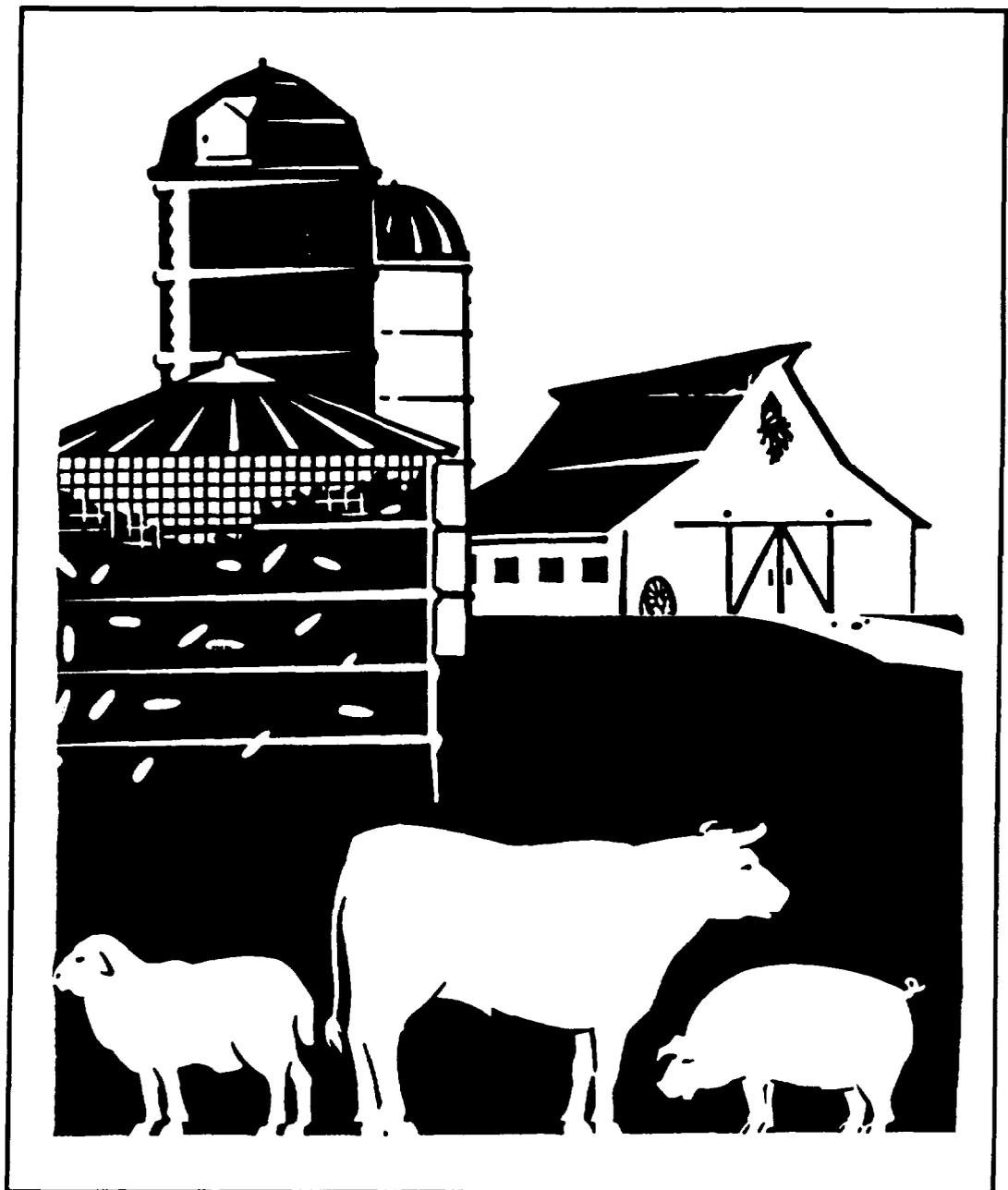




# Guide Manual On NPDES Regulations For Concentrated Animal Feeding Operations

Final





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## PREFACE

Since 1972, Section 502(14) of the Clean Water Act (CWA) has defined concentrated animal feeding operations as point sources subject to the prohibition against discharging pollutants to waters of the United States without a NPDES permit. In 1976, EPA promulgated National Pollutant Discharge Elimination System (NPDES) regulations to define the term "concentrated animal feeding operation" (CAFO). In 1987, the CWA was amended to include Section 402(p), which regulates discharges composed entirely of storm water, including storm water discharges from certain CAFOs. In recent years, it became clear that NPDES permitting authorities have not interpreted the CAFO regulations consistently, in part due to confusion over the meaning and intent of the regulations. In response, EPA assembled representatives from the States, EPA Headquarters, and EPA Regions to research the impact of livestock waste on waters of the United States and to encourage and improve CAFO regulatory efforts. EPA is providing this guidance manual to help permitting authorities understand the applicability of the NPDES regulations for CAFOs.

Under the NPDES regulations, animal feeding operations that meet certain criteria automatically fall under the definition of a CAFO. Other animal feeding operations may be designated as CAFOs if they pose a threat to water quality or use. This guidance explains when animal feeding operations are automatically CAFOs and the criteria permitting authorities may use to designate other operations as CAFOs. This guidance also briefly discusses technology-based permit requirements that may be applicable to animal feeding operations.

This document is guidance only. It does not establish or affect legal rights or obligations. Agency decisions in any particular case will be made by applying the laws and regulations on the basis of specific facts when permits are issued or regulations are promulgated.

## 1.0 INTRODUCTION

Section 301(a) of the Clean Water Act (CWA) establishes statutory requirements for the discharge of pollutants from point sources to waters of the United States. Under CWA 502(14) and implementing regulations at 40 CFR Section 122.23 and 40 CFR Part 122, Appendix B, "concentrated animal feeding operations" are point sources subject to the NPDES permits program. In this manual, the term "feedlot" is used to denote an animal feeding operation. The term "feedlot" is not synonymous with "concentrated animal feeding operation", which refers specifically to animal feeding operations identified as point source dischargers by the CWA and the NPDES regulations.

A report prepared by EPA, *Feedlots Case Studies of Selected States*, surveyed seven States and one EPA Region on implementation of the NPDES regulations for CAFOs. This report indicated that permitting authorities in different States interpret and implement the CAFO regulations differently. In particular, there appeared to be some confusion over:

- which feedlots are point sources (CAFOs);
- the significance and applicability of the 25-year, 24-hour storm exemption;
- interpretation of the term man-made conveyance;
- designations of CAFOs on a case-by-case basis; and
- NPDES regulation of facilities with animals of species not identified in 40 CFR Part 122, Appendix B.

The purpose of this guidance manual is to clarify these areas of confusion for permitting authorities, and to suggest appropriate interpretations of the regulations. Section 2.0 provides a detailed review of the NPDES provisions for CAFOs. Section 3.0 describes the significance of the term "25-year, 24-hour storm event" and explains how such a storm event precludes liability under the CWA for discharges from feedlots. Section 4.0 discusses the applicability of other EPA-administered programs to feedlots. The appendices provide the applicable NPDES regulations (Appendix A), a sample report for inspections of animal feeding operations (Appendix B), a glossary of terms (Appendix C), bibliography (Appendix D), and a fact sheet on the case Concerned Area Residents for the Environment v. Southview Farm.

## **2.0 FEEDLOTS SUBJECT TO THE NPDES PROGRAM**

This section defines the term animal feeding operation (or feedlot) and explains when a feedlot is a concentrated animal feeding operation (CAFO) subject to NPDES permitting requirements for discharges to waters of the United States. Appendix A is a copy of the NPDES regulations for CAFOs.

### **2.1 Discharges to Waters of the United States**

The NPDES program regulates the discharge of pollutants from point sources to waters of the United States. The term "waters of the United States" as defined at 40 CFR 122.2 is interpreted broadly. For the purposes of the NPDES regulations, the terms "waters of the United States" and "navigable waters," which both appear in the regulations, are interchangeable. It should be noted that this guidance does not expand nor change the definition of "waters of the United States", and is consistent with 40 CFR 122.2 in determining NPDES program regulation of discharge of pollutants from point sources to "waters of the United States".

Many discharges to surface water can be considered discharges to waters of the United States. The discharge does not have to be directly to a large lake or major interstate river. Wetlands and tributaries of interstate waters also are waters of the United States. Many discharges of pollutants from a point source to surface water through groundwater (that constitutes a direct hydrologic connection) also may be a point source discharge to waters of the United States. However, many waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA, are not waters of the United States. (See 40 CFR 122.2) EPA and the Department of the Army are currently developing a joint proposed rule that would incorporate existing guidance and policy interpreting CWA geographic jurisdiction into the regulatory definitions of "waters of the United States." This proposal may include both the isolated waters provisions and provisions that generally exclude certain man-made waters from CWA jurisdiction. For additional information, contact the Wetlands Division at (202) 260-8798.

A point source is a discernible, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters. The definition of "point source" in the CWA includes pipes, ditches, channels, tunnels, conduits, wells, and discrete fissures, which are all examples of the traditional understanding of the term "point source". Under CWA §502(14), however, CAFOs (concentrated animal feeding operations) are also specifically included in the definition of "point source."

An actual or ongoing discharge is not required for a facility to be covered by the NPDES regulations. The definition of a point source includes a concentrated animal feeding operation from which pollutants are or may be discharged [CWA §502(14) and 40 CFR 122.2].

## 2.2 Animal and Concentrated Animal Feeding Operations

A facility (e.g., farm, livestock market) that houses animals must meet both of the following criteria to be considered an animal feeding operation [40 CFR 122.23(b)(1)]. The facility must:

- Stable, confine, and feed or maintain animals for a total of 45 days or more in any 12-month period; and,
- Not sustain crops, vegetation forage growth, or post-harvest residues in the normal growing season over any portion of the facility.

The first part of this definition means that animals must be kept on the lot or facility for a minimum of 45 days. However, it does not mean that the same animals must remain on the lot for 45 days or more; only that some animals are fed or maintained on the lot 45 days out of any 12-month period. The 45 days do not have to be consecutive, nor does the 12-month period have to correspond to the calendar year. For example, the 12-month period may be counted from June 1 to the following May 31.

The regulations give the permitting authority a fair amount of discretion under 40 CFR 122.23(b)(1); EPA interprets "maintained" to mean that the animals are confined in an area where waste is generated and/or concentrated. Maintained also can mean that the animals in the confined area are watered, cleaned, groomed, or medicated. This interpretation allows the permitting authority to regulate animal operations such as dairy farms, stockyards, and auction houses where animals may not be fed, but are confined temporarily. The important consideration in this interpretation is that waste is generated in an area where animals are concentrated.

The second part of the definition distinguishes feedlots from pasture land, which is not subject to the NPDES program. This part of the definition narrows the geographic scope of the regulations to the portion of the facility where animals are confined and where natural forage or planted vegetation does not occur during the normal growing season (for that geographic area). Feedlots with constructed floors, such as solid concrete or metal slats, clearly satisfy this part of the definition. Other feedlots may have open dirt areas. These "open dirt" feedlots may have some vegetative growth along the edges while animals are present or during months when animals are kept elsewhere. EPA interprets the regulations to mean that if a facility maintains animals in an area without vegetation, including dirt lots, the facility meets the second part of the definition.

A concentrated animal feeding operation (CAFO) is an animal feeding operation (i.e., it meets the two criteria above) that also has:

- more than 1,000 animal units [40 CFR 122, Appendix B(a)];
- between 301 and 1,000 animal units and that may or does discharge by one of the methods covered by the regulations at 40 CFR 122, Appendix B(b); or,
- been designated a CAFO by the permitting authority on a case-by-case basis [40 CFR 122.23(c)].

Under the regulations, two animal feeding operations with the same owner are considered one operation for permitting purposes if they share a common border or have a common waste disposal system [40 CFR 122.23(b)(2)]. Two facilities have a common waste disposal system if the wastes are commingled prior to disposal. When considering two adjoining operations as one, permitting authorities should also calculate the total number of animals in order to determine if the operation is a CAFO. An example of two or more facilities which would meet the definition of one facility based on the regulation occurs at many poultry farms, particularly turkey operations. A turkey operation with 60,000 turkeys (10,000 turkeys in six individual totally enclosed facilities) collects its dry waste three times a year and stores it in another completely enclosed structure. The waste is later applied agronomically to the field, generally in the spring. This turkey operation is not a CAFO because there is no potential for a discharge from the operation.

The CWA excludes certain agricultural activities from federal NPDES permitting requirements, specifically return flows from irrigated agriculture and agricultural storm water runoff. This exclusion, however, does not apply to CAFOs, which are explicitly identified as point sources subject to the NPDES permitting program. {CWA Section 502(14);40 CFR 122.3(c) and (f)}. If a facility does not meet the criteria of a CAFO, discharges may constitute 'nonpoint source' agricultural storm water runoff and would be regulated under a different authority (States with approved NPDES programs may still regulate such discharges as 'point source,' but under the authority of CWA §510). Exhibits 1 and 2 contain flowcharts that illustrate when an animal feeding operation is a point source that must have a NPDES permit for discharges to waters of the United States, as discussed below.

### **2.3 Calculating the Number of Animal Units**

The first step in determining if an animal feeding operation is a CAFO is to calculate the number of animal units fed or maintained on-site. "Animal unit" is a term defined in 40 CFR 122, Appendix B and varies according to animal type; one animal is not always equal to one animal unit. The number of animal units in 40 CFR 122, Appendix B is calculated as follows:

- number of slaughter and feeder cattle multiplied by 1.0, plus,
- number of mature dairy cattle multiplied by 1.4, plus,
- number of swine weighing over 25 kilograms (55 pounds) multiplied by 0.4, plus,
- number of sheep multiplied by 0.1, plus,
- number of horses multiplied by 2.0.

