

TABLE 1.1.—REGULATORY SUMMARY—Continued

Topic	Regulatory cite (40 CFR)
Subpart D—Swine, Poultry, and Veal: Effluent limitations attainable by the application of the best available control technology economically achievable (BAT).	412.45
Subpart D—Swine, Poultry, and Veal New source performance standards (NSPS)	412.46
Subparts C and D—Required Land Application Best Management Practices	412.4(c)
Subparts C and D—Inspection and Record Keeping Requirements	412.37 and 412.47
Additional NPDES CAFO permit requirements:	
Nutrient management plan development and Implementation	122.42(e)(1)
Record-keeping	122.42(e)(2)
Transfer of manure	122.42(e)(3)
Annual reporting requirement	122.42(e)(4)

TABLE 1.2.—CONSOLIDATED TIME LINE FOR IMPLEMENTING TODAY’S RULEMAKING

	Time Frame
Milestone:	
Effective date of regulation	April 14, 2003.
Effective date of Effluent Guideline requirements for the production area applicable to Large CAFOs.	June 12, 2003.
Effective date of Effluent Guideline requirements for the land application area applicable to Large CAFOs.	By December 31, 2006.
Effective date for all CAFOs to develop and implement nutrient management plans.	By December 31, 2006, except for Large CAFOs that are new sources, by date of commencing operations.
Duty to Apply:	
Operations defined as CAFOs prior to April 14, 2003	Must have applied by the date required in 40 CFR 122.21(c).
Operations defined as CAFOs as of April 14, 2003, and that were not defined as CAFOs prior to that date.	As specified by the permitting authority, but no later than April 13, 2006.
Operations that become defined as CAFOs after April 14, 2003, but which are not new sources.	(a) Newly constructed operations: 180 days prior to the time the CAFO commences operation. (b) Other operations (e.g., increase in number of animals): As soon as possible but no later than 90 days after becoming defined as a CAFO, except that, if the operational change that causes the operation to be defined as a CAFO would not have caused it to be defined as a CAFO prior to April 13, 2003, the operation must apply no later than April 13, 2006 or 90 days after becoming defined as a CAFO, whichever is later.
New sources	180 days prior to the time the CAFO commences operation.
Designated CAFOs	90 days after receiving notice of designation.
State Program Revision:	
No statutory changes needed to revise NPDES Program	April 12, 2004.
Statutory changes needed to revise NPDES Program	April 13, 2005.

II. What Events Have Led to This Rule?

The revisions to the National Pollutant Discharge Elimination System (NPDES) and Effluent Limitation Guidelines Programs specified in this final rule are focused on those livestock and poultry operations that are defined or designated as CAFOs. CAFOs are defined as point sources under the Clean Water Act. Following is a brief historical context of key regulatory, legal, and policy actions which have collectively led to today’s action.

A. The Clean Water Act

Congress passed the Clean Water Act to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. 1251(a)). The Clean Water Act establishes a comprehensive program for protecting and restoring our Nation’s waters. Among its core provisions, the Clean Water Act prohibits the discharge of

pollutants from a point source to waters of the United States except as authorized by an NPDES permit. The Clean Water Act establishes the NPDES permit program to authorize and regulate the discharges of pollutants to waters of the United States. EPA has issued comprehensive regulations that implement the NPDES program at 40 CFR part 122. The Clean Water Act also provides for the development of technology-based and water quality-based effluent limitations that are implemented through NPDES permits to control discharges of pollutants.

1. The National Pollutant Discharge Elimination System (NPDES) Permit Program

Under the NPDES permit program, all point sources that discharge pollutants to waters of the United States must apply for an NPDES permit and may discharge pollutants only in compliance

with the terms of that permit. Such permits must include any nationally established, technology-based effluent discharge limitations (effluent guidelines—discussed below, in subsection II.A.2). In the absence of an applicable national effluent guideline, NPDES permit writers may establish technology-based requirements as determined by the permitting authority on a case-by-case basis, based on their “best professional judgment” (BPJ). Water quality-based effluent requirements are also included in permits where technology-based requirements are not sufficient to ensure compliance with State water quality standards or where required to implement a Total Maximum Daily Load (TMDL). For information on TMDLs see section IX.A.2 of this preamble.

