Jo Mercer -MDA- <jo.mercer@maryland.gov>

P Site Index Comments

1 message

Bill Satterfield <Satterfield@dpichicken.com> Sun, Feb 24, 2013 at 7:07 AM
To: "jo.mercer@maryland.gov" <jo.mercer@maryland.gov>

Please accept the attached comments from Delmarva Poultry Industry, Inc.

Bill Satterfield
Executive Director

Delmarva Poultry Industry, Inc.

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2013 mda p site index comments.pdf
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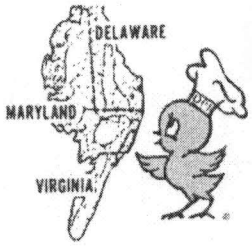

DELMARVA POULTRY INDUSTRY, INC.

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February 24, 2013

Jo A. Mercer, Ed. D
Administrator, Nutrient Management Program
Maryland Department of Agriculture
50 Harry S Truman Parkway
Annapolis, Maryland 21401

Dear Dr. Mercer:

Delmarva Poultry Industry, Inc. (DPI) is pleased to offer comments on the proposed changes to the Maryland Phosphorus Site Index (PSI) that were published in the January 25, 2013 ***Maryland Register***. Delmarva Poultry Industry, Inc. is the 2,000-member trade association for the Eastern Shore chicken industry.

While the new Phosphorus Management Tool (PMT) appears to do a better job of assessing risk and is an approach being studied by other states, we are concerned that it remains a work in progress and is still undergoing peer review. While still in a peer review process, we do not believe it is good public policy to adopt this tool as part of the nutrient management regulations. Until the peer review has been completed and the PMT is in a final form, it is premature to insert it into the regulations. If changes are required or desired because of the peer review, then it will be necessary to revisit the regulations and make changes. It has not been evaluated to learn if it works accurately in real world conditions and has not been calibrated to test it as the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) requires with in-field conditions. We don't know if it accurately assesses phosphorus losses. It seems to us better policy to get the tool completed and then, if absolutely necessary, to insert it into the regulations. There needs to be balanced approach and it is our opinion that this is not a balanced approach.

But equally important, the PMT NEVER was designed to be a regulatory tool. It was designed to assess risk of phosphorus movement into waters of the state. It was intended to be a management tool to help farmers reduce pollution risks.

The change from the four level soil test score to the three level score makes the PMT more restrictive than the NRCS 590 standard. This deviation from the NRCS standard could require farmers to import commercial fertilizers when a readily available nutrient source would be banned.

If the PMT causes a severe decline in the number of acres of farmland that can use chicken manure as a fertilizer, particularly on the Lower Eastern Shore, as DPI and many others believe it will, it is premature to make it part of the regulations until crop farmers and chicken growers are better equipped to deal with the new regulations in a responsible manner.

Strategies need to be developed and implemented to help Maryland growers implement farming changes caused by PMT-related regulations. Promulgating these regulations should be delayed until we have one or more of the following in place on the Lower Shore:

- Well thought out, viable, and economical alternative uses such as energy-producing facilities, commercial composting, or other options. We would hate to see a rush to build a facility that only ends up unsuccessful and costing private investors and/or taxpayers due to operating inefficiencies. It might make more sense to have several smaller capacity systems rather than one large unit. But whatever options are identified must have effective technologies, be affordable for the operators, and must have a plan to deal with the byproducts, such as ash from incineration, etc. Right now there are few if any competent and affordable on-farm systems. The Farm Pilot Project Coordination, Inc. is working to identify possible alternative use systems, but so far none seem to be capable of helping Maryland chicken growers.
- There must be a streamlined paperwork system to help chicken growers and receivers work through the Maryland Department of Agriculture manure transport program. We have heard that the amount of paperwork to participate in this program has convinced many growers not to use it. The benefits are not worth the hassle. A streamlined state system matched with the development of manure/litter markets out of Maryland and off of the Delmarva Peninsula would be useful.
- Approval of science base Best Management Practices would allow continued application of litter on high P soils. Since the issue on the Lower Shore appears to be subsurface transport of P in water to drainage ditches, what can be done to reduce theses losses? Amendments to litter or soil to bind P (i.e. gypsum curtains) or better management of drainage systems are possibilities. Some recent United States Department of Agriculture/ Agricultural Research Service research suggests that 40% to 60% reductions of nitrogen and phosphorus and sediments can be achieved using managed vegetation in ditches. There may be combinations of similar best management practices that offer continued use of litter on some high P soils. Cost share money should be available to help implement these practices.

