Maryland General Assembly
Department of Legislative Services

Proposed Regulations
Department of Agriculture
(DLS Control No. 14-346)

Overview and Legal and Fiscal Impact

These regulations incorporate the University of Maryland Phosphorus Management Tool (PMT) into the State's existing nutrient management planning process.

The regulations present no legal issues of concern.

There is no fiscal impact on State or local agencies.

Regulations of COMAR Affected

Department of Agriculture:

Soil and Water Conservation: Nutrient Management Certification and Licensing: COMAR 15.20.04.11
Agricultural Operation Nutrient Management Plan Requirements: COMAR 15.20.07.02
Content and Criteria for a Nutrient Management Plan Developed for an Agricultural Operation: COMAR 15.20.08.01, .03, and .05-.12

Legal Analysis

Background

Since the passage of the Water Quality Improvement Act of 1998 (Chapters 324 and 325), agricultural operations with $2,500 or more in gross annual income and livestock operations with 8,000 pounds or more of live animal weight must have and comply with a nutrient management plan for nitrogen and phosphorus. A nutrient management plan is a plan developed by a certified nutrient management consultant to manage the amount, placement, timing, and application of animal waste, commercial fertilizer, sludge, or other plant nutrients to prevent pollution by transport of nutrients and to maintain productivity on agricultural land. Different implementation dates apply to operations using chemical fertilizers and operations using sewage sludge or animal manure. Operations using sewage sludge or animal manure have been required to comply with a nutrient management plan for nitrogen and phosphorus since July 1, 2005.

The Maryland Department of Agriculture certifies and licenses nutrient management consultants and businesses to prepare nutrient management plans for farm operations and also issues certificates to farm operators to develop their own plans. In consultation with the Nutrient Management Advisory Committee, the department is required, by regulation, to prescribe the criteria, form, and content for certified nutrient management plans applicable to licensees and

certificate holders and also establish specified continuing education, recordkeeping, and reporting requirements.

The regulations add Supplement No. 8, which contains the PMT, to the Maryland Nutrient Management Manual (manual) and make corresponding changes to existing regulations. The PMT builds on the existing Phosphorus Site Index (PSI). First implemented in the 1990's, the PSI is used as a tool in the nutrient management planning process to assess the risk of phosphorus loss from agricultural lands. It applies in situations when phosphorus levels in the soil exceed a threshold that is established in regulation. According to the department, historic applications of manure have resulted in accumulated levels of phosphorus in soils, and the PSI directs manure application to result in a lower risk of phosphorus loss. The PMT was recently developed by scientists at the University of Maryland with collaborative support from regional and national scientists focused on phosphorus transport. It allows for more site-specific risk assessment and includes better estimates of sub-surface nutrient loss than the PSI.

Adopting the PMT is an element of Maryland's Watershed Implementation Plan, the federally mandated document that outlines specific steps the State will take to protect and restore the Chesapeake Bay under the Total Maximum Daily Load (TMDL). In its most recent evaluation of Maryland's progress in implementing the milestones associated with the bay TMDL, the U.S. Environmental Protection Agency noted that the failure to adopt PMT regulations was a "shortfall" in the State's otherwise sufficient progress to date. Regulations to incorporate Supplement No. 8 to the manual were previously submitted to the AELR committee in December 2012, July 2013, and September 2013; however, those (proposed and emergency) regulations were not adopted.

Summary of Regulations

The regulations incorporate the PMT into the State's existing nutrient management planning process. Specifically, Regulation .02 under COMAR 15.20.07 incorporates by reference Supplement No. 8, which contains the PMT. Regulation .11 under COMAR 15.20.04 is amended to require a license holder or certified consultant to file a report with the department that contains information relating to nutrient management plans developed for operations that have soils with a phosphorus fertility index value (FIV) of 150 or above.

Regulations .01, .03, and .05 through .12 under COMAR 15.20.08 incorporate the PMT into the content and criteria for a nutrient management plan developed for an agricultural operation. Generally, the regulations establish management phases, phased-in over a six-year period, to transition from the PSI to the PMT as a means to identify potential risk of phosphorus loss from farms. The PMT will be used when a soil sample shows a FIV of 150 or above. Farms that have excess soil phosphorus will be placed in one of three risk-based tiers, as determined by the operation's average phosphorus FIV. Farms in the high risk tier (high phosphorus FIV) will be the first operations required to begin implementing the PMT, but will be given a longer time-frame to fully implement it. Farms in the low and mid-risk tiers (lower to moderate phosphorus FIV) will be required to begin implementing the PMT later, but will be given less time to complete the transition. Finally, the regulations provide exceptions, applicable under several specified circumstances, in which a farm that is otherwise classified as high risk for phosphorus loss is not subject to the generally applicable phosphorus application restrictions.

