included in the price."^[41] In other words, it is argued that if CAFO operators were required to internalize the full costs of production, then some CAFOs might be less efficient than the smaller farms they replace.^[42]

Other economic criticisms [\[edit\]](#)

Critics of CAFOs also maintain that CAFOs benefit from the availability of industrial and agricultural tax breaks/subsidies and the "vertical integration of giant agribusiness firms."^[36] The [U.S. Department of Agriculture](#) (USDA), for instance, spent an average of \$16 billion annually between FY 1996 to FY 2002 on commodity based subsidies.^[43] Some allege that the lax enforcement of anti-competitive practices may be contributing to the formulation of market monopoly. Critics also contend that CAFOs reduce costs and maximize profits through the overuse of antibiotics.^[44]

Public health concerns [\[edit\]](#)

The direct discharge of manure from CAFOs and the accompanying pollutants (including nutrients, antibiotics, pathogens, and arsenic) is a serious public health risk.^[45] The contamination of groundwater with pathogenic organisms from CAFOs can threaten drinking water resources, and the transfer of pathogens through drinking water contamination can lead to

widespread outbreaks of illness. The EPA estimates that about 53% of people in the United States rely on groundwater resources for drinking water.^[46]

The exposure to chemical contaminants, like antibiotics, in drinking water also creates problems for public health.^[9] In order to maximize animal production, CAFOs have used an increasing number of antibiotics, which in turn, increases bacterial resistance. This resistance threatens the efficacy of medical treatment for humans fighting bacterial infections. The World Health Organization has recommended that the non-therapeutic use of antibiotics in [animal husbandry](#) be reevaluated, due to the identification of [resistant strain](#) of human pathogens.^[47] Public health is at risk from exposure to animal products with high rates of antibiotics through the generation of resistant foodborne pathogens and non-pathogenic bacteria as well.^[5] In 2004, the American Public Health Association adopted resolutions to preserve antibiotic effectiveness by placing restrictions on their use in meat production.^[45]

Air pollution from CAFOs also affects public health. Some of the health effects from CAFOs air emissions include asthma, headaches, respiratory problems, eye irritation, nausea, weakness, and chest tightness. These health effects are felt by farm workers and nearby residents, including children.^[48] Although "in many big CAFOs, it takes only a few workers to run a facility housing thousands of animals,"^[49] the long exposure and close contact to animals puts CAFO employees at an increased risk for contracting diseases like [Novel H1N1 flu](#), which erupted globally in spring of 2009.^[50] In addition, studies conducted by the University of Iowa show that the asthma rate of children of CAFO operators is higher than that of children from other farms.^[51]

Animal health and welfare concerns [[edit](#)]

CAFO practices have raised concerns over [animal welfare](#) from an ethics standpoint. Some view such conditions as neglectful to basic animal welfare. Many people believe that the harm to animals before their slaughter should be addressed through public policy.^[52] Laws regarding animal welfare in CAFOs have already been passed in the United States. For instance, in 2002, the state of Florida passed an amendment to the state's constitution banning the confinement of pregnant pigs in [gestation crates](#).^[53] As a source for comparison, several countries including Germany, Sweden, and Austria have all prohibited the use of [battery cages](#) for egg-laying hens and battery cage breeding methods will be completely outlawed in the European Union by 2012.^[54]

Whereas some people are concerned with animal welfare as an end in itself, others are concerned about animal welfare because of the impact of living conditions on [consumer safety](#). Animals in CAFOs have lives that do not resemble those of animals found in the wild.^[55] Although CAFOs help secure a reliable supply of animal products, the quality of the goods produced is debated, with many arguing that the food produced is unnatural. For instance, confining animals into small areas requires the use of large quantities of antibiotics to prevent the spread of disease. There are debates over whether the use of antibiotics in meat production is harmful to humans.^[56]

Regulation under the Clean Water Act [[edit](#)]

Basic structure of CAFO regulations under the CWA [[edit](#)]

