

Chapter

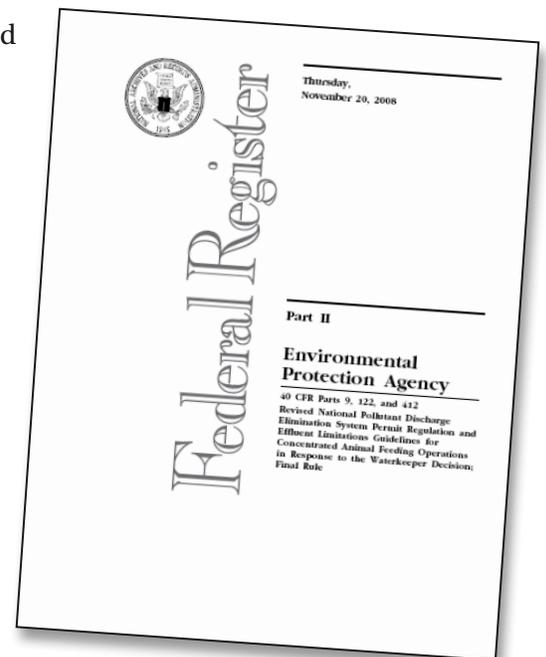
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1. Introduction

1.1. Overview

The *NPDES Permit Writers' Manual for Concentrated Animal Feeding Operations* provides information to National Pollutant Discharge Elimination System (NPDES) permit writers on permitting requirements for Concentrated Animal Feeding Operations (CAFOs). The information in the Manual may also be useful for inspectors, facility operators, and the general public. The Manual replaces the 2003 *Permit Writers' Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations*. The new version reflects the current NPDES regulations and Effluent Limitation Guidelines (ELGs) applicable to CAFOs under the Clean Water Act (CWA), including revisions to the regulations that the U.S. Environmental Protection Agency (EPA) finalized and published in the *Federal Register* (FR) in 2008.¹ Those requirements are collectively referred to in this Manual as *the CAFO regulations*.

The Manual does not cover types of discharges from CAFOs that trigger the requirement for a CAFO to apply for a NPDES permit. This requirement commonly referred to as the "Duty-to-Apply" requirement, will be covered in a stand-alone document. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and setting quality standards for surface waters. Under the CWA, it is unlawful to discharge any pollutant from a point source without an NPDES permit. The CWA defines *point source* to include "any discernible, confined, and discrete conveyance, including but not limited to any ... concentrated animal feeding operation ... from which pollutants are or may be discharged."² Under the NPDES CAFO regulations, a CAFO that discharges must seek NPDES permit coverage.³



1.2. Background

EPA began regulating the discharges of wastewater and manure from CAFOs in the 1970s. In 2003, the Agency updated the original CAFO regulations to address changes in the animal agriculture industry sectors. 68 FR 7176 (Feb. 12, 2003). EPA subsequently published revisions to the CAFO Rule in 2008 to address a 2005 decision by the U.S. Court of Appeals for the Second Circuit in litigation challenging the 2003 regulatory updates.⁴ 73 FR 70418 (Nov. 20, 2008).

At the time of the 2003 revised regulations, EPA estimated that animal feeding operations (AFOs) annually produce more than 500 million tons of animal manure.⁵ This manure can pose substantial risks to the environment and public health if managed improperly. EPA projected in 2003 that the revised rule would result in annual pollutant reductions of 56 million pounds of phosphorus (P), 110 million pounds of nitrogen (N), and two billion pounds of sediment.

Today, there are slightly more than one million farms with livestock in the United States.⁶ EPA estimates that about 212,000 of those farms are likely to be AFOs—operations where animals are kept and raised in confinement. Although the number of AFOs has declined since 2003, the total number of animals housed at AFOs has continued to grow because of expansion and consolidation in the industry. As Figure 1-1 shows, EPA's NPDES CAFO program tracking indicates that 20,000 of those AFOs are CAFOs—AFOs that meet certain numeric thresholds or other criteria—and that 8,000 of these CAFOs have NPDES permit coverage.⁷

Percentage of U.S. AFOs that are CAFOs

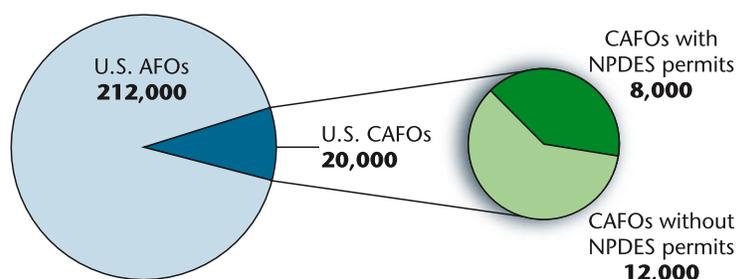


Figure 1-1. U.S. AFOs, CAFOs

The CAFO regulations identify NPDES permitting requirements for AFOs that are classified as CAFOs and that discharge. If CAFOs do not seek NPDES permit coverage, discharges from their land application areas only qualify for the agricultural stormwater exemption if the CAFOs implement and document basic nutrient management practices. EPA generally expects that the nutrient management requirements are being followed when a CAFO has developed and is implementing a comprehensive nutrient management plan (CNMP) in accordance with the U.S. Department of Agriculture (USDA) guidance. For permitted CAFOs, nutrient management

plans developed and implemented as a condition of an NPDES permit must be based on applicable technical standards for nutrient management established by the NPDES permitting authority.⁸

The federal CAFO program is designed to support and complement an array of voluntary and regulatory programs administered by USDA, EPA, and states (e.g., EQIP, Idaho One Plan, New York's AEM program). The CAFO regulations are an integral part of an overall federal strategy to support a vibrant agricultural economy while simultaneously ensuring that all AFOs manage their manure in a manner that is protective of the environment. EPA and USDA have worked collaboratively to ensure that USDA's voluntary programs and EPA's regulatory and voluntary programs complement each other and support effective nutrient management by all AFOs. EPA and USDA will continue to coordinate the development and implementation of regulatory and non-regulatory tools (e.g., software, guidance, conservation practices) to support both agricultural and environmental protection goals.