Technology- and water quality-based requirements may be in the form of

numeric effluent limitations or in the form of specific BMPs or other non-numeric effluent limitations and standards. In addition, NPDES permits normally include reporting, record-keeping, and other requirements and standard conditions (conditions that apply to all NPDES permits, such as the duty to properly operate and maintain equipment and treatment systems).

NPDES permits may be issued by EPA or a State, Territory, or Tribe authorized by EPA to implement the NPDES program. Currently, 45 States and the Virgin Islands are authorized to administer the NPDES program. This means that most CAFOs will obtain NPDES permits from State governments, not from EPA. Alaska, Arizona, the District of Columbia, Idaho, Massachusetts, New Hampshire, New Mexico, and Puerto Rico and other territories are not currently authorized to implement the NPDES program. In addition, Oklahoma, although authorized to administer the NPDES program, does not have CAFO regulatory authority. No Tribe is currently authorized to implement the NPDES program. This means that CAFOs located in the above-named jurisdictions or in Indian Country will obtain their NPDES permits from EPA.

An NPDES permit may be either an individual permit tailored for a single facility or a general permit applicable to multiple facilities. Before an individual permit is issued, the owner or operator must submit a permit application with facility-specific information to the permitting authority, which reviews the information and prepares a draft permit. The permitting authority prepares a fact sheet explaining the draft permit and publishes the draft permit and fact sheet for public review and comment. Following the permitting authority's consideration of public comments, a final permit is issued. Specific procedural requirements apply to the modification, revocation and reissuance, and termination of an NPDES permit. NPDES permits are subject to a maximum 5-year term and may be renewed when their term expires.

General NPDES permits are available to address categories of discharges that involve similar operations with similar wastes. Once a general permit is drafted, it is published for public review and comment accompanied by a fact sheet that explains the permit. Following EPA's or the State permitting authority's consideration of public comments, a final general permit is issued. The general permit specifies the type or category of facilities that may obtain coverage under the permit. To gain permit coverage, facilities generally

must submit a "notice of intent" (NOI) to be covered under the general permit. Both general permits and individual permits are used to implement the same pollution control standards.

2. Effluent Limitations Guidelines and Standards

Effluent limitations guidelines and standards ("effluent guidelines" or "ELGs") are national regulations that establish limitations on the discharge of pollutants by industrial category and subcategory. For each category and subcategory guidelines address three classes of pollutants: (1) Conventional pollutants (*i.e.*, total suspended solids (TSS), oil and grease, biochemical oxygen demand (BOD), fecal coliform bacteria, and pH); (2) toxic pollutants (*e.g.*, toxic metals such as lead and zinc; toxic organic pollutants such as benzene); and (3) non-conventional pollutants (*e.g.*, phosphorus). These technology-based requirements are subsequently incorporated into NPDES permits. The Clean Water Act provides that effluent guidelines may include numeric or non-numeric limitations. Non-numeric limitations are usually in the form of BMPs. The effluent guidelines are based on the degree of control that can be achieved using various levels of pollution control technology, as outlined below.

a. Best Practicable Control Technology Currently Available (BPT)—Section 304(b)(1) of the Clean Water Act. In the guidelines for an industry category, EPA defines BPT effluent limits for conventional, toxic, and non-conventional pollutants. Traditionally, EPA establishes BPT effluent limitations based on the average of the best performances of facilities within the industry of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, EPA may require higher levels of control than those currently in place in an industrial category if the Agency determines that the technology can be practically applied. In specifying BPT, EPA looks at a number of factors. EPA first considers the cost of achieving effluent reductions in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Agency deems appropriate (33 U.S.C. 304(b)(1)(B)).