The number of animals or animal units is the number most likely to be present for 45 days in a 12-month period. Permitting authorities should advise operators to use the highest number of animals most likely to be present for 45 days in a 12-month period.

Poultry operations (i.e., operations with turkeys, ducks, broilers or layers) also may be CAFOs, although there are no animal unit conversion factors for poultry. In determining if a poultry operation (such as a turkey operation) meets the size criteria to be considered a CAFO, the cumulative number of animals in the individual houses would be counted. The number of

turkeys, ducks, broilers or layers (with certain types of waste management systems) that cause an animal feeding operation to be a CAFO is listed in Sections 2.4 and 2.5. An operation with swine weighing less than 25 kilograms or with fewer turkeys, ducks, broilers or layers than the number listed in 40 CFR Part 122, Appendix B (discussed in Section 2.4 and 2.5) may be designated a CAFO (discussed in 2.6).

## 2.4 Feedlots with More Than 1,000 Animal Units

If the number of any one species exceeds the corresponding number indicated below, or the cumulative number of animal units exceeds 1,000, the animal feeding operation is a CAFO and should be covered by a NPDES permit:

- 1,000 slaughter and feeder cattle.
- 700 mature dairy cattle (whether milked or dry),
- 2,500 swine each weighing over 25 kilograms (55 pounds),
- 500 horses,
- 10,000 sheep or lambs,
- 55,000 turkeys,
- 100,000 laying hens or broilers (with a continuous flow watering system),
- 30,000 laying hens or broilers (with a liquid manure system)<sup>1</sup>, or
- 5,000 ducks.

Example: If an animal feeding operation maintains 8,500 sheep on one lot and 1,200 cattle on an adjacent lot, the entire facility is a CAFO and is subject to NPDES requirements. [1,200 cattle exceeds the 1,000-cattle threshold]

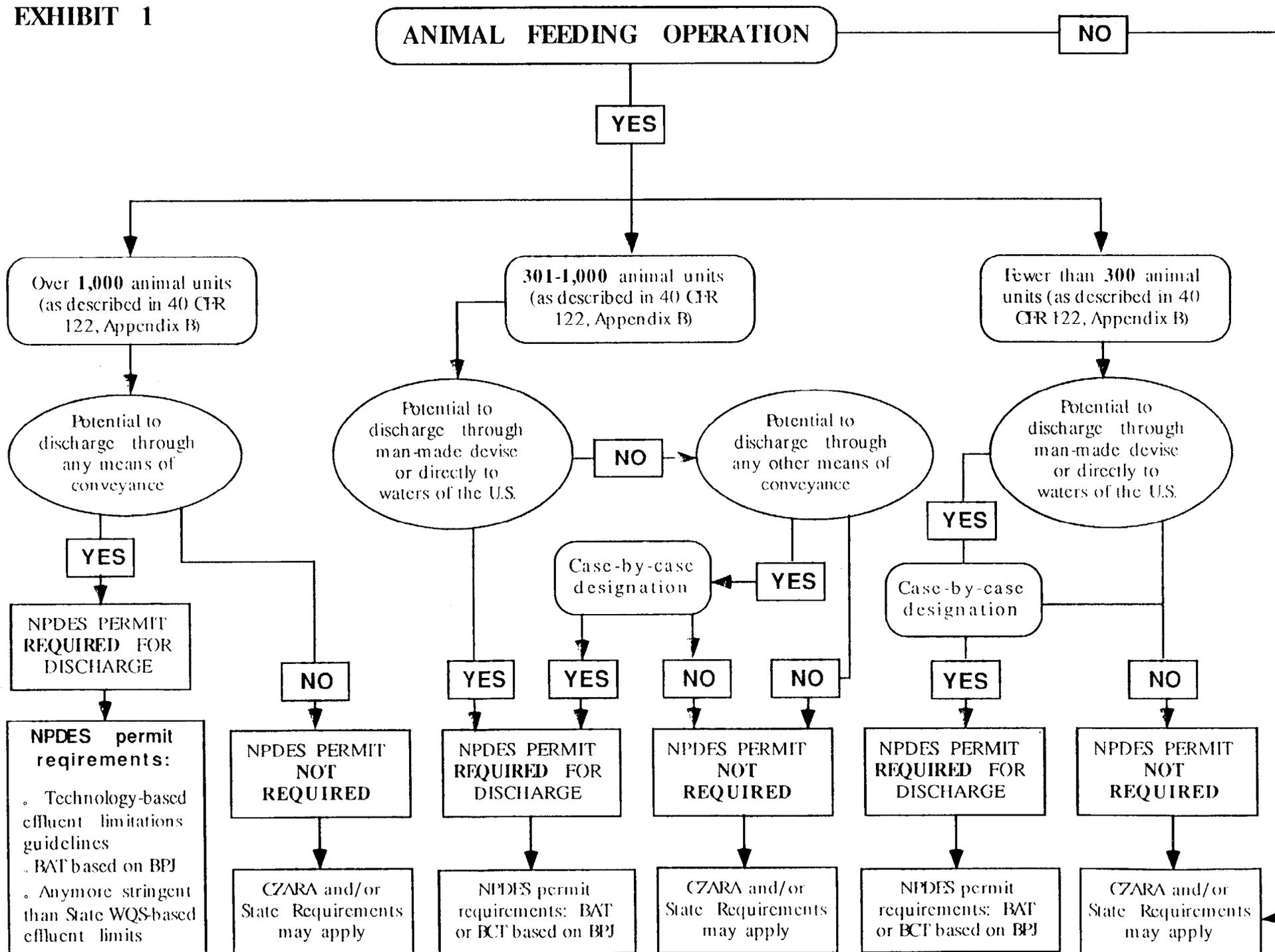
Example: An animal feeding operation confines and maintains 650 cattle, 5,000 sheep, and 30 horses in adjacent pens.  $[(650 \times 1.0) + (5,000 \times 0.1) + (30 \times 2.0)] = 1,210$  animal units]. This exceeds 1,000 animal units, thus the facility is a CAFO and is subject to NPDES requirements.

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<sup>1</sup>EPA recognizes that "continuous watering system" refers to an outdated technology, and the threshold in the CAFO regulations that is based on this technology would rarely apply. Therefore, the threshold based on "liquid manure system" would be the more commonly applied threshold for poultry operations. For facilities with inadequate or inappropriate waste treatment systems or waste handling practices (i.e., those that threaten or impair water quality), the permitting authority should determine whether a facility's waste handling system constitutes a "liquid manure system."

EPA believes that animal feeding operations, including poultry operations, that remove waste from pens and stack it in areas exposed to rainfall or an adjacent watercourse may have established a crude liquid manure system for process wastewater that may discharge pollutants, and therefore would be subject to the CAFO regulations [58 FR 7617]. These facilities would be point sources under the NPDES program if the number of animals confined at the facility meets the regulatory definition in 40 CFR Part 122, Appendix B or if the facility is designated a CAFO.

