A Summary of the Maryland Department of Agriculture’s (MDA) Proposed Changes to the Nutrient Management Regulations Submitted to the Joint Committee on Administrative, Executive and Legislative Review (AELR)

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Introduction: MDA is proposing changes to the State’s Nutrient Management Regulations to ensure consistency with scientific findings from research conducted by the University of Maryland in partnership with various agencies and organizations, including MDA. The summary below is a general explanation of the changes and what they mean.

An additional objective of these proposed changes is to achieve consistency in how all nutrient sources are managed and applied to agricultural land throughout the state. This will provide consistency in the application of fertilizers, animal waste, biosolids and all other nutrient sources. That consistency is important if the State of Maryland is to meet its Total Daily Maximum Load requirements, as set forth in EPA’s Watershed Implementation Plan for restoring the Chesapeake Bay. MDA is also proposing that these changes be phased in so that those impacted by them have adequate time to plan and prepare for their implementation, apply for cost-share funding, and install necessary best management practices.

A copy of the proposed regulations as submitted to AELR is available online at: http://www.mda.state.md.us/pdf/proposed_nm_%20regs.pdf.

There are six major changes being proposed:

1. **All primary nutrients must be included in Nutrient Management Plans.** This change is more of a clarification than a change. New language being proposed will specifically require all nutrient management plans to account for all sources of nutrients applied, including commercial fertilizers, organic nutrients, organic wastes, soil conditioners, soil amendments, food processing waste, etc. Although not previously spelled out in the regulations, it has always been MDA’s intent that these materials be included in Nutrient Management Plans.

2. **Nitrogen may not be applied to small grains (wheat and barley) during the fall, in most circumstances.** The use of starter fertilizer (i.e., fertilizer used when a crop is newly planted) on small grains will be prohibited unless a soil test for nitrates indicates that there are too few nitrates to support the crop. (Those amounts are 10 parts per million of residual nitrate for wheat and 15 parts per million for barley.) Research conducted by the University of Maryland over four years indicated that fall application of starter nitrogen on small grains either didn’t increase yields or provided no economic returns in the majority of cases tested. Soil nitrate tests will indicate whether there are inadequate nitrates available.

3. **The amount of nitrogen from organic sources (including animal manure and biosolids) that a farmer can apply on soybeans is restricted.** Although the University of Maryland findings indicate no nitrogen is required for soybean production, MDA is proposing to allow incidental application of nitrogen from organic nutrient sources if these sources are used to supply necessary crop phosphorus. This will allow farmers to apply nitrogen from both commercial fertilizers and
organic sources, up to 50 pounds per acre, providing the phosphorous rate limits on that land are not exceeded. This allowance provides more on-farm management options for farmers who have manure resources.

4. **Requirements for the application of organic nutrient sources will change.** All organic sources of nutrients (such as manure, biosolids, food processing wastes, etc.) must be injected or, if surface applied, must be incorporated into the soil as soon as possible but no later than 72 hours. Exceptions to this regulation will be provided for manure deposited by animals, pasture and hayland, fields with highly erodible soils or disturbance restrictions imposed by federal programs, or where nutrients are applied through a spray irrigation system. There also will be new restrictions for fall and winter application. Fall application would be restricted to farms generating manure or facilities generating biosolids or waste products that have inadequate storage to carry them through March 1. Additionally this allowance for fall application would only apply to those poultry operations that have stockpiling restrictions imposed by their Concentrated Animal Feeding Operation (CAFO) permit.

5. **Requirements for winter storage of organic nutrients will change.** This change will not only affect farmers who spread or store animal manure, but also any entity that owns or manages a wastewater or food processing facility. Currently, non-stackable materials (which are defined as organic materials with a 60 percent water content – typically dairy manure) may be spread on fields if there is no place to store it. Additionally biosolids and other materials, such as food processing waste, are applied to agricultural lands throughout the winter. This change would prohibit application of fertilizer in winter and require these materials to be stored or used for alternative sources (such as energy generation) in the winter. This regulation, would take effect July 1, 2016, in order to give farmers, municipalities, counties and others time to address the new requirements. (Note: This prohibition on fertilizer application would not apply to manure deposited by livestock.)

6. **Setback requirements will change.** Currently, the Maryland Department of the Environment (MDE) requires biosolids and animal operations permitted under MDE’s Confined Animal Feeding Operation program to use setbacks for nutrient application adjacent to surface water. MDA’s proposed changes will create consistency among all nutrient sources by establishing a 35-foot setback for broadcast fertilizing (i.e., a method using spinners or splashers); a 10-foot setback for direct spray or injection; and a 10-foot nutrient application setback on pastures and hayfields. Fencing will be required to keep livestock out of the pasture setback areas. For purposes of MDA’s requirements, surface water excludes ephemeral streams, irrigation and treatment ditches, and field ditches. These requirements would take effect Jan. 1, 2014.