

Environmental Protection Agency

§412.4

(e) *Land application area* means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied.

(f) *New source* is defined at 40 CFR 122.2. New source criteria are defined at 40 CFR 122.29(b).

(g) *Overflow* means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.

(h) *Production area* means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(i) *Ten (10)-year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event* mean precipitation events with a probable recurrence interval of once in ten years, or twenty five years, or one hundred years, respectively, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.

(j) *Analytical methods*. The parameters that are regulated or referenced in this part and listed with approved methods of analysis in Table 1B at 40 CFR 136.3 are defined as follows:

(1) *Ammonia (as N)* means ammonia reported as nitrogen.

(2) *BOD5* means 5-day biochemical oxygen demand.

(3) *Nitrate (as N)* means nitrate reported as nitrogen.

(4) *Total dissolved solids* means nonfilterable residue.

(k) The parameters that are regulated or referenced in this part and listed with approved methods of analysis in Table 1A at 40 CFR 136.3 are defined as follows:

(1) *Fecal coliform* means fecal coliform bacteria.

(2) *Total coliform* means all coliform bacteria.

§412.3 General pretreatment standards.

Any source subject to this part that introduces process wastewater pollutants into a publicly owned treatment works (POTW) must comply with 40 CFR part 403.

§412.4 Best management practices (BMPs) for land application of manure, litter, and process wastewater.

(a) *Applicability*. This section applies to any CAFO subject to subpart C of this part (Dairy and Beef Cattle other than Veal Calves) or subpart D of this part (Swine, Poultry, and Veal Calves).

(b) *Specialized definitions*.

(1) *Setback* means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: Open tile line intake structures, sinkholes, and agricultural well heads.

(2) *Vegetated buffer* means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

(3) Multi-year phosphorus application means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, litter, or process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

(c) *Requirement to develop and implement best management practices.* Each CAFO subject to this section that land applies manure, litter, or process wastewater, must do so in accordance with the following practices:

(1) *Nutrient Management Plan.* The CAFO must develop and implement a nutrient management plan that incorporates the requirements of paragraphs (c)(2) through (c)(5) of this section based on a field-specific assessment of the potential for nitrogen and phosphorus transport from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters.

(2) *Determination of application rates.* Application rates for manure, litter, and other process wastewater applied to land under the ownership or operational control of the CAFO must minimize phosphorus and nitrogen transport from the field to surface waters in compliance with the technical standards for nutrient management established by the Director. Such technical standards for nutrient management shall:

(i) Include a field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters, and address the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters; and

(ii) Include appropriate flexibilities for any CAFO to implement nutrient management practices to comply with the technical standards, including consideration of multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff to

surface water, phased implementation of phosphorus-based nutrient management, and other components, as determined appropriate by the Director.

(3) *Manure and soil sampling.* Manure must be analyzed a minimum of once annually for nitrogen and phosphorus content, and soil analyzed a minimum of once every five years for phosphorus content. The results of these analyses are to be used in determining application rates for manure, litter, and other process wastewater.

(4) *Inspect land application equipment for leaks.* The operator must periodically inspect equipment used for land application of manure, litter, or process wastewater.

(5) *Setback requirements.* Unless the CAFO exercises one of the compliance alternatives provided for in paragraph (c)(5)(i) or (c)(5)(ii) of this section, manure, litter, and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters.

(i) *Vegetated buffer compliance alternative.* As a compliance alternative, the CAFO may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited.

(ii) *Alternative practices compliance alternative.* As a compliance alternative, the CAFO may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot setback.

Subpart A—Horses and Sheep

§412.10 Applicability.

This subpart applies to discharges resulting from the production areas at horse and sheep CAFOs. This subpart does not apply to such CAFOs with less than the following capacities: 10,000 sheep or 500 horses.