b. Best Available Technology Economically Achievable (BAT)—Section 304(b)(2) of the Clean Water

Act. In general, BAT represents the best existing economically achievable performance of direct discharging facilities in the industrial category or subcategory. The factors considered in assessing BAT are the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the processes employed, engineering aspects of the control technology, potential process changes, non-water quality environmental impacts (including energy requirements), and such factors as the Administrator deems appropriate. The Agency retains considerable discretion in assigning the weight to be accorded to these factors. An additional statutory factor considered in setting BAT is economic achievability. Generally, the achievability is determined on the basis of the total cost to the industrial subcategory and the overall effect of the rule on the industry's financial health. BAT requirements may be based on effluent reductions attainable through changes in a facility's processes and operations. As with BPT, where existing performance is uniformly inadequate, BAT may be based on technology transferred from a different subcategory within an industry or from another industrial category. BAT may be based on process changes or internal controls, even when these technologies are not common industry practice.

c. Best Conventional Pollutant Control Technology (BCT)—Section 304(b)(4) of the Clean Water Act. The 1977 amendments to the Clean Water Act required EPA to identify effluent reduction levels for conventional pollutants associated with BCT technology for discharges from existing industrial point sources. In addition to other factors specified in Section 304(b)(4)(B), the Clean Water Act requires that EPA establish BCT requirements after considering a two-part "cost-reasonableness" test. EPA explained its methodology for the development of BCT limitations in July 1986 (51 FR 24974). Section 304(a)(4) designates the following as conventional pollutants: BOD, TSS, fecal coliform bacteria, pH, and any additional pollutants defined by the Administrator as conventional. The Administrator designated oil and grease as an additional conventional pollutant on July 30, 1979 (44 FR 44501).

d. New Source Performance Standards (NSPS)—Section 306 of the Clean Water Act. New Source Performance Standards (NSPS) reflect effluent reductions that are achievable based on the best available demonstrated control technology. New facilities have the opportunity to install

the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS represents the greatest degree of effluent reduction attainable through the application of the best available demonstrated control technology for all pollutants (conventional, non-conventional, and priority pollutants). In establishing NSPS, EPA is directed by the Clean Water Act to take into consideration the cost of achieving the effluent reduction and any non-water quality environmental impacts and energy requirements.

3. Effluent Guidelines Planning Process—Section 304(m) Requirements

Section 304(m) of the Clean Water Act, added by the Water Quality Act of 1987, requires EPA to establish schedules for (1) reviewing and revising existing effluent limitations guidelines and standards and (2) promulgating new effluent guidelines. On May 28, 1998, EPA published a Notice of Proposed Effluent Guidelines Plan (63 FR 102) that established schedules for developing new and revised effluent guidelines for several industry categories. One of the industries for which the Agency established a schedule was “Feedlots” (swine, poultry, dairy and beef cattle).

a. Clean Water Act Section 304(m) consent decree. The Natural Resources Defense Council (NRDC) and Public Citizen, Inc. filed suit against the Agency, alleging violation of section 304(m) and other statutory authorities that require promulgation of effluent guidelines (*NRDC et al. v. Whitman*, Civ. No. 89–2980 (D.D.C.)). Under the terms of the consent decree in that case, as amended, EPA agreed, among other things, to propose effluent guidelines for swine, poultry, beef and dairy portions of the animal industry by December 15, 2000, and to take final action by December 15, 2002.

B. Existing Clean Water Act Requirements Applicable to CAFOs

EPA’s regulation of CAFOs dates to the 1970s. The existing NPDES CAFO regulations were issued on March 18, 1976 (41 FR 11458). The existing national effluent limitations guidelines and standards for feedlots were issued on February 14, 1974 (39 FR 5704). The discussion below provides an overview of the scope and requirements imposed under the existing NPDES CAFO regulations and feedlot effluent guidelines. It also explains the relationship of these two regulations, and it briefly summarizes other federal and State regulations that potentially affect AFOs.