**EXHIBIT 1**



# EXHIBIT 1-A

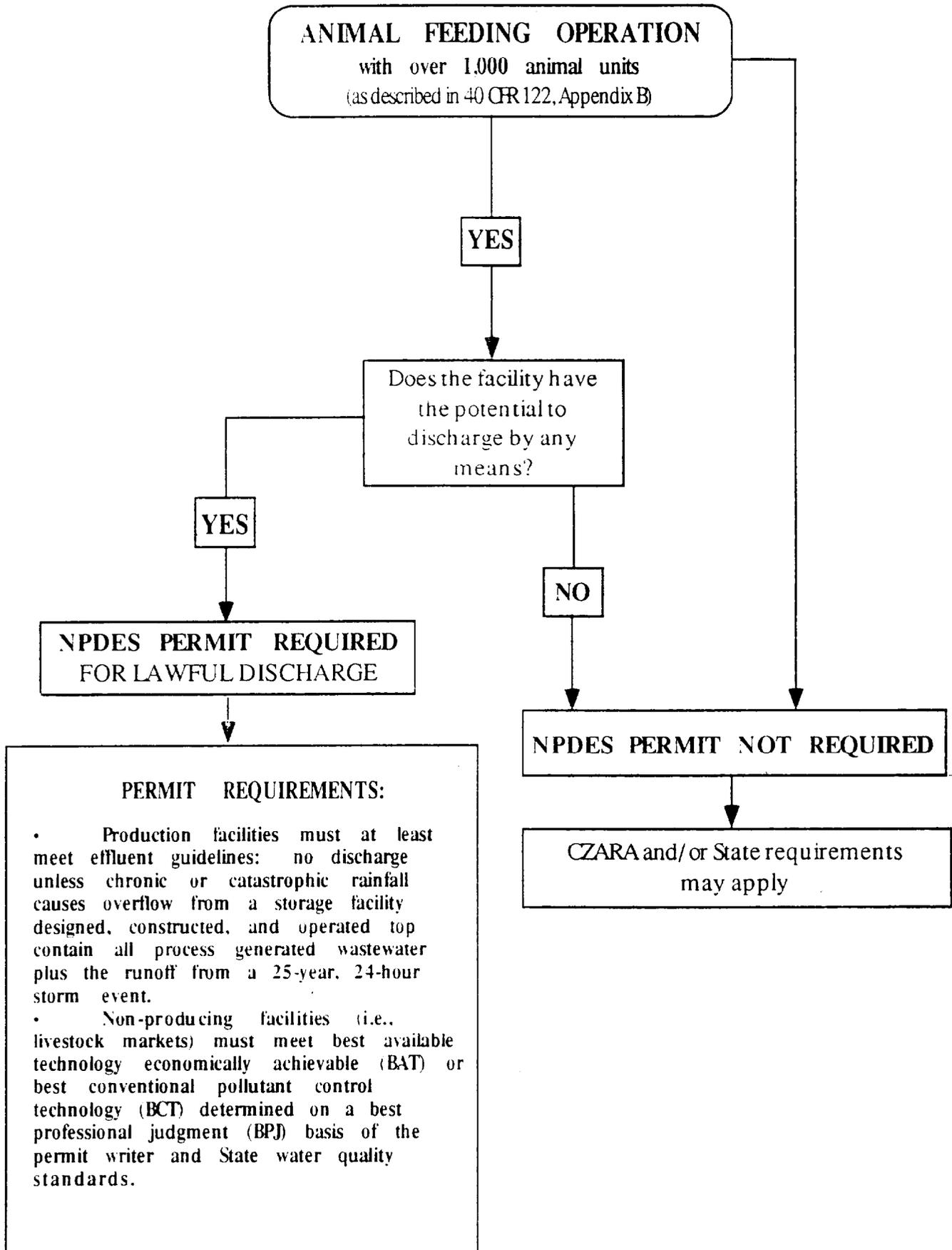


EXHIBIT 1-B

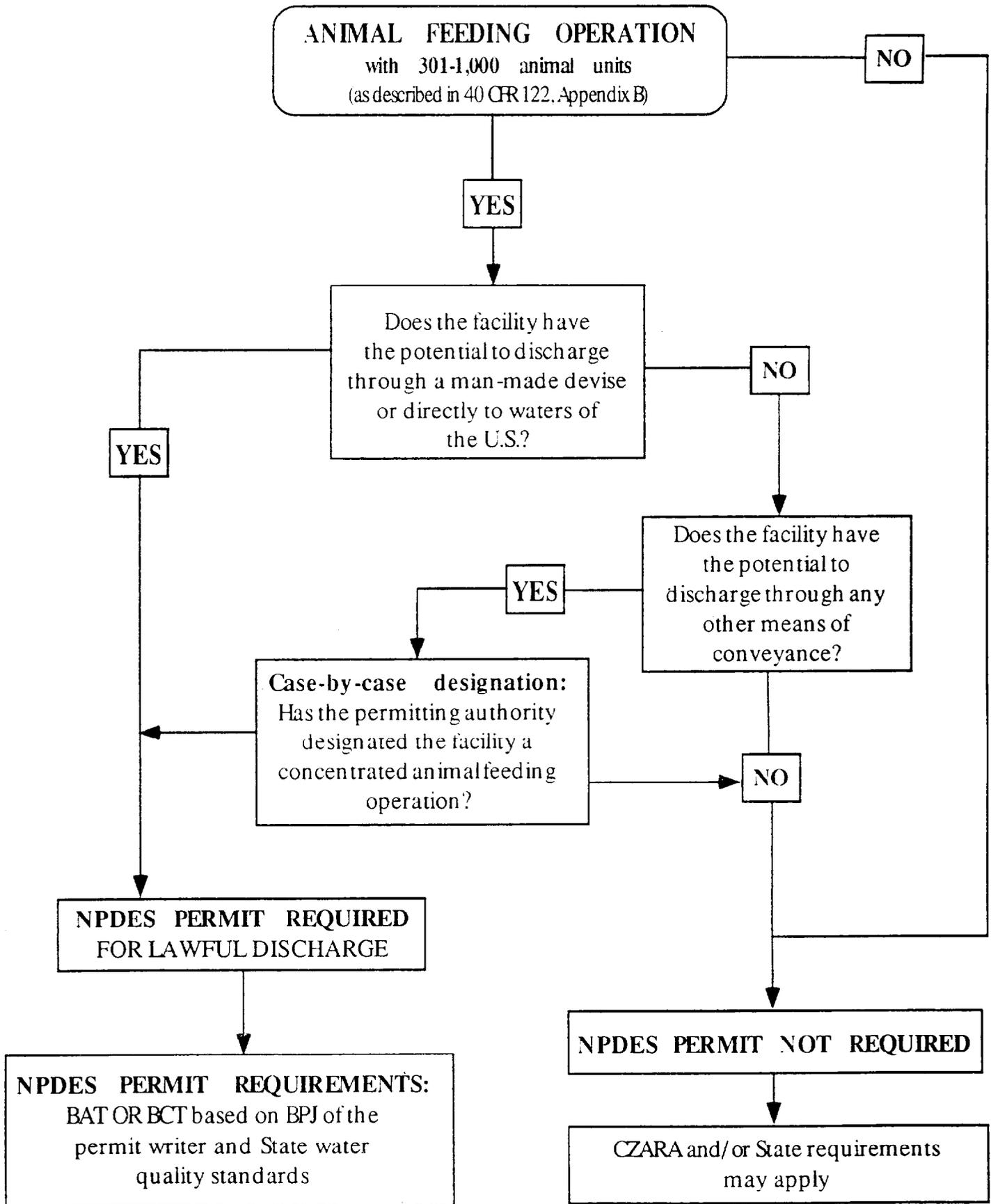
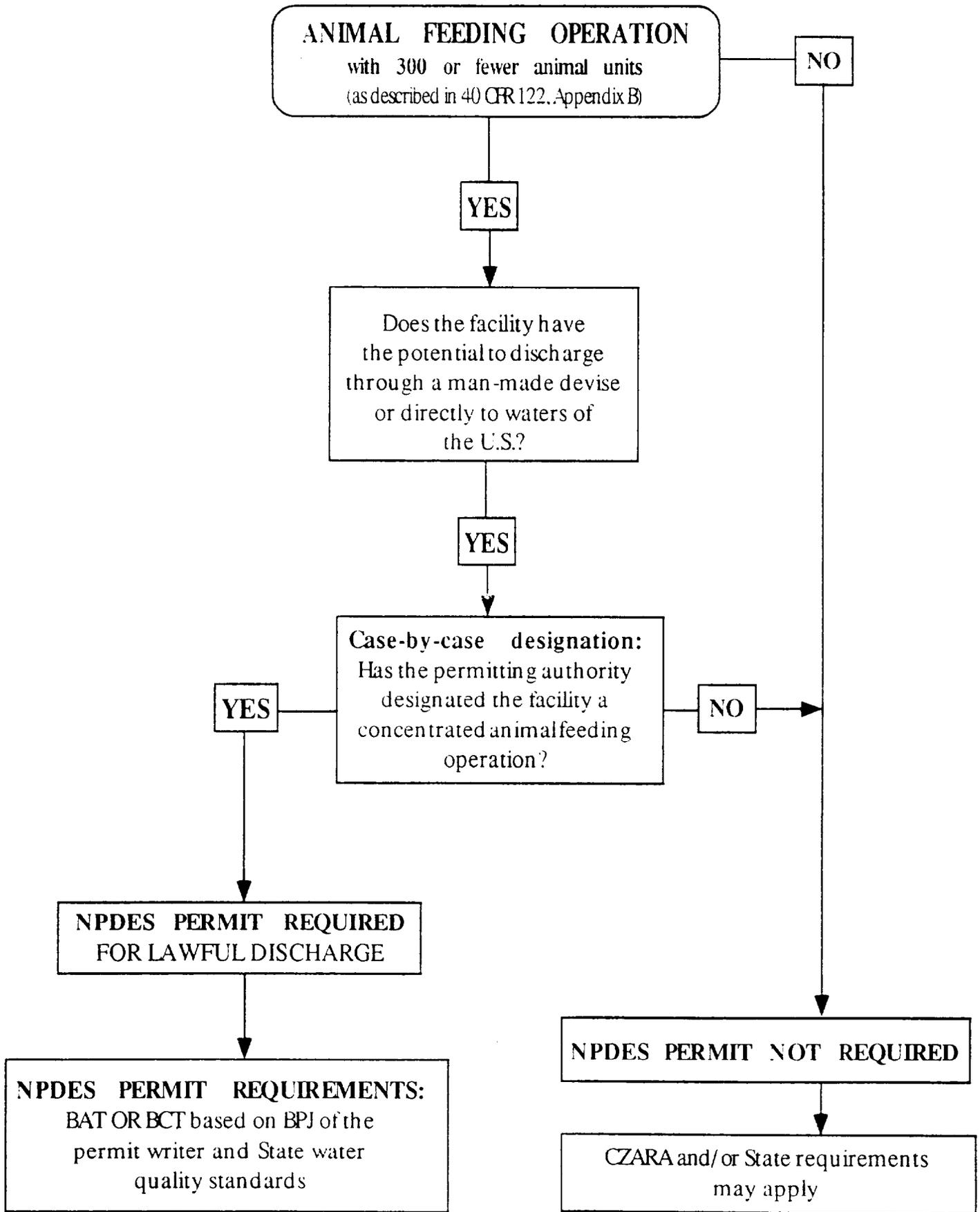
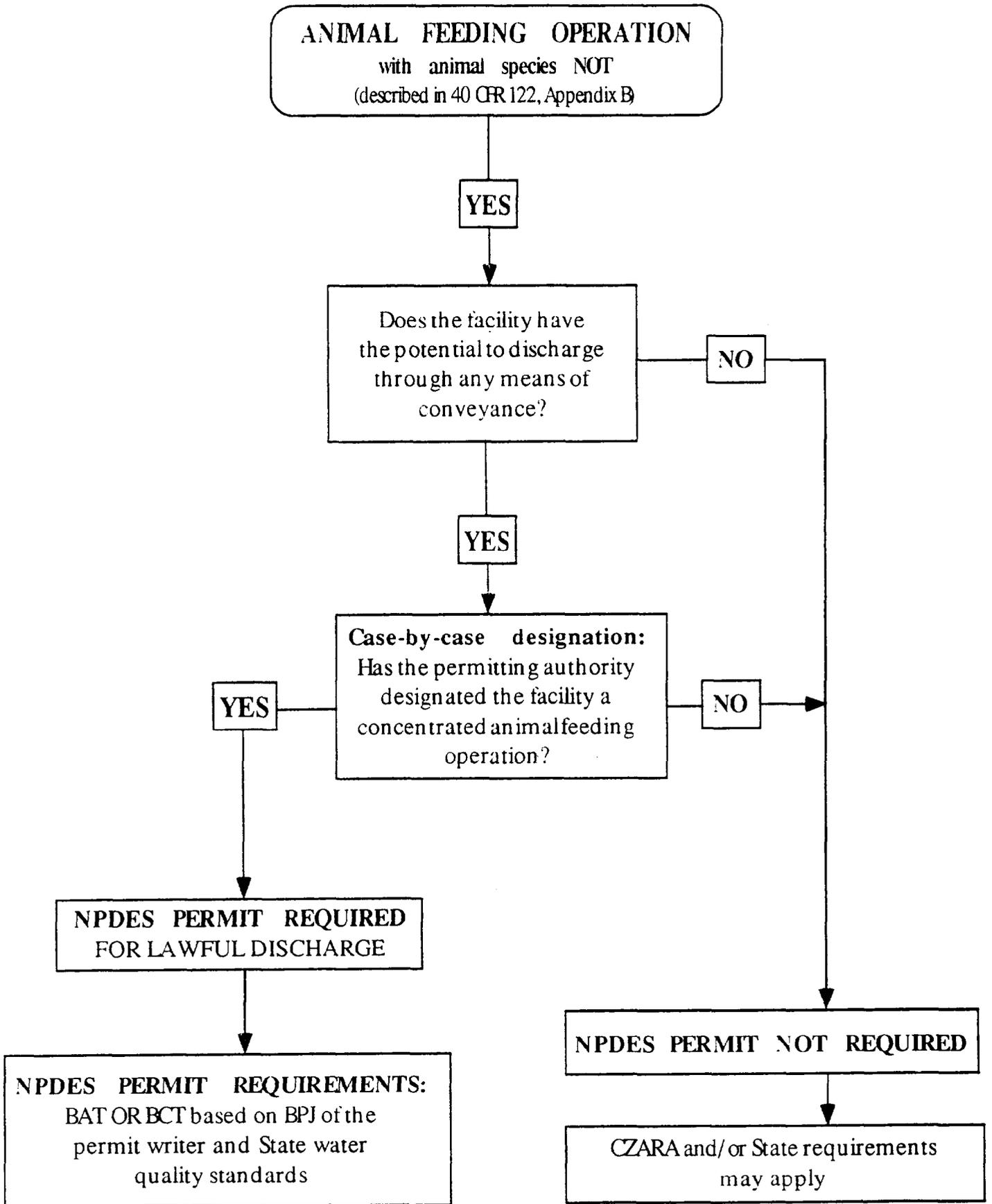


EXHIBIT 1-C



**EXHIBIT 2**



Discharges to waters of the United States from animal feeding operations with more than 1,000 animal units are point source discharges regardless of the manner of conveyance. The categorization of these facilities as CAFOs is not limited by the traditional understanding of the term 'point source.' The discharge may occur through a man-made conveyance (defined in Section 2.5.1) or through a natural channel or gully that transports wastes, for example, from a retention structure to nearby surface waters. Flows from the CAFO over bare ground adjacent to the animal enclosure, for instance, are likely to converge in naturally occurring channels (e.g., surface depressions). Any time wastewater from areas of the CAFO flow to waters of the United States, the result is a discharge that is subject to the NPDES program. Areas of the CAFO may include animal or poultry watering systems, washing, cleaning or flushing pens, barns, or manure pits, loading and unloading areas, and feed mills.

## 2.5 Feedlots with 301 - 1,000 Animal Units

There are two criteria that animal feeding operations with 301 - 1,000 animal units must meet before a permit is required for a discharge to waters of the United States: size and method of discharge. If both of these criteria are met, the feedlot is a CAFO and must have a NPDES permit for discharge to waters of the United States.

First, if the number of any one species exceeds the corresponding number indicated below, or the cumulative number of animal units exceeds 300, the facility meets the size criterion:

- 300 slaughter and feeder cattle,
- 200 mature dairy cattle (whether milked or dry),
- 750 swine each weighing over 25 kilograms (55 pounds),
- 150 horses,
- 3,000 sheep or lambs,
- 16,500 turkeys,
- 30,000 laying hens or broilers (with a continual flow watering system),
- 9,000 laying hens or broilers (with a liquid manure system),<sup>2</sup> or
- 1,500 ducks.

Example: A hog operation maintains 780 mature swine. This facility meets the size criteria.  
[780 mature swine exceeds the 750 swine threshold]

Example: A facility maintains 180 dairy cows and 50 feeder cattle. This facility meets the size criteria.  
[(180 x 1.4) + (50 x 1.0) = 302 animal units]

Second, animal feeding operations meet the "method of discharge" criterion if the operation discharges pollutants:

- into waters of the United States through a man-made ditch, flushing system, or similar man-made device; or,

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<sup>2</sup> See Footnote 1.

- directly into waters of the United States that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

### ***2.5.1 Definition of Man-Made Conveyance***

The term man-made conveyance means a conveyance constructed by man and used for transporting wastes to waters of the United States [40 CFR 122, Appendix B]. Man-made devices include pipes, ditches, and channels. If human action was involved in the creation of the conveyance, it is man-made even if natural materials were used to form the conveyance. A man-made channel or ditch that was not created specifically to carry animal wastes but nonetheless does so during storm events is considered a man-made conveyance.

Three types of conveyances are listed in the regulations, (1) a man-made ditch, (2) a flushing system, and (3) a similar man-made device. A ditch or flushing system transports the wastes to waters of the US (these conveyances assist or facilitate the wastes in reaching waters of the US). In other words, they cause the situation at the animal feeding operation to be worse than if the ditch or flushing system did not exist.

Some States have interpreted man-made conveyance more broadly than others, or have pursued permitting more aggressively for some types of conveyances than others. For example, in Minnesota and Iowa, the permitting authority has interpreted man-made conveyance to include agricultural drainage tiles that sometime receives drainage from the feedlot. By facilitating and directing discharge flows, these tiles convey wastewater to waters of the United States, and the operation is subject to the NPDES program. Kansas defines the term broadly to include irrigation systems and tractors with bucket scoops, both of which convey wastewater through mechanical, man-made means to waters of the US.<sup>3</sup>

### ***2.5.2 Definition of Direct Discharge of Pollutants***

A direct discharge criterion is presumed to be met whenever a stream, creek, wetland, or other waterbody begins outside a facility and passes over, across, or through the facility [40 CFR 122, Appendix B]. This method of discharge criterion is also met if animals maintained at the facility can come into direct contact with waters of the United States. A stream running through the area where animals are confined indicates that there is a direct discharge of pollutants. An intermittent stream or a dry creek bed running through the facility also falls into this category. A facility where such a conveyance exists is subject to NPDES permitting.

Information provided by the operator on a permit application or other information source (e.g., U.S. Geological Survey maps) may supply sufficient detail for a permitting authority to determine if the operation meets the regulatory criteria. The accuracy of the information may also be verified through a site inspection.

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<sup>3</sup> State interpretations of man-made conveyances came from actual on-site interviews with permits staff, water quality staff and nonpoint source staff. These interviews provided the background information for the *Feedlots Case Studies of Selected States*, which was part of the *Report of the EPA/State Feedlot Workgroup, September 1993*.