The command-and-control permitting structure of the [Clean Water Act](#) (CWA) provides the basis for nearly all regulation of CAFOs in the United States. Generally speaking, the CWA prohibits the discharge of pollution to the "waters of the United States" from any "point source," unless the discharge is authorized by a [National Pollutant Discharge Elimination System](#) (NPDES) permit issued by the EPA (or a state delegated by the EPA). CAFOs are explicitly listed as a "point source" in the CWA.^[57] Unauthorized discharges made from CAFOs (and other point sources) violate the CWA, even if the discharges are "unplanned or accidental."^[58] CAFOs that do not apply for NPDES permits "operate at their own risk because any discharge from an unpermitted CAFO (other than agricultural [stormwater](#)) is a violation of the CWA subject to enforcement action, including third party citizen suits."^[59]

The benefit of an NPDES permit is that it provides some level certainty to CAFO owners and operators. "Compliance with the permit is deemed compliance with the CWA... and thus acts as a shield against EPA or State CWA enforcement or against citizen suits under... the CWA."^[59] In addition, the "upset and bypass" provisions of the permit can give *permitted* CAFO owners a legal defense when "emergencies or [natural disasters](#) cause discharges beyond their reasonable control."^[59]

Under the CWA, the EPA specifies the maximum allowable amounts of pollution that can be discharged by facilities within an industrial category (like CAFOs). These general "effluent limitations guidelines" (ELG) then dictate the terms of the specific effluent limitations found in individual NPDES permits. The limits are based on the performance of specific technologies, but the EPA does not generally require the industry to use these technologies. Rather, the industry may use "any effective alternatives to meet the pollutant limits."^[60]

The EPA places minimum ELG requirements into each permit issued for CAFOs. The requirements can include both *discharge limits* (the amount of a pollutant that can be released into waters of the United States) and *other requirements related to ELGs* (such as management practices, including technology standards).^[61]

History of regulations [\[edit\]](#)

The major CAFO regulatory developments occurred in the 1970s and in the 2000s. The EPA first promulgated ELGs for CAFOs in 1976.^[58] The 2003 rule issued by the EPA updated and modified the applicable ELGs for CAFOs, among other things. In 2005, the court decision in *Waterkeeper Alliance v. EPA* (see below) struck down parts of the 2003 rule. The EPA responded by issuing a revised rule in 2008.

A complete history of EPA's CAFO rulemaking activities is provided on the CAFO Rule History page.^[62]

Background laws [\[edit\]](#)

The *Federal Water Pollution Control Act of 1948* was one of the first major efforts of the U.S. federal government to establish a comprehensive program for mitigating pollution in public water ways. The writers of the act aimed to improve water quality for the circulation of aquatic

life, industry use, and recreation. Since 1948, the Act has been amended many times to expand programming, procedures, and standards.^[63]

President Nixon's executive order *Reorganization Plan No. 3* created the EPA in 1970. The creation of the EPA was an effort to create a more comprehensive approach to pollution management. As noted in the order, a single polluter may simultaneously degrade a local environment's air, water, and land. President Nixon noted that a single government entity should be monitoring and mitigating pollution and considering all impacts. As relevant to CAFO regulation, the EPA became the main federal authority on CAFO pollution monitoring and mitigation.^[64]

The U.S. Congress created the [Clean Water Act](#) (CWA) in 1972 when it reworked the Federal Water Pollution Control Amendments.^[65] It specifically defines CAFOs as point source polluters and required operations managers and/or owners to obtain permits from the National Pollutant Discharge Elimination System (NPDES) in order to legally discharge wastewater from its facilities.^[66]

Initial regulations (1970s) [\[edit\]](#)

The EPA began regulating water pollution from CAFOs starting in the 1970s. The EPA first created effluent limitation guidelines (ELGs) for [feedlot](#) operations in 1974, placing emphasis on best available technology in the industry at the time.^[67] In 1976, under the Effluent Limitations Guidelines, the EPA began requiring all CAFOs to be first defined as AFOs. From that point, if the specific AFO met the appropriate criteria, it would then be classified as a CAFO and subject to appropriate regulation. That same year, EPA defined livestock and poultry CAFO facilities and established a specialized permitting program.^[68] NPDES permits specifications for CAFOs were also promulgated by the EPA in 1976.^[69]