1.3. Purpose and Organization of this Manual

This Manual provides information to NPDES permitting authorities on how to implement the CWA NPDES regulations for CAFOs:

- ▶ **Chapter 2** describes livestock operations that are regulated under the NPDES CAFO program. This description covers how EPA which livestock operations are AFOs and how, once an operation is defined as an AFO, it is then determined to be a CAFO. As mentioned above, the manual does not cover when CAFOs need NPDES permit coverage as this topic is covered in a separate EPA document.
- ▶ **Chapter 3** discusses the two options NPDES permitting authorities have for issuing NPDES permits for CAFOs: individual permits and general permits. It describes the administrative process for both options and provides examples of situations in which each option is most appropriate.
- ▶ **Chapter 4** discusses the critical elements of an NPDES permit for a CAFO. Those elements include effluent limitations and standards, monitoring, reporting and record-keeping requirements, special conditions, and standard conditions. It provides a detailed description of the requirements for each element and how to write a permit with enforceable terms and conditions.
- ▶ **Chapter 5** provides technical information on the nine basic components of a nutrient management plan (NMP) as required by the NPDES CAFO regulations. It also provides examples of permit terms reflecting the nine minimum measures.
- ▶ **Chapter 6** focuses specifically on the portion of the NMP that establishes protocols for land applying manure, litter, and process wastewater. It explains how to write permit terms using the two approaches—linear and narrative—outlined in the NPDES CAFO regulations.

The Manual assumes that the reader has a working knowledge of how NPDES permits are developed. Permit writers should also be familiar with applicable state voluntary and regulatory programs, and how those programs relate to the federal or state NPDES programs. The appendices contain supplementary information that is relevant to CAFOs and CAFO permitting. That information will also be of interest to CAFO owner/operators, the general public, and permit writers.

1.4. Limitations of the Manual

Although the Manual provides clarification of NPDES CAFO regulatory requirements, it does not alter or substitute for any of the NPDES CAFO regulations. The Manual, including the example permit and example NMP, is not a rule, is not legally enforceable, and does not confer legal rights or impose legal obligations on any federal or state agency or on any member of the public. If a conflict is apparent between the Manual and any statute or regulation, the Manual is not controlling. EPA has made every effort to ensure the accuracy of information in the Manual, but obligations of the regulated community are determined by the relevant statutes, regulations, or other legally binding requirements.

It is important to note that the Manual does not cover a CAFO's "Duty-to-Apply" for NPDES permit coverage. That topic was covered separately in prior EPA guidance, and EPA is at present updating both the NPDES CAFO regulations as well as the related guidance to reflect the 2011 legal decision in litigation on this topic. See *Nat'l Pork Producers Council v. EPA*, 635 F.3d 738 (5th Cir. 2011). In that decision, the court vacated the requirement that CAFOs that *propose to* discharge must apply for an NPDES permit, but upheld the duty to apply for discharging CAFOs.

Permit writers should be aware that other NPDES requirements besides CAFO requirements may apply to CAFOs. For example, Chapter 4 discusses the need for NPDES stormwater permits. In addition, states authorized to implement the NPDES permitting program have the option of establishing more stringent NPDES requirements than those laid out in the federal regulations.⁹

The Manual does not cover NPDES requirements for live animal receiving and holding areas at Meat and Poultry Processing (MPP) facilities. Those facilities are engaged in the slaughtering, dressing, and packing of meat and poultry products and are not included in EPA's definition of an AFO. That industry is considered a different point source category and is covered by a separate set of NPDES requirements connected with the ELG for the sector as laid out in 40 CFR part 432.

The word *should* as used in the Manual, including the example permit and example NMP, does not connote a requirement, but it does indicate EPA's recommendation for effective implementation of legal requirements and protection of the environment. The Manual might not apply in a situation according to the circumstances, and EPA, states and tribes have the discretion to adopt approaches on a case-by-case basis that differ from the Manual. Permitting authorities will make each permitting decision on a case-by-case basis and will be guided by the applicable

requirements of the CWA and implementing regulations, taking into account comments and information presented at appropriate times by interested persons.

EPA may decide to revise the Manual without public notice. The public may offer suggestions to EPA for clarifications at any time.

Endnotes

- ¹ Title 40 of the *Code of Federal Regulations* (CFR) 122.23 *et seq.*, as published in 73 *Federal Register* (FR) 70418.
- ² CWA section 502(14)
- ³ 40 CFR § 122.23(d)(1)
- ⁴ *Waterkeeper Alliance et al. v. EPA*, 399 F.3d 486 (2d Cir. 2005)
- ⁵ The term manure as used here and throughout the Manual refers to manure, litter, and process wastewater.
- ⁶ 2007 U.S. Department of Agriculture Census of Agriculture
- ⁷ NPDES CAFO Rule Implementation Status—National Summary, Midyear 2011
- ⁸ See 40 CFR part 412.4(c)(2)
- ⁹ 40 CFR § 123.25(a)