1. Scope and Requirements of the 1976 NPDES Regulations for CAFOs

This section provides a simplified summary of the previous NPDES regulation to provide context for today’s action. The previous NPDES CAFO regulations promulgated in 1976, determined which AFOs were defined or could be designated as CAFOs under the Clean Water Act and therefore subject to NPDES permit regulations. Under those regulations, CAFOs were defined as AFOs that confined more than 1,000 animal units (AU). In addition, an AFO that confined 300 to 1,000 AU was defined as a CAFO if it discharged pollutants through a man-made device or if pollutants were discharged to waters of the United States that ran through the facility or otherwise came into contact with the confined animals. AFOs were not defined as CAFOs, however, if they discharged only during a 25-year, 24-hour storm. Under the 1976 NPDES CAFO regulations, the permitting authority could also designate any AFO a CAFO, including those with fewer than 300 AU, if it met the discharge criteria specified above and was determined to be a significant contributor of pollution.

2. Scope and Requirements of the 1974 Feedlot Effluent Guidelines

This section provides a simplified summary of the previous effluent guidelines to provide context for today’s action. EPA uses the effluent guidelines to establish national requirements limiting discharges to waters of the United States. EPA established the effluent guidelines for feedlots in 1974 based on the best available technology that was economically achievable for the industry. The guidelines were applicable to those facilities in specified sectors (or subcategories) with as many as or more than 1,000 AU that were to be issued an NPDES permit. The 1974 effluent guidelines did not allow discharges of pollutants from CAFOs into the Nation’s waters except when a chronic or catastrophic storm caused an overflow from a facility that had been designed, constructed, and operated to contain manure, process wastewater and runoff resulting from a 25-year, 24-hour storm. For permitted facilities where the ELGs did not apply (those with fewer than 1,000 AU), technology-based discharge limits were established using the permit writer’s best professional judgment.

C. USDA–EPA Unified National Strategy for Animal Feeding Operations

In 1998, EPA and USDA jointly developed a unified national strategy to minimize the water quality and public health impacts of AFOs. EPA and USDA jointly published a draft *Unified National Strategy for Animal Feeding Operations* on September 21, 1998. After sponsoring and participating in 11 public listening sessions and considering public comments on the draft strategy, a final *Unified National Strategy for Animal Feeding Operations* was published on March 9, 1999. A copy of the *Strategy* is available on the EPA and USDA web sites. The *Unified National Strategy for Animal Feeding Operations* established national goals and performance expectations for all AFOs. The general goal is for AFO owners and operators to take actions to minimize water pollution from confinement facilities and land where manure is applied. To accomplish this goal, the *Strategy* established a national performance expectation that all AFOs should develop and implement technically sound, economically feasible, and site-specific CNMPs to minimize impacts on water quality and public health.

The *Unified National Strategy for Animal Feeding Operations* identified seven strategic issues that should be addressed to better resolve concerns associated with AFOs. These are (1) fostering CNMP development and implementation; (2) accelerating voluntary, incentive-based programs; (3) implementing and improving the existing regulatory program; (4) coordinating research, technical innovation, compliance assistance, and technology transfer; (5) encouraging industry leadership; (6) increasing data coordination; and (7) establishing better performance measures and greater accountability. Today’s action addresses the third strategic issue—implementing and improving the existing regulatory program.

III. How Was This Final Rule Developed?

The preamble to the proposed rule presented a detailed discussion of the history of EPA actions addressing CAFOs, including issuance of the original NPDES CAFO regulations and effluent limitations guidelines (ELGs) for feedlots, development of the EPA/State Feedlot Workgroup Report (1993), outreach dialogues with representatives of the pork industry and poultry industry, EPA AFO strategy development, and collaboration with USDA on the development of the