



Cost-Effective Solutions for CAFO Final Rule Compliance

Your Pollution Solution Starts with EEG

New federal laws for Confined Area Feedlot Operations (CAFOs) provide strict standards and guidelines for managing manure to prevent pollution.

Compliance, however, need not be a hardship. The Ecological Engineering Group (EEG) provides solutions for managing waste safely, effectively, for least cost, and in some cases, profitably.



Are You a CAFO?

The new rule affects large livestock operations including those with hundreds of thousands of hogs, cattle and poultry. Large CAFOs are defined in the rule as operations raising more than 1,000 cattle, 700 dairy cows, 2,500 swine, 10,000 sheep, 125,000 chickens, 82,000 laying hens, and 55,000 turkeys in confinement. Approximately 500 million tons of manure are generated annually by an estimated 238,000 livestock operations. From 1982 to 1997 these large livestock operations have grown by 51 percent, with some of the largest facilities having capacities exceeding a million animals. Since 1978 the number of animals per confined animal operation has increased significantly. The largest per operation increases have been: layers (176%), broilers (148%), swine (134%), turkeys (129%), dairy (93%), and beef cattle (56%).

EEG has extensive experience designing and engineering nutrient-utilization and reuse systems worldwide.

EEG helps you negotiate CAFO with these services:

- determining if you qualify as a CAFO
- assessing your situation and providing a report on your options and costs
- handling regulatory compliance and reporting
- determining costs for compliance and reporting
- identifying the best management practices (BMPs) for your operation
- obtaining a NPDES (National Pollutant Discharge Elimination System) permit
- where appropriate, demonstrating no potential to discharge (no CAFO compliance necessary)
- identifying financing options, including \$51 billion to solve these problems; if your operation qualifies, EEG helps you apply
- engineering and permitting cost-effective solutions
- providing construction supervision and oversight and, if required, operating the facility in conformance with the permit requirements

EEG combines conventional engineering integrated with best management practices (BMPs) approved by the USEPA.

We engineer solutions that provide beautiful environments, habitat for animals, and a good neighbor in your community, with possibilities for profitable crops and site amenities.

Call EEG to discuss your operation's needs today.

**Call EEG today
to discuss your
operation's needs:
978.369.9440**



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On December 15, 2002, the USEPA issued its Final Rule on Confined Area Feed Lot Operations (CAFOs) which requires them to apply for a NPDES permit.

“The USEPA announcement finalizes a rule that will replace 25-year old technology requirements and permitting regulations that did not address today’s environmental needs and did not keep pace with growth in the industry. Effective manure management practices required by this rule will maximize the use of manure as a resource for agriculture while reducing adverse impacts on the environment.

The new rule applies to about 15,500 livestock operations across the country. Under the new rule all large CAFOs will be required to apply for a permit, submit an annual report, and develop and follow a plan for handling manure and wastewater. In addition, the rule moves efforts to protect the environment forward by: placing controls on land application of manure and wastewater, covering all major animal agriculture sectors, and increasing public access to information through CAFO annual reports. The rule also eliminates current permitting exemptions and expands coverage over types of animals in three important ways: the rule eliminates the exemption that excuses CAFOs from applying for permits if they only discharge during large storms; second, the rule eliminates the exemption for operations that raise chickens with dry manure handling systems; and third, the rule extends coverage to immature swine and immature dairy cows.

Currently about 4,500 operations are covered by permits. Because of the new rule, EPA expects that up to 11,000 additional facilities will be required to apply for permits by 2006.

This rule will enhance protection of the nation’s waters from nutrient over-enrichment and eutrophication which causes algal blooms, fish kills and the expansion of the Gulf of Mexico dead zone. The rule will also reduce pathogens in drinking water and improve coastal water quality. The amount of phosphorus released into the environment will be reduced by 56 million pounds, while nitrogen releases will be slashed by more than 100 million pounds. In addition, over two billion pounds of sediments and nearly one million pounds of metals will not be released.

The new rule will affect large livestock operations including those with hundreds of thousands of hogs, cattle and poultry. Large CAFOs are defined in the rule as operations raising more than 1,000 cattle, 700 dairy cows, 2,500 swine, 10,000 sheep, 125,000 chickens, 82,000 laying hens, and 55,000 turkeys in confinement. Approximately 500 million tons of manure are generated annually by an estimated 238,000 livestock operations. From 1982 to 1997 these large livestock operations have grown by 51 percent, with some of the largest facilities having capacities exceeding a million animals. Since 1978 the number of animals per confined animal operation has increased significantly. The largest per operation increases have been: layers (176%), broilers (148%), swine (134%), turkeys (129%), dairy (93%), and beef cattle (56%).

To help these livestock operations meet the rule’s requirements, Congress increased funding for land and water conservation programs in the 2002 Farm Bill by \$20.9 billion, bringing total funding for these programs to \$51 billion over the next decade. The Environmental Quality Incentives Program (EQIP) was authorized at \$200 million in 2002 and will ultimately go up to \$1.3 billion in 2007; 60 percent of those funds must go to livestock operations. New technology is also being perfected to aid farmers in meeting this new rule.

States are being given significant flexibility to find geographically appropriate means of implementing the CAFO rule. For example, states retain the authority to determine the type of permit -- general or individual -- to be issued to a given operation. This enables States to develop permits that take into account the size, location, and environmental risks that may be posed by an operation. States will also have substantial flexibility to tailor nutrient management plans for CAFOs, and may authorize alternative performance standards for existing and new CAFOs that will help promote the use of innovative technologies”.

—USEPA press release

How can a CAFO make a demonstration of no potential to discharge?

Today’s rule specifies that a Large CAFO need not have an NPDES permit if the permitting authority finds that the operation has no potential to discharge. This final rule provides that Large CAFOs may request and submit technical information as the basis for a permitting authority to determine that there is no potential to discharge. Today’s rule also establishes requirements for the permitting authority to issue a public notice that such a request has been received. The request for a no potential to discharge determination must be submitted by the date upon which the CAFO is required to seek permit coverage (See 40 CFR 122.23(g) and section IV.B.3 and Table 4.2 of this preamble). Within 90 days of receiving the request, the Director will let the CAFO know whether or not the request for a no potential to discharge determination has been granted. If the request is denied, the CAFO must seek permit coverage within 30 days after the denial.