Prior to 1976, size had been the main defining criteria of CAFOs. However, after the 1976 Regulations **came into effect, the EPA stipulated some exceptions. Operations that were identified as particularly harmful to federal waterways could be classified as CAFOs, even if the facilities' sizes fall under AFOs standards. Additionally, some CAFOs were not required to apply for wastewater discharge permits if they met the two major operational-based exemptions. The first exception applied to operations that discharge wastewater only during a 25-year, 24-hour storm event. (The operation only discharges during a 24-hour rainfall period that occurs once every 25 years or more on average.) The second exception was when operations apply animal waste onto agricultural land.**^[68]

Developments in the 1990s [\[edit\]](#)

In 1989, the [Natural Resources Defense Council](#) and Public Citizens filed a lawsuit against the EPA (and Administrator of the EPA, [William Reilly](#)). The plaintiffs claimed the EPA had not complied with the Clean Water Act with respect to CAFOs.^[68] The lawsuit, *Natural Resource Defense Council v. Reilly* (D.D.C. 1991), resulted in a court order mandating the EPA update its regulations. They did so in what would become the 2003 Final Rule.^[70]

In 1995, the EPA released a "Guide Manual on NPDES Regulations for Concentrated Animal Feeding Operations" to provide more clarity to the public on NPDES regulation after the EPA's report "Feedlots Case Studies of Selected States" revealed there was uncertainty in the public regarding CAFO regulatory terminology and criteria.^[66] Although the document is not a rule, it did offer insight and furthered public understanding of previous rules.

In his 1998 Clean Water Action Plan, President [Bill Clinton](#) mandated the USDA and the EPA to join forces to develop a framework for future actions to improve national water quality standards for public health. The two federal agencies' specific responsibility was to improve the management of animal waste runoff from agricultural activities. In 1998, the USDA and the EPA hosted eleven public meetings across the country to discuss animal feeding operations (AFOs).^[71]

On March 9, 1999 the agencies released the framework titled the *Unified National Strategy for Animal Feeding Operations*.^[72] In the framework, the agencies recommended six major activities to be included in operations' Comprehensive Nutrient Management Plans (CNMPs): (1) feed management, (2) manure handling and storage, (3) land application of manure, (4) land management, (5) record keeping, and (6) activities that utilize manure.^[73] The framework also outlined two types of related programs. First, "voluntary programs" were designed to assist AFO operators with addressing public health and water quality problems.^[73] The framework outlines three types of voluntary programs available: "locally led conservation," "environmental education," and "financial and technical assistance."^[73] The framework explained that those that participate in voluntary programs are not required to have a comprehensive nutrient management plan (CNMP). The second type of program outlined by the framework was *regulatory*, which includes [command-and-control](#) regulation with NPDES permitting.^[73]

EPA final rule (2003) [[edit](#)]

According to the EPA, the purpose of the 2003 rule was to update decades-old policies to reflect new technology advancements and increase the expected pollution mitigation from CAFOs.^[74] The EPA was also responding to a 1991 court order based on the district court's decision in *Natural Resources Defense Council v. Reilly*.^[68] The final rule took effect on April 14, 2003 and responded to public comments received following the issuance of the proposed rule in 2000.^[75] The EPA allowed authorized NPDES states until February 2005 to update their programs and develop technical standards.^[75]

The 2003 rule established "non-numerical best management practices" for CAFOs that apply both to the "production areas" (e.g. the animal confinement area and the manure storage area) and, for the first time ever, to the "land application area" (land to which manure and other animal waste is applied as fertilizer).^[76] The standards for best management practices in the 2003 rule vary depending on the regulated area of the CAFO:

- *Production Area*: Discharges from a production area must meet a performance standard that requires CAFOs to "maintain waste containment structures that generally prohibit discharges except in the event of overflows or runoff resulting from a 25-year, 24-hour

rainfall event."^[76] New sources are required to meet a standard of no discharge except in the event of a 100-year, 24-hour rainfall event.^[60]

- *Land Application Area*: The best management practices (BMPs) for land application areas include different requirements, such as vegetative buffer strips and setback limits from water bodies.^[76]

The 2003 rule also requires CAFOs to submit an annual performance report to the EPA and to develop and implement a comprehensive [nutrient management plan](#) (NMP) for handling animal waste.^[76] Lastly, in an attempt to broaden the scope of regulated facilities, the 2003 rule expanded the number of CAFOs required to apply for NPDES permits by making it mandatory for *all* CAFOs (not just those who actually discharge pollutants into waters of the United States).^[76] Many of the provisions of the 2003 rule were affected by the Second Circuit's decision issued in *Waterkeeper Alliance v. EPA*.