## 2.6 Feedlots with 300 or Fewer Animal Units and Other Feedlots Designated as CAFOs

Three types of operations can be designated as CAFOs on a case-by-case basis if determined to be actual or potential significant contributors of pollutants to waters of the United States:

- 1) An animal feeding operation with more than 300 animal units (but less than 1000 animal units) that does not meet the discharge criterion described in Section 2.5 [40 CFR 122.23(c)(1)]. In other words, these operations may be designated regardless of the manner of conveyance of the discharge.
- 2) An animal feeding operation with 300 animal units or fewer if the facility meets the "method of discharge" criterion discussed in Section 2.5, namely that the operation actually or potentially discharges pollutants [40 CFR 122.23(c)(2)]:
  - into waters of the United States through a man-made ditch, flushing system, or similar man-made device; or,
  - directly into waters of the United States that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
- 3) An animal feeding operation that raises animals other than the species identified in 40 CFR Part 122, Appendix B. Examples of such animal feeding operations include llama ranches and farms that raise mink or other fur-bearing animals. These operations would be designated under the authority of 40 CFR 122.23(c)(1), which does not reference 40 CFR 122, Appendix B. These operations may be designated as CAFOs regardless of the manner of conveyance of the discharge.

No operation may be designated a CAFO on a case-by-case basis until the permitting authority has conducted an on-site inspection of the facility, regardless of the size of the operation or the type of animals confined [40 CFR 122.23(c)(3)]. In States where EPA is the permitting authority, the Regional Director or a duly authorized representative may designate a CAFO. In NPDES-authorized States, only the State program director or a representative authorized by the Director may designate a CAFO.

Appendix B of this document is a sample guide for conducting inspections to determine whether an operation should be designated a CAFO. Permitting authorities may also consider establishment of point-based rating systems where points are assigned based on the facility's location, operating practices, and impact on receiving waters. A score above a certain level indicates that the facility is or may be a significant contributor of pollution and should be designated a CAFO. Rating scales should be adjusted to accurately reflect local conditions. The provisions of 40 CFR §122.23(c) provide the permitting authority with flexibility to designate CAFOs to protect waters of the United States.

### **2.6.1 Designation Requirements**

In making a case-by-case designation of a CAFO, at least the following factors must be considered:

- Size of the operation;
- Amount of wastes reaching waters of the United States;
- Location of the operation relative to waters of the United States;
- The means of conveyance of animal wastes and process wastewater into waters of the United States;
- The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes and process wastewater into waters of the United States; and
- Other relevant factors, for example proximity to impaired or pristine surface waters, public complaints, etc.

These factors are important because they enable the permitting authority to systematically identify the feedlots that individually or as a group may impair water quality. For example, the size of a feedlot, its proximity to waters of the United States, and the lack of a waste retention structure may, in combination, indicate that it is a potential significant contributor of pollution. Also, the impact of the aggregate amount of waste from many small operations may equal or exceed that of a large operation (i.e., over 1,000 animal units) and may necessitate that all smaller operations in a watershed be designated CAFOs.

Examples of cases when such factors warrant designation of feedlots as CAFOs are included below.

Example: Four animal feeding operations that each maintain 250 dairy cows (which does not meet the size criteria) are located within a watershed of a small river impaired by nutrient contamination. During storms, runoff from these facilities collects in naturally-occurring channels and flows into the river. The aggregate amount of waste equals the waste that would be produced by a single dairy operation with 1,400 animal units. These facilities would be a prime candidate for inspection and designation as CAFOs. Before the designation process could occur, the NPDES permitting authority would have to conduct an on-site inspection of the facility.

Example: An animal feeding operation that maintains 310 cattle is located adjacent to a water quality impaired river. The operator routinely piles the waste next to the enclosure where it remains until a contract hauler picks it up for disposal. The waste is removed on a monthly basis, but rainfall occurs several times a month and runoff from the stacked manure flows through naturally-occurring channels in the ground to the river. This facility would be a prime candidate for inspection and designation as a CAFO. Before the designation process could occur, the NPDES permitting authority would have to conduct an on-site inspection of the facility.

### **2.6.2 Targeting Designation Efforts**

There are several approaches permitting authorities may consider when prioritizing sites for inspection and possible designation as CAFOs. It is strongly recommended that the permitting authority contact the feedlot owner to arrange a site visit. EPA encourages permitting authorities

to target feedlots as part of a watershed or whole-basin planning effort. This approach may be particularly useful if the basin or watershed is known to experience problems with high nutrient levels or microbial contamination. Also, if a State has listed a river on a CWA §303(d) or CWA §304(l) list, all operations that contribute to the impairment problem may be suitable for designation and permitting. Assessments conducted under §319 of the CWA also may be used in targeting efforts.

Alternatively, feedlots may be targeted in many different watersheds based on proximity to waters of the United States or proximity to waters with known or suspected impairments. A third approach might target older operations that were established before implementation of existing State waste handling statutes or development of newer waste handling technologies. Finally, response to public concern provides another possible approach. The inspection approach selected will depend upon the resources available, the number of potentially regulated operations, the degree of known resource impairment, and other factors unique to each area.

### ***2.6.3 Designation Prior to a Discharge***

A permitting authority does not need to verify the occurrence of a discharge from an operation prior to designating it as a CAFO [CWA §502(14); 41 FR 11459]. Point source includes CAFOs from which pollutants are or may be discharged. The facility, however, is not obligated to have a NPDES permit unless there is an actual discharge. An unpermitted feedlot designated as a CAFO would be subject to enforcement under the CWA only if it actually discharges. Thus, once such a discharge occurs, the unpermitted facility is considered in violation of the CWA. Even after the discharge ceases, the operation remains in continuing violation (i.e., for the purpose of citizens' suits under CWA §505) if the discharger does not apply for and obtain a NPDES permit [Carr v. Alta Verde Industries, 931 F.2d 1055 (5th Cir. 1991)].

If an animal feeding operation does not meet the definition of a CAFO and has not been designated a CAFO, however, any addition of pollutants to waters of the United States would not constitute a violation of the CWA. The following two examples illustrate the application of this principle (designating a feedlot prior to a discharge.)

Example: An operation maintains 100 mature swine (which does not satisfy the size criterion and is located near a water quality impaired lake). The facility has gutters that transport runoff to a plot of nearby land. After a major storm, the gutters overflow into the adjacent lake. The facility has not been designated a CAFO, and thus the discharge does not violate the CWA.

Example: An operation maintains 100 mature swine (which does not satisfy the size criterion), and is located near a water-quality impaired lake. The facility has gutters that transport runoff to a plot of nearby land. The permitting authority conducts a site inspection and based on location-specific factors (runoff collection system and proximity to the lake) notifies the facility operator that the facility has been designated a CAFO. The operator does not believe a discharge will occur and does not obtain a NPDES permit. After a major storm, the gutters overflow into the lake. The facility has violated the CWA and is subject to enforcement action.

## 2.7 Intermittent Facilities and Partially Sheltered Operations

Permitting authorities and members of the regulated community have expressed confusion over how to apply the CAFO regulations to enclosed, partially sheltered, and temporary animal holding facilities. This section clarifies EPA's position on these issues.

A totally enclosed facility with no discharge (and no anticipated or potential discharge) of animal waste to waters of the United States is not a CAFO. A partially sheltered facility, however, is a CAFO if it meets the size and discharge criteria of the NPDES regulations, or if it is designated a CAFO. In partially sheltered operations, the number of animals maintained at the facility for 45 days or more is the combined number of animals in the open and sheltered sections of the facility. The entire operation is considered one unit and all animals must be counted for the purposes of CAFO classification — not just those in the open areas. This is in contrast to the situation where an operator has an enclosed facility and an open lot facility where the two facilities are not adjoining and have separate waste management systems. In facilities that use both pasture and confined areas where animals are concentrated the confined area may be a CAFO; the pasture is not subject to the NPDES regulations, and the animals that remain at pasture would not be counted for classification purposes.

Example: A dairy operation feeds 1,200 cows at pasture throughout the year. The operation has a holding area where the cows gather two times a day, 365 days a year before entering the milking barn. The holding area has no vegetative growth. The holding area is a CAFO and is covered by the NPDES regulations.

Livestock marketing operations also may be subject to these provisions. Auction houses and transfer facilities that meet the regulatory definition of a CAFO must have NPDES permits if they discharge of wastewater to waters of the United States.

Example: A livestock market facility where 1,500 cattle are maintained for four days per month, or 48 days in each 12-month period, is considered a CAFO.

## 2.8 NPDES Permit Conditions

NPDES permits for CAFOs must contain the following technology-based effluent limitations:

- For CAFOs with over 1,000 animal units where animals are grown, requirements at least as stringent as those in the national effluent limitations guidelines for feedlots.
- For CAFOs with over 1,000 animal units that are non-producing facilities, best available technology economically achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) based on the best professional judgment of the permit writer. ("Non-producing" CAFOs are CAFOs that do not feed and grow animals, but only house them temporarily. Transfer facilities and auction houses are examples of non-producing operations.)

- For CAFOs with less than 1,000 animal units, BAT and BCT based on the best professional judgment of the permit writer.

Permit writers can refer to the effluent limitations guidelines supporting documents to help them determine best professional judgment (BPJ) requirements and limitations for non-producing CAFOs and CAFOs with fewer than 1,000 animal units. Permit writers may also reference the CZARA guidance document (see Section 4.1) in BAT and BCT for feedlots.

The conditions in State NPDES permits must conform with the minimum federal requirements. NPDES permits may contain more stringent requirements established pursuant to State law, including State water quality standards. Some States also have the authority to include requirements for groundwater protection and to ensure development of nutrient management plans or land application procedures. In addition, many States have non-NPDES programs that regulate feedlots. However, permits issued under such non-NPDES programs do not authorize discharges under the CWA, and therefore do not shield discharging facilities from enforcement actions.

### *2.8.1 Effluent Limitations Guidelines*

The effluent limitations guidelines for feedlots with over 1,000 animal units, other than non-producing facilities, are at 40 CFR Part 412.<sup>4</sup> The effluent limitation allows no discharges to waters of the United States, except when chronic or catastrophic storm events cause an overflow from a facility designed, constructed, and operated to hold process generated wastewater plus runoff from a 25-year, 24-hour storm event. All NPDES permits for CAFOs with over 1,000 animal units, other than non-producing facilities, must contain an equivalent or more stringent effluent limitation. The 25-year, 24-hour storm event and the terms "chronic" and "catastrophic" are discussed in Section 3.0.

In practical terms, the effluent limitations guidelines mean that these facilities must have retention structures that are properly constructed and operated to hold process-generated wastewater and runoff from a 25-year, 24-hour storm event. NPDES permits issued to CAFOs should clearly state this requirement. It should be emphasized that the management of the entire waste handling system must be considered when designing the retention structure(s). Capacity needed in the storage structure not only is based on manure that is loaded into the structure, the volume of runoff from the open lot areas and other contributing drainage areas, and the rain falling on the structure itself. This capacity is normally expressed as a given number of days, weeks, or months worth of waste produced at the facility. To ensure appropriate practices for the application of waste, specifically manure to the land, it is recommended that the permittee develop, implement and periodically update a nutrient management plan to: apply nutrients at rates necessary to achieve realistic crop yields; improve the timing of nutrient application; and, use agronomic crop production technology to increase nutrient use efficiency.

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<sup>4</sup> The guidelines do not apply to non-producing facilities because they were not considered during development of the guidelines, and the definition of the operations covered by the guidelines refers only to CAFOs where livestock are grown and fed, not where individual livestock are held briefly[40 CFR 412.11(b); 40 FR 12513]. However, non-producing operations that meet the definition of a CAFO must have a permit to lawfully discharge.

CAFOs subject to effluent limitations guidelines are also subject to NPDES regulations for storm water discharges associated with industrial activity. Compliance with the effluent limitations in the guidelines, however, provides compliance with the storm water regulations since the guidelines establish BAT/BCT or new performance standards (NSPS) for storm water discharges from these facilities.

Since the effluent guidelines for feedlots do not establish numeric limitations for discharges that result from chronic or catastrophic storms, non-numeric conditions (e.g., development of a nutrient management plan, retention structure design requirements, inspection and reporting requirements, best management practices (BMPs), and pollution prevention plans) may be included in NPDES permits as effluent limitations.

NPDES permits for CAFOs must require at a minimum annual reporting of monitoring results [40 CFR 122.44(i)(2) and 122.44(i)(3)]. Monitoring requirements can range from visual inspection of overflow or potential discharge points at specified intervals and/or after storms of a certain size; to permits which require installation of a sensor or collection device that will detect any discharge from the retention structure.

### ***2.8.2 Limitations Based on Best Professional Judgment***

The effluent limitations for CAFOs with fewer than 1,000 animal units, as well as all non-producing CAFOs, must be established on the basis of the best professional judgment (BPJ) of the permit writer. These limitations must meet technology-based standards (BAT/BCT) and any more stringent limitations necessary to comply with applicable State water quality-based standards. These CAFOs are not subject to the NPDES storm water regulations for storm water discharges associated with industrial activity because the effluent guidelines for feedlots do not apply to these facilities.

The NPDES regulations for BPJ determinations of BAT/BCT [40 CFR 125.3(d)(3)] require permitting authorities to consider the cost of achieving effluent reduction, the age of the equipment and the facility, the process employed, the engineering aspects of the control techniques, the process changes, and non-water quality environmental impacts.

As in the case of CAFOs subject to effluent limitations guidelines, CAFO permits based on BPJ may contain non-numeric conditions (e.g., development of nutrient management plans, retention structures, inspections and reporting, and other pollution prevention practices) if numeric effluent limitations are infeasible and if non-numeric conditions are reasonably necessary to achieve effluent limitations and standards and to carry out the intent of the CWA. In addition, these CAFOs also must require a minimum of annual reporting of monitoring results, which is discussed above in Section 2.8.1. [40 CFR 122.44(i)(2)].

