



Maryland Setback Standards and Approved Alternatives Consistent with CAFO/MAFO Requirements

The Maryland Department of the Environment's (the "Department") current regulations governing the control of water pollution to address permit requirements for Concentrated Animal Feeding Operations (CAFOs) and Maryland Animal Feeding Operations (MAFO) include options for manure application setback standards. These setback standards can be found in the Code of Maryland Regulations (COMAR) 26.08.03.09b(1), as well as in the federal regulations at 40 CFR Part 412.4(c)(5).

As written in Part IVB8 of the General Discharge (GD) Permit for Animal Feeding Operations (NPDES Permit No. MDG01A, Maryland Permit No 14AFA), the setback provisions include:

For both CAFOs and MAFOs:

- a. A setback of at least 100' from waters of the State, including field ditches, other conduits, intermittent streams, and drinking water wells, shall be maintained; or an approved alternative may be substituted for the 100' setback;
- b. A setback of at least 100' from property lines shall be maintained, unless an approved alternative setback for property lines is established with the consent of the adjacent property owner.

Approved Alternative Setbacks for poultry MAFOs ONLY:

For slopes of 2% or less, a MAFO may satisfy the land application setback and buffer requirements of this permit by maintaining: 1) a vegetated filter strip at least 10 feet wide along field ditches and in the final 35 feet of the field ditches (applicable to ditch embankments and, to the maximum extent practicable, the channel) adjoining the receiving waters or the facility boundary, whichever occurs first, 2) a 35' vegetated filter strip or 3) a 50' setback from all other surface waters of the State.

Approved Alternative Setbacks for both CAFOs and MAFOs:

The following are the approved alternatives to the 100-foot setback, which have been established by MDE in consultation with the Maryland Department of Agriculture (MDA), Natural Resources Conservation Service (NRCS) and the University of Maryland Extension (UME).

- **Option 1: A 35-foot vegetative buffer strip established in accordance with the NRCS Practice Standards 390, 391, or 393, or systems as approved by MDE in coordination with the MDA, NRCS and UME which is included in the GD Permit.**

The buffer strip shall consist of a permanent vegetative planting that is not part of a cropland or pasture rotation. The location, layout, and density of the buffer strip shall reflect the intended purpose of the practice, conditions of the site, and the objectives of the land user. Site preparation and planting to establish the buffer strip shall be done at a time and manner to insure survival and growth of the selected species. Select plant species that are native to Maryland, or are introduced and are non-invasive (i.e., not likely to spread beyond the planted area and displace native

species). See Maryland NRCS 390, 391, and 393 Conservation Practice Standards for more details. Existing naturally vegetated areas may also qualify as buffers if they meet the criteria in the applicable standard.

Note: For any fields with slopes 8% or above, the NRCS approved soil loss prediction tool shall be used to determine risk. If significant risk (above tolerable soil loss) is determined, the appropriate Best Management Practices to reduce soil loss risk will be implemented according to NRCS standards.

➤ **Option 2: 10-foot no nutrient application zone from Surface Waters plus one of three land treatment practices**

The operator shall maintain a minimum 10-foot setback from surface waters on which no manure, chemical fertilizer or any other nutrient containing soil amendments are applied AND must implement at least ONE additional of the following Best Management Practices:

- **Option 2A: Winter crop establishment including small grains, brassicas, or other species in accordance with MDA Nutrient Management Plan (NMP) requirements with no nitrogen or phosphorus applications before March 1st.**

Such crops shall be planted during the fall in the year manure application took place. The winter crop shall be applied to the entire field that received manure.

- **Option 2B: Subsurface injection or surface application of manure with incorporation within three days (72 hours) of manure or wastewater surface application.**

If vertical tillage is used to minimally incorporate manure with surface residue, soil loss needs to be "T" or less as determined by RUSLE 2. Plug or spike aerators (such as Aerway®), seed bed conditioners and vertical till (such as Turbotill™) may be used for incorporation.

- **Option 2C: Dry Manure Injection.**

Injection of poultry litter and dry manure application (Subsurfer®).

➤ **Option 3: Other – Must be approved in writing by MDE in coordination with NRCS, UME and MDA.** Applicant must demonstrate to the satisfaction of MDE and the other agencies that this option conserves and protects public health, natural resources, and the environment of the State, and controls water and land pollution to at least the same extent as would be obtained by compliance with the applicable requirements.