***Waterkeeper Alliance v. EPA* (2nd Cir. 2005) [\[edit\]](#)**

Environmental and farm industry groups challenged the 2003 final rule in court, and the [Second Circuit Court of Appeals](#) issued a decision in the consolidated case [Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486 \(2nd Cir. 2005\)](#). The Second Circuit's decision reflected a "partial victory" for both environmentalists and industry, as all parties were "unsatisfied to at least some extent" with the court's decision.^[77] The court's decision addressed four main issues with the 2003 final rule promulgated by the EPA:

- **Agricultural Stormwater Discharges**: The EPA's authority to regulate CAFO waste that results in agricultural stormwater discharge was one of the "most controversial" aspects of the 2003 rule.^[78] The issue centered on the scope of the [Clean Water Act](#) (CWA), which provides for the regulation only of "point sources." The term was defined by the CWA to expressly *include* CAFOs but *exclude* "agricultural stormwater."^[79] The EPA was thus forced to interpret the statutory definition to "identify the conditions under which discharges from the land application area of [waste from] a CAFO are point source discharges that are subject to NPDES permitting requirements, and those which are agricultural stormwater discharges and thus are not point source discharges."^[78] In the face of widely divergent views of environmentalists and industry groups, the EPA in the 2003 rule determined that any runoff resulting from manure applied *in accordance with agronomic rates* would be exempt from the CWA permitting requirements (as "agricultural stormwater"). However, when such agronomic rates are not used, the EPA concluded that the resulting runoff from a land application is *not* "agricultural stormwater" and is therefore subject to the CWA (as a discharge from a point source, i.e. the CAFO). The Second Circuit upheld the EPA's definition as a "reasonable" interpretation of the statutory language in the CWA.
- **Duty to Apply for an NPDES Permit**: The 2003 rule adopted by the EPA imposed a duty on *all* CAFOs to apply for an NPDES permit (or demonstrate that they had no potential to discharge).^[80] The rationale for this requirement was the EPA's "presumption that most CAFOs have a potential to discharge pollutants into waters of the United States" and therefore must affirmatively comply with the requirements of the Clean Water Act.^[81] The Second Circuit sided with the farm industry plaintiffs on this point and

ruled that this portion of the 2003 rule exceeded the EPA's authority. The court held that the EPA can require NPDES permits only where there is an *actual* discharge by a CAFO, not just a potential to discharge. The EPA later estimated that 25 percent fewer CAFOs would seek permits as a result of the Second Circuit's decision on this issue.^[82]

- **Nutrient Management Plans (NMPs):** The fight in court over the portion of the 2003 rule on NMPs was a proxy for a larger battle over public participation by environmental groups in the implementation of the CWA. The 2003 rule required all permitted CAFOs that "land apply" animal waste to develop an NMP that satisfied certain minimum requirements (e.g. ensuring proper storage of manure and process wastewater). A copy of the NMP was to be kept on-site at the facility, available for viewing by the EPA or other permitting authority. The environmental plaintiffs argued that this portion of the rule violated the CWA and the [Administrative Procedures Act](#) by failing to make the NMP part of the NPDES permit itself (which would make the NMP subject to both public comments and enforcement in court by private citizens). The court sided with the environmental plaintiffs and vacated this portion of the rule.^[83]
- **Effluent Limitation Guidelines (ELGs) for CAFOs:** The 2003 rule issued New Source Performance Standards (NSPS) for new sources of swine, poultry, and veal operations. The CWA requires that NSPS be based on what is called the "best available demonstrated control technology." The EPA's 2003 rule required that these new sources meet a no discharge standard, except in the case of a 100-year, 24-hour rainfall event (or a less restrictive measure for new CAFOs that voluntarily use new technologies and management practices). The Second Circuit ruled that the EPA did not provide an adequate basis (either in the statute or in evidence) for this portion of the rule.^[60] The Second Circuit also required the EPA to go back and provide additional justification for the requirements in the 2003 rule dealing with the "best control technology for conventional pollutants" (BCT) standards for reducing fecal coliform pathogen. Lastly, the court ordered the EPA to provide additional analysis on whether the more stringent "water quality-based effluent permit limitations" (WQBELs) should be required in certain instances for CAFO discharges from land application areas, a policy that the EPA had rejected in the 2003 rule.