CAFOs of different sizes often have similar potential to discharge pollutants to waters of the United States and may use similar pollution control practices effectively. Permitting authorities should base BPJ determinations on pollution reduction achieved by feedlot operations within the locality, information gathered during inspections, and any economic or other analyses on pollutant control technologies previously conducted for the feedlot industry. The analyses

performed by EPA for the feedlot industry in establishing the feedlot regulations and effluent limitations guidelines may be a useful source of information. EPA also conducted an economic analysis of waste management practices for feedlots for the Coastal Zone Act Reauthorization Amendments (CZARA), which also may be useful for development of NPDES permits.

### ***2.8.3 Permit Terms Relating to Land Application of Manure***

In general, the Clean Water Act does not regulate manure spreading operations, only manure spreading for CAFOs. As explained previously, CAFOs are the only feedlots subject to regulation under the point source permit program (NPDES). When a NPDES permit contains conditions for appropriate land application practices, and the permittee complies with those conditions, the permit will provide compliance with the CWA and act as a "shield against enforcement for any additions of pollutants to Waters of the United States that may occur. If a feedlot is determined not to be a CAFO, then it is not a point source (Appendix E). In addition, the CWA does not regulate manure spreading once the manure leaves the property where it was generated. The CAFO owner/operator is only responsible for complying with NPDES permit requirements relative to any manure spreading on-site.

To ensure that land application of manure is in accordance with appropriate practices, it is recommended that the permittee develop, implement and periodically update a nutrient management plan to: apply nutrients at rates necessary to achieve realistic crop yields; improve the timing of nutrient application; and, use agronomic crop production technology to increase nutrient efficiency.

Use of nutrient management plans minimize damage to groundwater and surface water and increases the efficiency of nutrient uses by crops. A nutrient management plan should be developed and kept on-site by the permittee. This document should be reviewed and updated if necessary by the permittee at least once every three years, or whenever the crop rotation is changed or the nutrient source is changed. Nutrient management plans should be reviewed by the permitting authority on a periodic basis. A detailed description of recommended core components of a nutrient management plan is available in The United States Department of Agriculture's (USDA) *Agricultural Waste Management Field Handbook*.

EPA contemplated that in certain circumstances that NPDES permits incorporate appropriate land application measures. The Agency promulgated and published permit application forms regarding agricultural activities: Short Form B. 38 FR 10960 (May 3, 1973), (proposed); and, 38 FR 18000 (July 5, 1973). Section II.3 of the permit application form requests information on the appropriate land (in acres) available for manure disposal and/or runoff disposal.

### 3.0 THE 25-YEAR, 24-HOUR STORM EVENT EXEMPTION

Section 2.0 discussed the size and discharge criteria defining concentrated animal feeding operations (CAFOs). Discharges from animal feeding operations that occur under certain rainfall conditions are subject to a narrow exemption from the NPDES regulations for CAFOs. This exemption, discharge due to a 25-year, 24-hour storm, is discussed in greater detail in this section.

#### 3.1 Applicability of the 25-Year, 24-Hour Storm Exemption

A 25-year, 24-hour storm refers to the number of inches of rainfall in a 24-hour period that is expected to occur only once every 25 years.<sup>5</sup> Storm events larger than the 25-year, 24-hour storm are expected to occur less frequently than smaller storm events. For example, a 50-year, 24-hour storm event is larger than a 25-year, 24-hour storm event and is expected to occur less frequently. Conversely, a 10-year, 24-hour event is smaller and is expected to occur more frequently than a 25-year, 24-hour storm event. Maps published by the National Weather Service (NWS) show the amount of rainfall that constitutes the 25-year, 24-hour storm event for every location in the United States.

Example: Cheyenne, Wyoming received 3 inches of rain in the last 24 hours. According to the NWS, the 25-year, 24-hour storm event for Cheyenne is 2.8 inches of rain. Therefore, the storm exceeds the 25-year, 24-hour storm event.

According to 40 CFR 122, Appendix B, an animal feeding operation is not a CAFO if it discharges only in the event of a 25-year, 24-hour storm or larger. This exemption applies to all feedlots, including CAFOs designated as such on a case-by-case basis.

The effluent guidelines for feedlots [40 CFR 412], and consequently NPDES permits for CAFOs, contain references to catastrophic and chronic rainfall. A catastrophic event is equivalent to a 25-year, 24-hour storm event. Catastrophic events could also include tornadoes, hurricanes, or other catastrophic conditions that would cause an overflow from the required waste retention structure. A chronic rainfall is a series of wet weather conditions that preclude dewatering of properly maintained waste retention structures [58 FR 7620]. Under the current effluent limitations guidelines for CAFOs, permitted discharges that result from chronic rainfall or catastrophic events do not violate the CWA. Unpermitted discharges other than those due to a 25-year, 24-hour storm, however, would not be authorized because, absent a permit, a discharge is a violation of the CWA.

Example: According to NWS, the 25-year, 24-hour storm event for Omaha, Nebraska is 5.3 inches of rain. A storm lasting six days delivers 20 inches of rain. This is not a 25-year, 24-hour storm event because 5.3 inches of rain was not received in any single 24-hour period. Rather, it is a chronic rainfall. A discharge from an unpermitted facility would be a CWA violation. A discharge from a facility with a NPDES permit that contains language based on the effluent limitations guidelines would not be a CWA violation as long as the facility has been operated properly.

<sup>5</sup> The 25-year, 24-hour storm event is a statistical calculation of the National Weather Service, and is defined by the Department of Commerce in "25-year, 24-Hour Rainfall", Technical Paper 40, as the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years.

NPDES permits for CAFOs may include language similar to the effluent guidelines or language requiring the installation of diversion systems(smaller operations). Also, every NPDES permit must include the provisions of 40 CFR 122.41, including the upset and bypass provisions. This permit language will ensure that the permitted operation is not in violation of the permit or the CWA due to discharges that occur as a result of a chronic rainfall, providing that the operation is in compliance with all other permit conditions.

### 3.2 Retention Structure Capacity

Retention structures need to be designed, built, and maintained to prevent discharges that are caused by storms up to and including the 25-year, 24-hour storm. The capacity of the retention structure must be based on the amount of process generated wastewater generated by the facility and the volume of the expected runoff from a 25-year, 24-hour storm for all the contributing drainage areas (including open lot surfaces, roofed areas, and areas between lots and retention structures). However, an unpermitted concentrated animal feeding operation with a retention structure that is designed, built, and maintained to contain process wastewater and the runoff from a 25-year, 24-hour storm is not protected from liability under the CWA in the event of a discharge due to smaller storm events. While design and equipment effectiveness may increase the confidence of the unpermitted discharger, capacity alone provides little protection from enforcement in the event of a discharge. The capacity to contain all runoff from a 25-year, 24-hour storm event protects unpermitted facilities from violating the CWA only if it functions to actually prevent all discharges from smaller and chronic storm events.

Example: An unpermitted CAFO's waste handling system has the capacity to contain the expected volume of runoff from a 25-year, 24-hour rainfall event plus three week's worth of average daily process-generated wastewater production. It rains heavily for three weeks (a chronic rainfall), but the rainfall in any 24-hour period never exceeds the 25-year, 24-hour storm event. The facility's waste handling system reaches capacity and discharges to waters of the United States. The facility would be in violation of the Clean Water Act.

Example: A permitted CAFO's waste handling system has the capacity to contain the expected volume of runoff from a 25-year, 24-hour rainfall event plus three week's worth of average daily process-generated wastewater production. It rains heavily for three weeks (a chronic rainfall), but the rainfall in any 24-hour period never exceeds the 25-year, 24-hour storm event. The facility is covered by language identical to the effluent limitations guidelines in the permit and is not considered in violation of the CWA.

This interpretation was supported by Carr v. Alta Verde Industries, 931 F.2d 1055 (5th Cir. 1991), in which an unpermitted facility discharged as a result of chronic rainfall that did not qualify as a 25-year, 24-hour storm. The court ruled that such a facility was not exempted from CWA jurisdiction (and the NPDES permit program), and remained in continuing violation while discharging until it obtained a NPDES permit. Discharges from an unpermitted facility, other than those from a 25-year, 24-hour storm, are in violation of the CWA regardless of retention capacity.

## 4.0 OTHER REGULATORY PROGRAMS

This section discusses two provisions of the Coastal Zone Act Reauthorization Amendment of 1990 (CZARA) that apply to feedlots. Although a CAFO with a NPDES permit is exempt from CZARA, NPDES permitting efforts should be coordinated with CZARA and other applicable regulatory programs.

It also discusses Safe Drinking Water Act (SDWA) program, which apply to feedlots only in rare instances.

### 4.1 Coastal Zone Act Reauthorization Amendments of 1990

In its reauthorization of the Coastal Zone Management Act in 1990, Congress identified nonpoint source pollution as a major factor in the continuing degradation of coastal waters. Congress also recognized that effective solutions to nonpoint source pollution could be implemented at the State and local levels. Therefore, in the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Congress added Section 6217, which calls upon States with federally-approved coastal zone management programs to develop and implement coastal nonpoint pollution control programs. The §6217 program is administered at the federal level jointly by EPA and the National Oceanic and Atmospheric Agency (NOAA).

Section 6217(g) of CZARA called for EPA, in consultation with other agencies, to develop guidance on "management measures" for sources of nonpoint source pollution in coastal waters. Under §6217 of CZARA, EPA is responsible for developing technical guidance to assist States in designing coastal nonpoint pollution control programs. On January 19, 1993, EPA issued its *Guidance Specifying Management Measures For Sources of Nonpoint Pollution in Coastal Waters* which addresses five major source categories of nonpoint pollution:

- 1) Urban runoff;
- 2) Agriculture runoff;
- 3) Forestry runoff;
- 4) Marinas and recreational boating; and
- 5) Hydromodification.

The guidelines for the agriculture nonpoint source category specifically includes management measures for "confined animal facilities." The guidance also specifies management measures for erosion and sediment control, nutrient management on cropland, and grazing. These three additional management measures apply to facilities with livestock even if they are not confined animal facilities as defined by CZARA. However, they do not apply to CAFOs under the NPDES program. This section explains which feedlots are subject to the confined animal facility requirements of CZARA and discusses these requirements in more detail. It also briefly explains the nutrient management measure, which may be implemented by confined animal facilities.

#### What is the "Coastal Zone"?

Under the initial Coastal Zone Management Act of 1972, 35 States and territories are considered to have coastal waters. Participation in the coastal zone management program is voluntary.

Twenty-nine States have developed coastal zone management programs that were approved by NOAA. Of the other 6 States with coastal waters, 2 are not participating and 4 have programs currently in development.<sup>6</sup>

Each of these 29 States delineated a "coastal zone" for their program. In delineating a "coastal zone," States have implemented this language differently, depending on the specific geography and other circumstances in the State. In many States, the coastal zone extends inland a set distance, while in others the entire State is part of the coastal zone (e.g., Delaware and Florida).

### CZARA Approach

The original Coastal Zone Management Act of 1972 did not specifically address water quality concerns. The enactment of §6217 acknowledges the impact of nonpoint source pollution on coastal waters. States are to develop and implement coastal nonpoint pollution control programs that must be approved by NOAA and EPA. One of the first steps in program approval is to delineate a §6217 management area, which may or may not correspond to the previously established coastal zone.

NOAA made recommendations to the States in March 1993 for coastal zone boundary changes to address nonpoint pollution of coastal waters. In general, the recommendations are that coastal watersheds be used as boundaries for §6217. States may change their coastal zone boundaries to coincide with the program management area, or may use State authorities other than the Coastal Zone Management Act to implement management measures in areas outside of the coastal zone. The §6217 management area may be larger than the coastal zone to encompass all the activities that may contribute to nonpoint pollution of coastal waters; in no case may the program management area be smaller than the coastal zone.

EPA's *Guidance Specifying Management Measures For Sources of Nonpoint Pollution in Coastal Waters* specifies "management measures" designed to protect coastal waters from nonpoint source pollution. The management measures are the equivalent of technology-based controls for the nonpoint source program and are defined in CZARA §6217 as:

...economically achievable measures to control the addition of pollutants to our coastal waters, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.

To remain eligible for full federal funding under §319 of CWA and §306 of CZMA, coastal States must develop programs to implement the management measures in conformity with EPA's management measures guidance, including establishing enforceable policies and mechanisms to assure implementation of the measures. States, however, have flexibility to determine the most

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<sup>6</sup> The 29 States and territories currently participating in the program are: Alabama, Alaska, American Samoa, California, Connecticut, Delaware, Florida, Guam, Hawaii, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Northern Mariana Island, Oregon, Pennsylvania, Puerto Rico, South Carolina, Rhode Island, Virginia, U.S. Virgin Islands, Washington, Wisconsin. The four States currently developing programs are: Georgia, Minnesota, Ohio, and Texas. Illinois and Indiana are not participating in the coastal zone management program.

effective way to implement them within the management area. This flexibility allows for the enormous differences in the site-specific factors that influence the nature and amount of nonpoint source pollution, and the different mechanisms States have at their disposal to enact control programs. Different States may decide to use different management practices to achieve conformity with the required management measures. Management measures are not directly or automatically applicable to categories of nonpoint sources as a matter of federal law. Instead, it is the State Coastal Nonpoint Pollution Control Program, backed by the authority of State law, that provides for implementation of the management measures.