Legal Issue

The regulations present no legal issues of concern.

Statutory Authority and Legislative Intent

The department cites § 8-801 through § 8-806 of the Agriculture Article as authority for the regulations. Specifically, § 8-801.1 requires each nutrient management plan to be developed using the "best reasonable scientific methods accepted by the Department and the University of Maryland Cooperative Extension Service" or "scientifically validated data for the development of a nutrient management plan as defined by the department in regulation."

Additionally, under § 8-804(b) of the Agriculture Article, the department is required to adopt regulations, in consultation with the Nutrient Management Advisory Committee, to (1) prescribe the criteria, form, and content for certified nutrient management plans; (2) establish continuing education requirements for certified nutrient management consultants; and (3) adopt guidelines and requirements for licensees and consultants on recordkeeping and reporting. This authority is correct and complete, and the regulations comply with the legislative intent of the law.

Fiscal Analysis

There is no fiscal impact on State or local agencies.

Agency Estimate of Projected Fiscal Impact

The department advises that the regulations have no impact on State or local governments. The Department of Legislative Services concurs.

Impact on Budget

There is no direct impact on the State operating or capital budget.

Agency Estimate of Projected Small Business Impact

The department advises that the regulations have a meaningful economic impact on small businesses in the State. According to the department's estimate, the regulations are likely to have a meaningful adverse impact on many farmers, particularly those with the highest soil phosphorus levels, who will need to purchase more expensive, inorganic fertilizers. The regulations are also likely to have a meaningful adverse impact on farmers who incur higher costs to store, transport, or remove poultry litter. The Department of Legislative Services concurs with this assessment but disagrees with a portion of the department's estimate.

The department's discussion of the economic impact refers to the analysis conducted by the Business Economic and Community Outreach Network (BEACON) at Salisbury University. The BEACON analysis projected the macroeconomic and microeconomic impacts of three potential scenarios. Ultimately, the department drafted the present proposal based on the third

scenario, which included a six-year phase-in approach and the lowest estimated cost among the three scenarios.

The department's economic impact estimate references the $22.5 million cost estimate provided by BEACON for the third scenario analysis. However, this estimate should not be applied to the present regulatory proposal for several reasons. First, the BEACON estimate reflects the *subsidized* cost to farmers, rather than the total, unsubsidized cost. Second, the estimate was created prior to the drafting of these regulations and may not reflect several key details included in the regulations. Finally, the analysis only evaluated the impact on the Eastern Shore, whereas the regulations apply statewide; it should be noted that the vast majority of the impact (and the adverse impact, in particular) does, in fact, apply to farmers on the Eastern Shore. While the scenario analyzed by the BEACON study differs from these regulations, it is worth noting that the study projected total costs to Eastern Shore farmers of about $62.5 million, not including current and potential future subsidies that the department estimates may cover roughly two-thirds of the estimated costs.

The department's estimate does not account for any potentially meaningful beneficial impact on farmers with low levels of phosphorus loss as a result of organic fertilizer becoming more readily available and less expensive in the future. The department's estimate also does not account for any potentially meaningful beneficial impact on contractors engaged in the transportation, storage, removal, or disposal of poultry litter and vendors that sell supplies and equipment related to those activities. Although the department discusses these impacts in its economic impact analysis, the impacts are omitted from its small business impact statement.

Additional Comments

As noted above, the regulations have no direct fiscal impact on the State. However, the BEACON study incorporated existing subsidies into its economic model, and the department provided additional information regarding additional subsidies that may be available in future fiscal years as the regulations' provisions are phased in. Of the $38.8 million in subsidies identified in Appendix C of the BEACON report, more than half of the subsidies ($20.7 million) represents future funding subject to the annual appropriations process and the enactment of new tax provisions, while slightly less than half of the subsidies is from current sources of funding that may (or may not) be continued in future fiscal years.

The BEACON report noted that, once the department finalized its regulations for submittal to the AELR Committee, a final cost estimate can be made of the actual regulations. The committee may wish to ensure that the department seek a final cost estimate of the regulations, as proposed, using the model developed by BEACON.

Contact Information

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