EPA final rule (2008) [[edit](#)]

The EPA published revised regulations that address the Second Circuit court's decision in *Waterkeeper Alliance, Inc. v. EPA* on November 20, 2008 (effective December 22, 2008).^[84] The 2008 final rule revised and amended the 2003 final rule.

The 2008 rule addresses each point of the court's decision in *Waterkeeper Alliance v. EPA*. Specifically, the EPA adopted the following measures:

- The EPA replaced the "duty to apply" standard with one that requires NPDES permit coverage for any CAFO that "discharges or proposes to discharge." The 2008 rule specifies that "a CAFO proposes to discharge if it is designed, constructed, operated, or maintained such that a discharge will occur."^[85] On May 28, 2010, the EPA issued guidance "designed to assist permitting authorities in implementing the [CAFO regulations] by specifying the kinds of operations and factual circumstances that EPA

anticipates may trigger the duty to apply for permits.”^[86] On March 15, 2011, the Fifth Circuit Court of Appeals in *National Pork Producers Council v. EPA* again struck down the EPA's rule on this issue, holding that the "propose to discharge" standard exceeds the EPA's authority under the CWA. After the Fifth Circuit's ruling, a CAFO cannot be required to apply for an NPDES permit unless it *actually* discharges into a water of the United States.^[87]

- The EPA modified the requirements related to the nutrient management plans (NMP). In keeping with the court's decision in *Waterkeeper Alliance v. EPA*, the EPA instituted a requirement that the permitting authority (either the EPA or the State) incorporate the enforceable "terms of the NMP" into the actual permit. The "terms of the NMP" include the "information, protocols, best management practices (BMPs) and other conditions in the NMP necessary to meet the NMP requirements of the 2003 rule."^[59] The EPA must make the NMPs in the applications filed by CAFOs publicly available.
- The EPA reiterated that in order to take advantage of the "agricultural stormwater" exception (upheld by the court in *Waterkeeper Alliance v. EPA*) an unpermitted CAFO must still implement "site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients as specified previously under the 2003 rule."^[59] The unpermitted facility must keep documentation of such practices and make it available to the permitting authority in the case of a precipitation-related discharge.^[59]
- The EPA addressed the Second Circuit's ruling on the effluent limitation guidelines (ELGs) for CAFOs. The agency deleted the provision allowing new sources of CAFOs to meet a 100-year, 24-hour precipitation-event standard, replacing it with a no discharge standard through the establishment of best management practices.^[59] The EPA also clarified and defended its previous positions on (1) the availability of water quality-based effluent limitations (WQBELs) and (2) the appropriateness of the best control technology (BCT) standards for fecal coliform. First, the 2008 rule "explicitly recognizes" that the permitting authority may impose WQBELs on all production area discharges and all land application discharges (other than those that meet the "agricultural stormwater" exemption) if the technology-based effluent limitations are deemed insufficient to meet the water quality standards of a particular body of water. In particular, the EPA noted that a case-by-case review should be adopted in cases where CAFOs discharge to the waters of the United States through a direct hydrologic connection to groundwater.^[59] Second, the EPA announced that it would not be promulgating more stringent standards for fecal coliform than in the 2003 rule because it reached the conclusion there is "no available, achievable, and cost reasonable technology on which to base such limitations."^[59]

The 2008 final rule also specifies two approaches that a CAFO may use to identify the "annual maximum rates of application of manure, litter, and process wastewater by field and crop for each year of permit coverage." The **linear approach** expresses the rate in terms of the "amount of nitrogen and phosphorus from manure, litter, and process wastewater allowed to be applied." The **narrative rate approach** expresses the amount in terms of a "narrative rate prescribing how to calculate the amount of manure, litter, and process wastewater allowed to be applied."^[59] The EPA believes that the narrative approach gives CAFO operators the most flexibility. Normally, CAFO operators are subject to the terms of their permit for a period of 5 years. Under the narrative approach, CAFO operators can use "real time" data to determine the rates of application. As a result, CAFO operators can more easily "change their crop rotation, form and

source of manure, litter, and process wastewater, as well as the timing and method of application" without having to seek a revision to the terms of their NPDES permits.^[59]