### CZARA Management Measures for Animal Feeding Operations

The effect of the CZARA management measures for feedlots is to subject smaller feedlots to requirements similar to those found in the NPDES regulations. Feedlots located in §6217 program management areas that are not CAFOs under the NPDES program may be subject to CZARA requirements. This section will outline the two management measures for confined animal facilities presented in EPA's CZARA guidance.

The first management measure for confined animal facilities in the EPA guidance applies, in §6217 management areas, to all new operations and existing "large" operations (as defined by the CZARA and explained below):

#### Management Measure for Facility Wastewater and Runoff from Confined Animal Facilities (New or Large Existing Facilities)

Limit the discharge from the confined animal facility to surface waters by:

- Storing both the facility wastewater *and* the runoff from confined animal facilities that is caused by storms up to and including a 25-year, 24-hour frequency storm. Storage facilities should:
  - (a) Have an earthen lining or plastic membrane lining, or
  - (b) Be constructed with concrete, or
  - (c) Be a storage tank.
- Managing stored runoff and accumulated solids from the facility through an appropriate waste utilization system.

This management measure applies to all new facilities regardless of size and to all existing confined animal facilities that contain more than a certain number of animals. As defined in EPA's guidance, a large facility is one that contains the numbers of livestock or equivalent animal units listed below.

	<u>Head</u>	<u>Animal Units</u>
Beef Feedlots	300	300
Stables(horses)	200	400
Dairies	70	98
Layers	15,000	150 (liquid manure system) 495 (continuous overflow watering system)
Broilers	15,000	150 (liquid manure system) 495 (continuous overflow watering system)
Turkeys	13,750	2,475
Swine	200	80

These cutoffs were developed based on an economic analysis for CZARA, and the numbers of animals are different than the numbers of animals used in the definition of a CAFO under the NPDES regulations. This does not impede implementation of the NPDES program since EPA's CZARA guidance states that any facility with a NPDES permit for concentrated animal feeding operations is exempt from CZARA requirements. If a facility subject to CZARA requirements is later designated as a CAFO by the Director of a NPDES permit program, that facility is no longer subject to the CZARA management measures. This means that a feedlot will never be subject to both NPDES and CZARA requirements at the same time.

This CZARA management measure has the same goal as the NPDES CAFO requirements: no discharge of wastewater or runoff from feedlots during storms equal to or smaller than the 25-year, 24-hour storm event. Both programs envision facilities designed with sufficient storage capacity to hold all wastewater and runoff up to and including the 25-year, 24-hour storm event, although CZARA has more stringent requirements for waste storage structures to protect groundwater. In addition, the CZARA management measure calls for stored runoff and accumulated solids from the facility to be managed through an appropriate waste utilization system. This requirement can be met through implementation of an appropriate nutrient management plan.

The second management measure for feedlots in EPA's CZARA guidance applies to "small existing units" (as defined in the CZARA and explained below):

**Management Measure for Facility Wastewater and Runoff from Confined Animal Facilities (Small Existing Units)**

Minimize the discharge of pollutants by:

- Designing and implementing systems that collect solids, reduce contaminant concentrations, and reduce runoff to minimize the discharge of contaminants in both facility wastewater and in runoff that is caused by storms up to and including a 25-year, 24-hour frequency storm. Implement these systems to substantially reduce significant increases in pollutant loading to groundwater.
- Managing stored runoff and accumulated solids from the facility through an appropriate waste utilization system.

This management measure applies to all existing operations that contain the following number of livestock or animal units:

	<u>Head</u>	<u>Animal Units</u>
Beef Feedlots	50-299	50-299
Stables(horses)	100-199	200-399
Dairies	20-69	28-97
Layers	5,000-14,999	50-149 (liquid manure system) 165-494 (continuous overflow watering system)
Broilers	5,000-14,999	50-149 (liquid manure system) 165-494 (continuous overflow watering system)
Turkeys	5,000-13,749	900-2,474
Swine	100-199	40-79

This management measure for smaller existing units calls for a somewhat less stringent level of control and was developed to minimize the economic impact on small operations (i.e., systems should minimize as opposed to limit discharges). This management measure also calls for proper land application of waste. Feedlots containing fewer than the number of livestock animal units listed above are not subject to the requirements of CZARA management measures.

*CZARA Nutrient Management Measure*

Under CZARA, States are required to develop plans for nutrient management for activities associated with the application of nutrients to agricultural lands. Use of nutrient management plans minimizes damage to groundwater and surface water and increases the efficiency of nutrient use by crops. Coastal zone States should implement the nutrient management measure through application of management practices and operation and maintenance requirements for nutrient application to agricultural land.

The nutrient management practices to use are those commonly suggested by the USDA and States for general use of agricultural lands, and each State may select those management practices most appropriate for its nutrient management needs. At a minimum, however, the nutrient management plans should conform to the management measure as described below.

#### Nutrient Management Measure

Develop, implement, and periodically update a nutrient management plan that includes the following core components:

- Farm and field maps indicating acreage, crops, soils, and waterbodies.
- Realistic yield expectations for the crop(s) grown.
- A summary of available nutrient resources including: soil test results for pH, phosphorus, nitrogen, and potassium; a nutrient analysis of manure or other effluent; nitrogen contribution to the soil from legumes grown in the rotation (if applicable); and, information on other significant nutrient sources (i.e. irrigation water).
- An evaluation of field limitations based on environmental hazards or concerns, such as: sinkholes, shallow soils over fractured bedrock, and soils with high leaching potential; lands near surface water; highly erodible soils; and, shallow aquifers.
- Use of the limiting nutrient concept to establish the mix of nutrient sources and requirements for the crop based on realistic yield expectations.
- Identification of application and timing methods for nutrients in order to: achieve realistic crop results, reduce losses to the environment, and avoid application to frozen soil or during periods of leaching or runoff.
- Provisions for the proper calibration and operation of nutrient application equipment.

The practices that can be used to implement and fulfill these management measures are described in detail in EPA's *Guidance Specifying Management Measures For Sources of Nonpoint Pollution in Coastal Waters*. The practices described in this reference are useful for feedlots with NPDES permits as well.

#### 4.2 The Safe Drinking Water Act

The following four programs established by the Safe Drinking Water Act (SDWA) may apply to select feedlots.

The Underground Injection Control Program (UIC) helps protect underground sources of drinking water by controlling the pollutants disposed of in injection wells. Injection wells that accept feedlot drainage are classified as agricultural drainage wells, one of the many types of Class V wells. Currently, all Class V wells are authorized by rule and are subject to inventory requirements at 40 CFR Part 144, but not to technical requirements. However, Class V wells are subject to a performance standard that prohibits movement of contaminants into an underground source of drinking water, if the contaminants could cause a violation of a drinking water standard or otherwise adversely affect human health. Well injection of feedlot waste and runoff is very uncommon. For that reason, the UIC program requirements will apply to very few feedlots. The Sole Source Aquifer Program includes development of a comprehensive management plan requiring identification of existing and potential point and nonpoint sources of groundwater

degradation, an assessment of the relationship between activities on the land surface and groundwater quality, and development of management practices to be implemented in the critical protection area. If identified as a source of groundwater degradation, a feedlot located above a sole source aquifer could be subject to additional management practices. In a sole source aquifer area, no federal financial assistance can be used for projects that could contaminate the aquifer and create a significant public health hazard. For feedlots above a sole source aquifer, permitting authorities should work with USDA-NRCS (Natural Resources Conservation Service) and USDA-CFSA (Conservation Farm Service Agency) to determine applicable waste retention requirements for facilities using federal cost-share funds.

The State Wellhead Protection Areas Program requires each State to adopt a program to protect wellhead areas from contaminants that may adversely affect human health. States determine the boundary of their wellhead protection areas and are required to identify all actual and potential sources of contaminants within each wellhead protection area. A feedlot within a designated wellhead protection area identified as a source of contaminants adversely affecting human health could be subject to additional discharge limitations or management practices.

The Surface Water Treatment Rule establishes criteria that public water systems must meet in order to avoid filtration. These criteria include identification of activities that may have an adverse effect on the quality of water sources, and demonstration through ownership or written agreements with land owners that all sources of human activities with potential for such adverse impact can be controlled. Feedlots located near such public water systems may be asked to enter into such a written agreement.

**APPENDIX A**

***NPDES Regulations for Concentrated Animal Feeding Operations***

## § 122.23

requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under §122.22(a)(1)(ii) rather than to specific individuals.'

(2) *For a partnership or sole proprietorship.* By a general partner or the proprietor, respectively; or

(3) *For a municipality, State, Federal, or other public agency.* By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

(b) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Director.

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Clean Water Act (33 U.S.C. 1251 *et seq.*), Safe Drinking Water Act (42 U.S.C. 300f *et seq.*), Clean Air Act (42 U.S.C. 7401 *et seq.*), Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*)

[48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39619, Sept. 1, 1983; 49 FR 38047, Sept. 29, 1984; 50 FR 6941, Feb. 19, 1985; 55 FR 48063, Nov. 16, 1990]

### § 122.23 Concentrated animal feeding operations (applicable to State NPDES programs, see § 123.25).

(a) *Permit requirement.* Concentrated animal feeding operations are point sources subject to the NPDES permit program.

(b) *Definitions.* (1) *Animal feeding operation* means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

(i) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and

(ii) Crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

(2) Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

(3) *Concentrated animal feeding operation* means an "animal feeding operation" which meets the criteria in appendix B of this part, or which the Di-

rector designates under paragraph (c) of this section.

(c) *Case-by-case designation of concentrated animal feeding operations.* (1) The Director may designate any animal feeding operation as a concentrated animal feeding operation upon determining that it is a significant contributor of pollution to the waters of the United States. In making this designation the Director shall consider the following factors:

(i) The size of the animal feeding operation and the amount of wastes reaching waters of the United States;

(ii) The location of the animal feeding operation relative to waters of the United States;

(iii) The means of conveyance of animal wastes and process waste waters into waters of the United States;

(iv) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes and process waste waters into waters of the United States; and

(v) Other relevant factors.

(2) No animal feeding operation with less than the numbers of animals set forth in appendix B of this part shall be designated as a concentrated animal feeding operation unless:

(i) Pollutants are discharged into waters of the United States through a manmade ditch, flushing system, or other similar manmade device; or

(ii) Pollutants are discharged directly into waters of the United States which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(3) A permit application shall not be required from a concentrated animal feeding operation designated under this paragraph until the Director has conducted an on-site inspection of the operation and determined that the operation should and could be regulated under the permit program.

APPENDIX B TO PART 122—CRITERIA FOR  
DETERMINING A CONCENTRATED ANI-  
MAL FEEDING OPERATION (§ 122.23)

An animal feeding operation is a concentrated animal feeding operation for purposes of § 122.23 if either of the following criteria are met.

(a) More than the numbers of animals specified in any of the following categories are confined:

- (1) 1,000 slaughter and feeder cattle,
- (2) 700 mature dairy cattle (whether milked or dry cows),
- (3) 2,500 swine each weighing over 25 kilograms (approximately 55 pounds),
- (4) 500 horses,
- (5) 10,000 sheep or lambs,
- (6) 55,000 turkeys,
- (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering),
- (8) 30,000 laying hens or broilers (if the facility has a liquid manure system),
- (9) 5,000 ducks, or
- (10) 1,000 animal units; or

(b) More than the following number and types of animals are confined:

- (1) 300 slaughter or feeder cattle,
- (2) 200 mature dairy cattle (whether milked or dry cows),
- (3) 750 swine each weighing over 25 kilograms (approximately 55 pounds),
- (4) 150 horses,
- (5) 3,000 sheep or lambs,
- (6) 16,500 turkeys,
- (7) 30,000 laying hens or broilers (if the facility has continuous overflow watering),
- (8) 9,000 laying hens or broilers (if the facility has a liquid manure handling system),
- (9) 1,500 ducks, or
- (10) 300 animal units;

and either one of the following conditions are met: pollutants are discharged into navigable waters through a manmade ditch, flushing system or other similar man-made device; or pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

Provided, however, that no animal feeding operation is a concentrated animal feeding operation as defined above if such animal feeding operation discharges only in the event of a 25 year, 24-hour storm event.

The term *animal unit* means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations
TSS .....	Not to exceed 50 mg/l.
pH .....	Within the range 6.0 to 9.0.

(b) Any overflow from facilities designed, constructed and operated to treat to the applicable limitations the precipitation and runoff resulting from a 10-year, 24-hour precipitation event shall not be subject to the limitations of this section.

[42 FR 10681, Feb. 23, 1977]

#### § 411.36 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the materials storage piles runoff subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR part 128, except that, for the purpose of this section, §128.133 of this title shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 411.35; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

#### § 411.37 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.

Effluent characteristic	Effluent limitations
TSS .....	Not to exceed 50 mg/l.
pH .....	Within the range 6.0 to 9.0.

(b) Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff from materials storage piles which results from a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated in paragraph (a) of this section.

[39 FR 6591, Feb. 20, 1974. Redesignated and amended at 44 FR 50741, Aug. 29, 1979]

## PART 412—FEEDLOTS POINT SOURCE CATEGORY

### Subpart A—All Subcategories Except Ducks

Sec.

- 412.10 Applicability; description of all subcategories except ducks.
- 412.11 Specialized definitions.
- 412.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 412.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 412.14 Pretreatment standards for existing sources.
- 412.15 Standards of performance for new sources.
- 412.16 Pretreatment standards for new sources.
- 412.17 [Reserved]

### Subpart B—Ducks Subcategory

- 412.20 Applicability; description of the duck subcategory.
- 412.21 Specialized definitions.

- 412.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 412.23 [Reserved]
- 412.24 Pretreatment standards for existing sources.
- 412.25 Standards of performance for new sources.
- 412.26 Pretreatment standards for new sources.

AUTHORITY: Secs. 301, 304 (b) and (c), 306 (b) and (c), and 307(c) of the Federal Water Pollution Control Act, as amended; 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), and 1317(c); 86 Stat. 816 et seq., Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217.

SOURCE: 39 FR 5706, Feb. 14, 1974, unless otherwise noted.

### Subpart A—All Subcategories Except Ducks

#### § 412.10 Applicability; description of all subcategories except ducks.

The provisions of this subpart are applicable to discharges of pollutants resulting from feedlots in the following subcategories: Beef cattle—open lots; beef cattle—housed lots; dairy cattle—stall barn (with milk room); dairy—free stall barn (with milking center); dairy—cowyards (with milking center); swine—open dirt or pasture lots; swine—housed, slotted floor; swine—solid concrete floor, open or housed lot; sheep—open lots; sheep—housed lots; horses—stables (race tracks); chickens—broilers, housed; chickens—layers (egg production), housed; chickens—layer breeding or replacement stock; housed; turkeys—open lots; turkeys—housed; and for those feedlot operations within these subcategories as large or larger than the capacities given below:

1,000 slaughter steers and heifers; 700 mature dairy cattle (whether milkers or dry cows); 2,500 swine weighing over 55 pounds; 10,000 sheep; 55,000 turkeys; 100,000 laying hens or broilers when facility has unlimited continuous flow watering systems; 30,000 laying hens or broilers when facility has liquid manure handling system; 500 horses; and 1,000 animal units from a combination of slaughter steers and heifers, mature dairy cattle, swine over 55 pounds and sheep.

#### § 412.11 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in part 401 of this chapter shall apply to this subpart.

(b) The term *feedlot* shall mean a concentrated, confined animal or poultry growing operation for meat, milk or egg production, or stabling, in pens or houses wherein the animals or poultry are fed at the place of confinement and crop or forage growth or production is not sustained in the area of confinement.

(c) The term *process waste water* shall mean any process generated waste water and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

(d) The term *process generated waste water* shall mean water directly or indirectly used in the operation of a feedlot for any or all of the following: Spillage or overflow from animal or poultry watering systems; washing, cleaning or flushing pens, barns, manure pits or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust control.

(e) The terms *10 year, 24 hour rainfall event* and *25 year, 24 hour rainfall event* shall mean a rainfall event with a probable recurrence interval of once in ten years or twenty-five years, respectively, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

(f) The term *open lot* shall mean pens or similar confinement areas with dirt, or concrete (or paved or hard) surfaces wherein animals or poultry are substantially or entirely exposed to the outside environment except for possible small portions affording some protection by windbreaks, small shed-type shade areas. For the purposes hereof the term "open lot" is synonymous with the terms "cowyard" (dairy cattle), "pasture lot" (swine), and "dirt lot" (swine, sheep or turkeys), "dry

## §412.12

lot" (swine, cattle, sheep, or turkeys) which are terms widely used in the industry.

(g) The term *housed lot* shall mean totally roofed buildings which may be open or completely enclosed on the sides wherein animals or poultry are housed over solid concrete or dirt floors, slotted (partially open) floors over pits or manure collection areas in pens, stalls or cages, with or without bedding materials and mechanical ventilation. For the purposes hereof, the term "housed lot" is synonymous with the terms "slotted floor" buildings (swine, beef), "barn" (dairy cattle) or "stable" (horses), "houses" (turkeys, chickens), which are terms widely used in the industry.

(h) The term *stall barn* shall mean specialized facilities wherein producing cows and replacement cows are milked and fed in a fixed location.

(i) The term *free stall barn* shall mean specialized facilities wherein producing cows are permitted free movement between resting and feeding areas.

(j) The term *milkroom* shall mean milk storage and cooling rooms normally used for stall barn dairies.

(k) The term *milking center* shall mean a separate milking area with storage and cooling facilities adjacent to a free stall barn or cowyard dairy operation.

### **§412.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Adminis-

trator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharge effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: There shall be no discharge of process waste water pollutants to navigable waters.

(b) Process waste pollutants in the overflow may be discharged to navigable waters whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 10-year, 24-hour rainfall event for the location of the point source.

### **§412.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

(a) Subject to the provisions of paragraph (b) of this section, the following

limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: There shall be no discharge of process waste water pollutants to navigable waters.

(b) Process waste pollutants in the overflow may be discharged to navigable waters whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 25-year, 24-hour rainfall event for the location of the point source.

**§ 412.14 Pretreatment standards for existing sources.**

The pretreatment standards under section 307(b) of the Act for a source within all subcategories except ducks which is a user of a publicly owned treatment works and a major contributing industry as defined in 40 CFR part 128 (and which would be an existing point source subject to section 301 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR part 128, except that, for the purpose of this section, 40 CFR 128.121, 128.122, 128.132, and 128.133 shall not apply. The following pretreatment standard establishes the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged to a publicly owned treatment works by a point source subject to the provisions of this subpart.

Pollutant or pollutant property	Pretreatment standard
Fecal coliform .....	No limitation.
BOD5 .....	Do.

[40 FR 6440, Feb. 11, 1975]

**§ 412.15 Standards of performance for new sources.**

(a) Subject to the provisions of paragraph (b) of this section, the following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a source subject to the provisions of this subpart: There shall be

no discharge of process waste water pollutants to navigable waters.

(b) Process waste pollutants in the overflow may be discharged to navigable waters whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 25-year, 24-hour rainfall event for the location of the point source.

**§ 412.16 Pretreatment standards for new sources.**

The pretreatment standards under section 307(c) of the Act for a source within all subcategories except ducks which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this title shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 412.15; *Provided* That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

**§ 412.17 [Reserved]**

**Subpart B—Ducks Subcategory**

**§ 412.20 Applicability; description of the ducks subcategory.**

The provisions of this subpart are applicable to discharges of pollutants resulting from feedlots for the following subcategories: Ducks—dry lot; ducks—wet lot; and for those feedlot operations within these subcategories as large or larger than the capacities given below:

5,000 ducks

## §412.21

### § 412.21 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in Part 401 of this chapter shall apply to this subpart.

(b) The term *feedlot* shall mean a concentrated, confined animal or poultry growing operation for meat, milk or egg production, or stabling, in pens or houses wherein the animals or poultry are fed at the place of confinement and crop or forage production or growth is not sustained in the area of confinement.

(c) The term *process waste water* shall mean any process generated waste water and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animal or poultry or direct products (e.g. milk, eggs).

(d) The term *process generated waste water* shall mean water directly or indirectly used in the operation of a feedlot for any or all of the following: Spillage or overflow from animal or poultry watering systems; washing, cleaning or flushing pens, barns, manure pits or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust control.

(e) The terms *10-year, 24-hour rainfall event* and *25-year, 24-hour rainfall event* shall mean a rainfall event with a probable recurrence interval of once in ten years or twenty-five years, respectively, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

(f) The term *dry lot* shall mean a confinement facility for growing ducks in confinement with a dry litter floor cover and no access to swimming areas.

(g) The term *wet lot* shall mean a confinement facility for raising ducks which is open to the environment with a small portion of shelter area, and with open water runs and swimming areas to which ducks have free access.

### § 412.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after ap-

plication of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kg/1,000 ducks)	
BOD5 .....	1.66	0.91
Fecal coliform .....	( <sup>1</sup> )	( <sup>1</sup> )
	English units (lb/1,000 ducks)	
BOD5 .....	3.66	2.00
Fecal coliform .....	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Not to exceed mpn of 400/100 ml at any time.  
<sup>2</sup> See above (not typically expressed in English units).

§ 412.23 [Reserved]

§ 412.24 Pretreatment standards for existing sources.

The pretreatment standards under section 307(b) of the Act for a source within the ducks subcategory which is a user of a publicly owned treatment works and a major contributing industry as defined in 40 CFR part 128 (and which would be an existing point source subject to section 301 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR part 128, except that, for the purpose of this section, 40 CFR 128.121, 128.122, 128.132, and 128.133 shall not apply. The following pretreatment standard establishes the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged to a publicly owned treatment works by a point source subject to the provisions of this subpart.

Pollutant or pollutant property	Pretreatment standard
Fecal coliform .....	No limitation.
BOD5 .....	Do.

[40 FR 6440, Feb. 11, 1975]

§ 412.25 Standards of performance for new sources.

(a) Subject to the provisions of paragraph (b) of this section, the following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a source subject to the provisions of this subpart: There shall be

no discharge of process waste water pollutants to navigable waters.

(b) Process waste pollutants in the overflow may be discharged to navigable waters whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste 24-hour rainfall event for the location of the point source.

§ 412.26 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the ducks subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in part 128, of this chapter, except that, for the purpose of this section, §128.133 of this title shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 412.15; *Provided That*, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standard providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

**APPENDIX B**

*Sample Inspection Report*

**APPENDIX B**  
**SAMPLE**  
**ANIMAL FEEDING OPERATION INSPECTION REPORT**  
**(Name of permitting authority)**

**I. GENERAL INFORMATION**

Inspector's Name \_\_\_\_\_ Arrival Time \_\_\_\_\_

Departure Time \_\_\_\_\_

Facility Name \_\_\_\_\_ Owner Name/Operator Name \_\_\_\_\_

Facility Location \_\_\_\_\_ Owner Address/Operator Address \_\_\_\_\_

Name and position of individual to whom credentials presented \_\_\_\_\_

Weather conditions immediately prior to and during inspection \_\_\_\_\_

**II. FACILITY OPERATION INFORMATION**

1. What type of operation is the facility?

<input type="checkbox"/> Dairy Cattle	<input type="checkbox"/> Turkeys	<input type="checkbox"/> Livestock Market
<input type="checkbox"/> Beef Cattle	<input type="checkbox"/> Swine	<input type="checkbox"/> Racetrack/Rodeo
<input type="checkbox"/> Chickens	<input type="checkbox"/> Horses	<input type="checkbox"/> Other _____

2. How many and what type of animals are present?

<input type="checkbox"/> Dairy Cattle	No. of animals _____
<input type="checkbox"/> Swine(Over 55lbs.)	No. of animals _____
<input type="checkbox"/> Beef Cattle	No. of animals _____
<input type="checkbox"/> Horses	No. of animals _____
<input type="checkbox"/> Sheep and/or Lambs	No. of animals _____
<input type="checkbox"/> Chickens	No. of animals _____
<input type="checkbox"/> Turkeys	No. of animals _____
<input type="checkbox"/> Other _____	No. of animals _____

3. Approximate number of days animals are stabled/confined and fed/maintained over any 12-month period (provide source of the information)

\_\_\_\_\_

4. Are any crops, vegetation, forage growth, or post-harvest residues sustained in the normal growing season over any portion of the lot or facility (provide source of this information)

\_\_\_\_\_

5. Is the facility located near a surface water? (If so, provide proximity of surface water)

\_\_\_\_\_

## SAMPLE

6. Do the animals enter or cross surface water (e.g., rivers, streams, canals) on a regular basis? Yes \_\_\_\_\_ No \_\_\_\_\_
7. Were animals observed in surface water? Yes \_\_\_\_\_ No \_\_\_\_\_

### III. WASTE HANDLING, TREATMENT, AND/OR MANAGEMENT OPERATIONS

1. Describe the types of confinement (i.e., free stall barns, sheltered or limited shelter dirt lots, paved or dirt open lots, swine houses) \_\_\_\_\_

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2. Describe the types of waste handling used (i.e., direct spreading in solid form, slotted floor with lagoon or pit, single or multi-cell lagoon, aerated lagoon, land application of liquid manure, spray irrigation, contractor disposal, etc.)

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3. If there is a waste storage lagoon give capacity and state how the dimensions were obtained (i.e., measured, estimated, information from the operator)

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4. Is there a nutrient management plan (i.e., land application records) kept on-site? \_\_\_\_\_

5. Can pollutants from the disposal of wastes and wastewaters enter a surface water, drybed, ditch, canal, etc.? If yes, name the surface water, drybed, ditch, canal, etc., and describe how the discharge may occur

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### IV. DISCHARGE INFORMATION

If there is evidence of a discharge or a discharge was observed, obtain answers to the following questions and indicate how the information was obtained. Also, take a sample from the source of the discharge and take photographs of the discharge or evidence of the discharge

1. Did the discharge occur through or because of a man-made ditch, flushing system or similar man-made device (i.e., man-made shaping or grading or man-made alteration to property, trough)?

Yes \_\_\_\_\_ No \_\_\_\_\_

Explain how and why the discharge occurred \_\_\_\_\_

## SAMPLE

2. List any other discharges which have occurred at the facility and describe how and why the discharges occurred (e.g., failure of manure storage structure, 25-year, 24-hour storm)

\_\_\_\_\_

\_\_\_\_\_

3. Provide the type (ditch, canal, stream, river, drybed) and name of the water body receiving the discharge \_\_\_\_\_

\_\_\_\_\_

4. Was the discharge:

Process-generated wastewater	Yes	___	No	___
Animal waste	Yes	___	No	___
Rain or snow runoff	Yes	___	No	___

If another type of discharge, please describe \_\_\_\_\_

5. What is the 25-year, 24-hour rainfall amount for this location? \_\_\_\_\_

### V. WATER QUALITY ASSESSMENT

1. Does a surface water, drybed, ditch, canal, etc. pass over, across, through, or along side the area where the animals are confined?

\_\_\_\_\_

2. If the answer to #1 is no, what is the distance from the area where the animals are confined to a surface water, dry bed, ditch, canal, etc?