Government assistance for compliance [\[edit\]](#)

The EPA points to several tools available to assist CAFO operators in meeting their obligations under the CWA. First, the EPA awards federal grants to provide technical assistance to livestock operators for preventing discharges of water pollution (and reducing air pollution). The EPA claims that CAFOs can obtain an NMP for free under these grants.^[88] Recently, the annual amount of the grant totaled \$8 million.^[59] Second, a Manure Management Planner (MMP) software program has been developed by Purdue University in conjunction with funding by a federal grant. The MMP is tailored to each State's technical standards (including Phosphorus Indexes and other assessment tools).^[59] The MMP software program provides free assistance to both permitting authorities and CAFO operators and can be found at the Purdue University website.^[89] Lastly, the EPA notes that the USDA offers a "range of support services," including a long-term program that aims to assist CAFOs with NMPs.^[59]

Debate over EPA policy [\[edit\]](#)

Environmentalists argue that the standards under the CWA are not strong enough. Researchers have identified regions in the country that have weak enforcement of regulations and, therefore, are popular locations for CAFO developers looking to reduce cost and expand operations without strict government oversight.^[90] Even when laws are enforced, there is the risk of environmental accidents. The massive 1995 manure spill in North Carolina highlights the reality that contamination can happen even when it is not done maliciously.^[91] The question of whether such a spill could have been avoided is a contributing factor in the debate for policy reform.

Environmental groups have criticized the EPA's regulation of CAFOs on several specific grounds, including the following.^[92]

- *Size threshold for "CAFO"*: Environmentalists favor reducing the size limits required to qualify as a CAFO; this would broaden the scope of the EPA's regulations on CAFOs to include more industry farming operations (currently classified as AFOs).
- *Duty to apply*: Environmentalists strongly criticized the portion of the Court's ruling in *Waterkeeper Alliance* that deleted the EPA's 2003 rule that all CAFOs must apply for an NPDES permit. The EPA's revised permitted policy is now overly reactive, environmentalists maintain, because it "allow[s] CAFO operators to decide whether their situation poses enough risk of getting caught having a discharge to warrant the investment of time and resources in obtaining a permit."^[93] It is argued that CAFOs have very little incentive to seek an NPDES permit under the new rule.^[94]
- *Requirement for co-permitting entities that exercise "substantial operational control" over CAFOs*: Environmental groups unsuccessfully petitioned the EPA to require "co-permitting of both the farmer who raises the livestock and the large companies that actually own the animals and contract with farmers."^[92] This modification to EPA regulations would have made the corporations legally responsible for the waste produced on the farms with which they contract.

- *Zero discharge requirement to groundwater when a direct hydrologic connection exists to surface water:* The EPA omitted a provision in its 2003 rule that would have held CAFOs to a zero discharge limit from the CAFO's production area to "ground water that has a direct hydrologic connection to surface water."^[95] Environmentalists criticized the EPA's decision to omit this provision on the basis that ground water is often a drinking source in rural areas, where most all CAFOs are located.
- *Specific performance standards:* Environmentalists urged the EPA to phase out the use of lagoons (holding animal waste in pond-like structures) and sprayfields (spraying waste onto crops). Environmentalists argued that these techniques for dealing with animal waste were outmoded and present an "unacceptable risk to public health and the environment" due to their ability to pollute both surface and groundwater following "weather events, human error, and system failures."^[95] Environmentalists suggested that whenever manure is land applied that it should be injected into the soil (and not sprayed).
- *Lack of regulation of air pollution:* The revisions to the EPA's rules under the CWA did not address air pollutants. Environmentalists maintain that the air pollutants from CAFOs—which include [ammonia](#), [hydrogen sulfide](#), [methane](#), [volatile organic compounds](#), and [particulate matter](#)—should be subject to EPA regulation.^[96]

Conversely, industry groups criticize the EPA's rules as overly stringent. Industry groups vocally opposed the requirement in the 2008 rule (since struck down by the Fifth Circuit) that required CAFOs to seek a permit if they "propose to discharge" into waters of the United States.^[97] Generally speaking, the farm industry disputes the presumption that CAFOs do discharge pollutants and it therefore objects to the pressure that the EPA places on CAFOs to voluntarily seek an NPDES permit.^[97] As a starting point, farm industry groups "emphasize that most farmers are diligent stewards of the environment, since they depend on natural resources of the land, water, and air for their livelihoods and they, too, directly experience adverse impacts on water and air quality."^[98] Some of the agricultural industry groups continue to maintain that the EPA should have no authority to regulate any of the runoff from land application areas because they believe this constitutes a nonpoint source that is outside the scope of the CWA.^[92] According to this viewpoint, voluntary programs adequately address any problems with excess manure.^[92]

States' role and authority [\[edit\]](#)

The role of the federal government in environmental issues is generally to set national guidelines and the state governments' role is to address specific issues. The framework of federal goals is such that the responsibility to prevent, reduce, and eliminate pollution are the responsibility of the states.^[99]

The management of water and air standards follows this authoritative structure. States that have been authorized by the EPA to directly issue permits under the National Pollutant Discharge Elimination System of the [Clean Water Act](#) (also known as "[NPDES](#) states") have received jurisdiction over CAFOs. As a result of this delegation of authority from the EPA, CAFO permitting procedures and standards may vary from state to state.

Specifically for water pollution, the federal government establishes federal standards for wastewater discharge and authorized states develop their own wastewater policies to fall in compliance. More specifically, what a state allows an individual CAFO to discharge must be as strict or stricter than the federal government's standard.^[100] This protection includes all waterways, whether or not the water body can safely sustain aquatic life or house public recreational activities. Higher standards are upheld in some cases of pristine publicly owned waterways, such as parks. They keep higher standards in order to maintain the pristine nature of the environment for preservation and recreation. Exceptions are in place for lower water quality standards in certain waterways if it is deemed economically significant.^[99] These policy patterns are significant when considering the role of state governments' in CAFO permitting.

State versus federal [\[edit\]](#)

Federal law requires CAFOs to obtain NPDES permits before wastewater may be discharged from the facility. The state agency responsible for approving permits for CAFOs in a given state is dependent on the authorization of that state. The permitting process is divided into two main methods based on a state's authorization status. The first is with authorized states managing and approving NPDES permits through a state agency. Although they have their own state-specific permitting standards, permitting requirements in authorized states must be at least as stringent as federal standards.^[101] The second method, found in unauthorized states, is the federal government maintaining the permitting process.

According to the EPA website, there are 46 states that have authority to permit, not including authorized territories. The EPA has a comprehensive list of states' authorization to approve:

- state NPDES permit programs
- regulation of federal facilities
- state pretreatment programs
- general permits programs
- biosolids programs

According to the EPA, the states with the most comprehensive authorization are Arizona, Michigan, Ohio, Oklahoma, Wisconsin, South Dakota, Texas, and Utah. Unauthorized states are Idaho, Massachusetts, New Hampshire, and New Mexico. All other states have some form of "partial status" or in other words, authority.^[102]

The [EPA website](#) provides a list and map of states' and territories' authority status.

Permitting process [\[edit\]](#)

A state's authority and the state's environmental regulatory framework will determine the permit process and the state offices involved. Below are two examples of states' permitting organization.

Authorized state case study: Arizona [\[edit\]](#)

Arizona issues permits through a general permitting process. CAFOs must obtain both a general Arizona Pollutant Discharge Elimination System (AZPDES) Permit and a general Aquifer Protection Permit.^[103] The Arizona state agency tasked with managing permitting is the Arizona Department of Environmental Quality (ADEQ).

For the Aquifer Protection Permit, CAFOs are automatically permitted if they comply with the state's best management practices (BMP) outlined in the relevant state rule, listed on the ADEQ's website. Their compliance is evaluated through agency CAFO Inspection Program's onsite inspections. If a facility is found to be unlawfully discharging, then the agency may issue warnings and, if necessary, file suit against the facility. For the AZPDES permit, CAFOs are required to submit a Notice of Intent to the ADEQ. In addition, they must complete and submit a Nutrient Management Plan (NMP) for the state's annual report.^[103]

Even in an authorized state, the EPA maintains the authority to inspect state permitting programs. This would be most likely to happen in the event that a complaint is filed with the EPA by a third party. For instance, in 2008, Illinois Citizens for Clean Air & Water filed a complaint with the EPA arguing that the state was not properly implementing its CAFO permitting program. The EPA responded with an "informal" investigation. In a [report](#)^[dead link] released in 2010, the agency sided with the environmental organization and provided a list of recommendations and required action for the state to meet.