\_\_\_\_\_

3. If there is a buffer or diversion structure, describe the condition of the buffer or diversion structure \_\_\_\_\_

\_\_\_\_\_

4. Describe where the surface water originates and where it flows once it has received a discharge \_\_\_\_\_

\_\_\_\_\_

5. Describe other animal operations in the immediate vicinity and their proximity to the same or other surface waters \_\_\_\_\_

\_\_\_\_\_

6. Provide information on the nearby surface water, such as uses, known impairment, etc. \_\_\_\_\_

\_\_\_\_\_

### VI. RECOMMENDATIONS

## **SAMPLE**

1. Describe any compliance suggestions or recommendations given to facility owner/operator \_\_\_\_\_

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2. Recommendations for further action (e.g., designate as a CAFO, schedule a follow-up inspection, no action)

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### **VII. FACILITY DIAGRAM**

Attach a sketch of the facility layout, including pertinent information such as surface water, discharge location, buildings, fencing, etc.

**APPENDIX C**

***Glossary***

## Glossary

**25-Year, 24-Hour Storm Event** - The maximum 24-hour precipitation event expressed in inches with a probable recurrence interval of once in 25 years, as defined by the National Weather Service.

**Aerobic** - The presence of free oxygen, or the use of bacteria and free oxygen to reduce organic matter.

**Anaerobic** - The absence of oxygen, or the use of anaerobic bacteria to reduce organic matter.

**Animal feeding operation** - A lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of at least 45 days in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season.

**Animal unit** - A unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

**Best available technology (BAT)** - A level of reduction determined to be economically achievable through the use of the best available technology according to 301(b)(2)(a) and §402(a)(1) of the Clean Water Act. The criteria and standards for establishing technology-based permit requirements are listed in 40 CFR 125.3.

**Best Conventional Pollutant Control Technology (BCT)** - A level of treatment that succeeds BPT (Best Practical Control Technology Currently Available) for conventional pollutants. The deadline for achieving BCT was July 1, 1984 but was changed in the 1987 amendments to March 31, 1989.

**Best management practices (BMPs)** - Schedules of activities, prohibitions, maintenance procedures, and other management practices found to be the most effective and practicable methods to prevent or reduce the discharge of pollutants to waters of the United States. Best management practices also include operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Clean Water Act** - The Clean Water Act, found at 33 USC 1251 et seq., previously called the Federal Water Pollution Control Act.

**Concentrated animal feeding operation** - An animal feeding operation that meets the criteria in 40 CFR Part 122, Appendix B, or that the Director designates as a significant contributor of pollution pursuant to 40 CFR 122.23(c). Animal feeding operations defined as concentrated in 40 CFR 122, Appendix B are as follows:

1. A lot or facility that stables or confines and feeds or maintain for a total of 45 days or more in any 12-month period more than the number of animals specified in any of the following categories:
  - a. 1,000 slaughter or feeder cattle,
  - b. 700 mature dairy cattle (whether milkers or dry cows),
  - c. 2,500 swine each weighing over 25 kilograms (approximately 55 pounds),
  - d. 500 horses,
  - e. 10,000 sheep or lambs,
  - f. 55,000 turkeys,
  - g. 100,000 laying hens or broilers (when the facility has unlimited continuous flow watering systems),
  - h. 30,000 laying hens or broilers (when facility has liquid manure handling system),
  - i. 5,000 ducks,
  - j. 1,000 animal units.
  
2. A lot or facility that discharges pollutants into waters of the United States either through a man-made ditch, flushing system, or other similar man-made device; or directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation and that stable or confine and feed or maintain for a total of 45 days or more in any 12-month period more than the numbers of animals in the following categories:
  - a. 300 slaughter of feeder cattle,
  - b. 200 mature dairy cattle (whether milkers of dry cows),
  - c. 750 swine (each weighing over 25 kilograms),
  - d. 150 horses,
  - e. 3,000 sheep or lambs,
  - f. 16,000 turkeys,
  - g. 30,000 laying hens or broilers (when the facility has unlimited continuous flow watering systems),
  - h. 9,000 laying hens or broilers (when facility has liquid manure handling system),
  - i. 1,500 ducks, or
  - j. 300 animal units.

Provided, however, that no animal feeding operation is a concentrated animal feeding operation as defined above if such animal feeding operation discharges only in the event of a 25-year, 24-hour storm event.

**Concrete and earthen pit** - A structure for storage of liquid or solid manure with a concrete floor and earthen sides that may include a filter wall or picket dam to allow liquid to drain from one side to a separate compartment.

**Concrete tank** - A tank constructed entirely of concrete and located under the animal confinement so that manure falls directly into the tank.

**Confinement feeding** - Feeding in limited quarters, often under a roof and over slotted floors.

**Control facility** - Any system used for retention of wastes on the premises prior to their ultimate disposal, which may include the retention of manure, liquid waste, and runoff from the feedlot area.

**Earthen pit** - A liquid manure storage structure constructed entirely of natural soil, hauled-in clay or soil, and bentonite.

**Filter walls** - A wall with drain holes in it constructed entirely of natural soil, hauled-in clay or soil, and bentonite.

**Gutter** - A channel or trough used to carry liquid waste.

**Gutter Cleaner** - A device installed in shallow, narrow gutters to carry the manure to a stacker for piling.

**Holding pond** - A detention device that stores runoff water from a settling basin.

**Lagoon** - A reservoir or pond built to contain water and animal wastes until they can be removed or decomposed either by aerobic or anaerobic action.

**Land application** - The removal of wastewater and waste solids from a waste control facility and distribution to, or incorporation into, the soil mantle primarily for disposal purposes.

**Liner** - A barrier in the form of a layer, membrane, or blanket installed to prevent discharges from retention structures to waters of the United States, through groundwater that has a hydrologic connection to surface waters.

**Liquid manure** - A mixture of water and manure, usually less than 10 percent solids.

**Liquid tight concrete pit** - An outside manure pit constructed so that the entire wetted area is concrete.

**Livestock Waste** - Animal waste, but also may include bedding, feed, and other by-products of an animal feeding operation.

**Man-made discharging devices** - A pipeline, ditch, or drain tile that discharges into Waters of the United States. Any object that carries waste or runoff (pipes, terraces, irrigation systems, tractors with bucket scoops, etc.).

**Open confinement** - A fenced area where the animals are fed, but that is not a pasture. Generally an open animal feeding operation will have a high density of animals, will have little or no vegetation, and will be covered with a manure pack that requires periodic cleaning.

**Open feedlot** - (See open confinement, above).

**Process wastewater** - Any process-generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g., milk, eggs).

**Process-generated wastewater** - Water used either directly or indirectly by an animal feeding operation for various uses, including: spillage or overflow from animal poultry watering systems; washing, cleaning, flushing pens, barns, manure pits, or other feedlot facilities; direct contact swimming, washing, or spray cooling of animals, and dust control.

**Retention facility or Retention structures** - All collection ditches and conduits for the collection of runoff and wastewater, and all basins, ponds, and lagoons used to store wastes, wastewaters, and manures.

**Settling basin (or channels)** - Type of temporary runoff storage area where the liquids flow at a very slow velocity, which allows the solids to settle out and the liquids to drain out slowly.

**The Act** - Federal Water Pollution Control Act as amended, also known as the Clean Water Act, found at 33 USC 1251 et seq.

**Waste retention pond (or retention lagoon)** - Excavated or diked structures or natural depressions provided for or used for the purpose of holding animal wastes and other associated animal feeding operation materials.

**Waste treatment facilities** - Structures and/or devices that stabilize, or otherwise control pollutants so that after discharge of treated wastes, water pollution does not occur and the public health and the beneficial uses of Waters of the United States are adequately protected.

### **Waters of the United States**

1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
2. All interstate waters, including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

- a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or,
  - c. Which are or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
  5. Tributaries of waters identified in paragraphs (1) through (4) of this definition.
  6. The territorial sea; and
  7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1 through 6 of this definition.

**Wetlands** - Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

**APPENDIX D**

***Bibliography***

## BIBLIOGRAPHY

### Publications and Reports

Bodman, G.R., Dashazer, J.A., et al., *Beef Housing and Equipment Handbook*, Midwest Plan Service, Iowa State University, Fourth Edition. 1987.

Ensminger, M.E., *Animal Science (Animal Agriculture Series)*, Interstate Publishers, Inc., Danville, IL, Ninth Edition. 1989.

Howard, K. and T. Plasto, *Feedlotting: A Guide for Beef Producers*, Queensland Department of Primary Industries Information Services, Brisbane, Australia. 1991.

Iowa Department of Natural Resources, *Environmental Regulations and Guidelines for Animal Feeding Operations in Iowa*, Iowa Department of Natural Resources. 1992.

Manges, H.L., Lipper, R.J., et al., *Treatment and Ultimate Disposal of Cattle Feedlot Wastes*, EPA 660/2-75-013. 1975.

Ontario Soil and Crop Improvement Association, *Manure Management Handbook*, Ontario Soil and Crop Improvement Association, Ontario, Canada. 1982.

Sutton, Alan L. "Animal Agriculture's Effect on Water Quality," *Water Quality*, Department of Agriculture, Purdue University, West Lafayette, IN. July 1990.

Swanson, N.P., Mielke, et al., "Transport of Pollutants from Sloping Cattle Feedlots as Affected by Rainfall Intensity, Duration, and Recurrence," *Livestock Waste Management and Pollution Abatement*, American Society of Agricultural Engineers, St. Joseph, WI, pp. 51-55. 1971.

U.S. Department of Agriculture, *Agricultural Waste Management Field Handbook*, U.S. Department of Agriculture, Soil Conservation Service, Washington, DC. 1992.

U.S. Department of Commerce, *25 Year, 24 Hour Rainfall (Inches)*, Technical Paper 40, U.S. Department of Commerce, Weather Bureau, Washington, DC.

U.S. Environmental Protection Agency, *Development Document for Effluent Limitations Guidelines and New Source Performance Standard for the Feedlots Point Source Category*, U.S. Environmental Protection Agency, Office of Air and Water Programs, EPA 440/1-74-004-a. 1974.

U.S. Environmental Protection Agency, *Feedlots Case Studies of Selected States*, U.S. Environmental Protection Agency, Feedlot Workgroups, Washington, DC. 1993.

U.S. Environmental Protection Agency, *Preliminary Economic Achievability Analysis: Agricultural Management Measures*, U.S. Environmental Protection Agency, Office of Policy, Planning, and Evaluation, Washington, DC. 1992.

U.S. Environmental Protection Agency, *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, U.S. Environmental Protection Agency, Office of Water, Washington, DC. January 1993.

U.S. Environmental Protection Agency, *Summary of Water Pollution from Feedlot Waste: An Analysis of its Magnitude and Geographic Distribution*, U.S. Environmental Protection Agency, Feedlots Workgroup, Washington, DC. 1993.

Young, R.A., et al., "Effectiveness of Vegetated Buffer Strips in Controlling Pollution from Feedlot Runoff," *Journal of Environmental Quality*, pp. 483-487. July/Sept. 1980.

Young, R.A., et al. *An Evaluation System to Rate Feedlot Pollution Potential*, Agriculture Research Service, U.S. Department of Agriculture, Washington, DC. 1982.

### **Laws and Regulations**

*The Clean Water Act as Amended by the Water Quality Act of 1987*, Public Law 100-4, Senate Committee on Environment and Public Works, 100th Cong., 2d Session (1988).

*Criteria for Determining a Concentrated Animal Feeding Operation*, 40 CFR §122, Appendix B (1992).

*Concentrated Animal Feeding Operations*, 40 CFR §122.23 (1992).

*Effluent Guidelines and Standards: Feedlots Point Sources Category*, 39 FR 5704 (Feb. 14, 1974).

*EPA Effluent Guidelines and Standards for Feedlots*, 40 CFR 412 (Revised through July 1, 1991).

*National Pollutant Discharge Elimination System and State Program Elements Necessary for Participation: Concentrated Animal Feeding Operations*, 40 FR 54182 (Nov. 20, 1975).

*National Pollutant Discharge Elimination System General Permit and Reporting Requirements for Discharges from Concentrated Animal Feeding Operations (Region 6 Final Notice)*, 58 FR 7610 (Feb. 8, 1993).

*State Program Elements Necessary for Participation in the National Pollutant Discharge Elimination System: Concentrated Animal Feeding Operations*, 41 FR 11458 (Mar. 18, 1976).22

**APPENDIX E**

***Fact Sheet - Southview Farm Case***

***Agricultural Point Sources and the Concerned Area Residents for the Environment v. Southview Farm***

The CWA does not regulate manure spreading operations in general -- only manure spreading by CAFOs. As explained previously, CAFOs are the only feedlots subject to regulation under the point source permit program. If a feedlot is not a CAFO, it is not a point source. In a recent Second Circuit case, Concerned Area Residents for the Environment v. Southview Farm, the Circuit Court agreed with the citizen plaintiffs' alternative argument that, "manure spreading vehicles themselves were point sources. The collection of liquid manure into tankers and their discharge on fields from which the manure directly flows into navigable waters are point sources under the case law." Southview Farm, 34 F.3d 114, 119 (2d Cir. 1994). EPA does not endorse this interpretation in general and believes it was only applicable to the Southview Farm case. Furthermore, EPA believes it was unnecessary for the Court to make this point in determining that Southview Farms was a CAFO because Southview Farm operated a "large" CAFO (more than 1,000 animal units). As a large CAFO, the means of conveyance (i.e., manure spreading vehicles) was irrelevant for determining whether there was a point source discharge.



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