Unauthorized state case study: Massachusetts [\[edit\]](#)

In unauthorized states, the EPA has the authority for issuing NPDES permits. In these states, such as Massachusetts, CAFOs communicate and file required documentation through an EPA regional office. In Massachusetts, the EPA issues a general permit for the entire state. The state's Department of Agricultural Resources (MDAR) has an agreement with the EPA for the implementation of CAFO rules. MDAR's major responsibility is educational. The agency assists operators in determining if their facility qualifies as a CAFO. Specifically they do onsite evaluations of facilities, provide advice on best practices, and provide information and technical assistance.^[104]

If a state has additional state specific rules for water quality standards, the state government maintains the authority for permitting. For instance, New Mexico, also unauthorized, requires CAFOs and AFOs to obtain a Groundwater Permit if the facilities discharge waste in a manner that might affect local groundwater. The EPA is not involved in the issuing of this state permit.^[104] Massachusetts, however, does not have additional state permit requirements.^[104]

Zoning ordinances [\[edit\]](#)

State planning laws and local [zoning ordinances](#) represent the main policy tools for regulating land use. Many states have adopted legislation that specifically exempt CAFOs (and other agricultural entities) from zoning regulations.^[105] The promulgation of so-called "**right to farm**" **statutes** have provided, in some instances, a shield from liability for CAFOs (and other potential nuisances in agricultural).^[105] More specifically, the right-to-farm statutes seek to "limit the circumstances under which agricultural operations can be deemed [nuisances](#)."

The history of these agricultural exemptions dates back to the 1950s. Right-to-farm statutes expanded in the 1970s when state legislatures became increasingly sensitive to the loss of rural farmland to urban expansion.^[106] The statutes were enacted at a time when CAFOs and "modern confinement operations did not factor into legislator's perceptions of the beneficiaries of [the] generosity" of such statutes.^[105] Forty-three (43) states now have some sort of statutory protection for farmers from nuisance. Some of these states (such as Iowa, Oklahoma, Wyoming, Tennessee, and Kansas) also provide specific protection to animal feeding operations (AFOs) and CAFOs.^[106] Right-to-farm statutes vary in form. Some states, for instance, require agricultural operation be located "within an acknowledged and approved agricultural district" in order to receive protection; other states do not.^[106]

Opponents of CAFOs have challenged right-to-farm statutes in court, and the [constitutionality](#) of such statutes is not entirely clear. The Iowa Supreme Court, for instance, struck down a right-to-farm statute as a "taking" (in violation of the 5th and 14th Amendments of the U.S. Constitution) because the statute stripped neighboring landowners of property rights without compensation.^[107]

Regulation under the Clean Air Act [\[edit\]](#)

CAFOs are potentially subject to regulation under the [Clean Air Act](#) (CAA), but the emissions from CAFOs generally do not exceed established statutory thresholds.^[108] In addition, the EPA's regulations do not provide a clear methodology for measuring emissions from CAFOs, which has "vexed both regulators and the industry."^[109] Negotiations between the EPA and the agricultural industry did, however, result in an Air Compliance Agreement in January 2005.^[108] According to the agreement, certain animal feeding operations (AFOs) received a covenant not to sue from the EPA in exchange for payment of a civil penalty for past violations of the CAA and an agreement to allow their facilities to be monitored for a study on air pollution emissions in the agricultural sector.^[108] Results and analysis of the EPA's study are scheduled to be released later in 2011.^[108]

Environmental groups have formally proposed to tighten EPA regulation of air pollution from CAFOs. A coalition of environmental groups petitioned the EPA on April 6, 2011 to designate ammonia as a "[criteria pollutant](#)" and establish National Ambient Air Quality Standards (NAAQS) for ammonia from CAFOs.^[108] The petition alleges that "CAFOs are leading contributors to the nation's ammonia inventory; by one EPA estimate livestock account for approximately 80 percent of total emissions. CAFOs also emit a disproportionately large share of the ammonia in certain states and communities."^[110] If the EPA adopts the petition, CAFOs and other sources of ammonia would be subject to the permitting requirements of the CAA.