We believe that adoption of the PMT into regulation without alternatives for manure negatively will impact the construction of chicken houses on the lower Eastern Shore. Construction of new houses to replace obsolete houses and to allow new growers to get into the business is vitally important to the long term competitiveness of our industry.

Until the new PMT has been peer reviewed and in a more complete status, it could be onerous for chicken growers and crop farms using the manure, especially on the Lower Eastern Shore. It will be expensive for affected farmers to replace organic fertilizer with more expensive inorganic fertilizer.

From an agronomic perspective, though the P levels in a soil may be high, it is not all available for the plant to use and therefore crop yields could be lower. After all, chicken manure is a slow release fertilizer.

There needs to be a regional approach on Chesapeake Bay water quality improvements and this effort by MDA to incorporate the still developing PMT into regulations once again puts Maryland ahead of the curve on Chesapeake Bay issues. Such positioning makes it more and more difficult for Maryland farmers to stay competitive with farmers in nearby states. Maryland farmers are leaders in environmental protection through voluntary and regulatory programs. Let's not put them so far out that they can no longer remain in business.

We long have argued that nutrient management decisions and state laws and regulations should be science based and the updated PMT is moving in that direction, but until there is a final peer review, real world testing and evaluation, and calibration, while allowing necessary adjustments to be made, we believe it is premature to make it part of the MDA regulations.

Respectfully submitted,

Bill Satterfield

Bill Satterfield
Executive Director

Maryland Farm Bureau, Inc.

8930 Liberty Road • Randallstown, MD 21133 • (410) 922-3426

February 24, 2013

Jo A. Mercer, Ed. D
Administrator, Nutrient Management Program
Maryland Department of Agriculture
50 Harry Truman Parkway
Annapolis, MD 21401

Re: January 25, 2013 Maryland Register Proposal on Phosphorus Site Index (PSI)

Dear Dr. Mercer:

On behalf of 37,000 Maryland Farm Bureau families, I am writing to urge MDA to withdraw the proposed changes to the Phosphorus Site Index until such a time as the research community can complete the peer review and make necessary changes to the tool.

As you know, members of the farm community are on record urging the Governor and the Department of Agriculture to use sound science that has been peer-reviewed in all regulations concerning nutrient management on farms.

Many of our members have been briefed by the scientists who have drafted the changes to the PSI. They understand that adoption of the new PSI will mean dramatic changes to the way fields are fertilized, particularly on the lower shore and on the slopes of central and western Maryland.

Our members also understand that the peer review process is currently underway. It makes no sense to rush to implement a new PSI standard that is likely to need re-drafting as soon as it is implemented. This will cause confusion on farms and in the nutrient marketplace.

In addition, the State should redouble its efforts to identify economically viable alternative uses of poultry litter and liquid manure before putting into place a new standard that will require farmers to store this locally produced, organic fertilizer and purchase replacement nutrients from outside the region.

Farmers are just now beginning the effort to phase in the unpopular nutrient management regulations MDA adopted last fall. They have not figured out how to pay for the fencing, storage and incorporation requirements of that mandate. They disagree with the lack of science used to set fall fertilization dates. Rushing ahead with a new regulation on the PSI before the science is perfected by the research community is premature. MDA should withdrawal the proposal.

Sincerely,

Patricia A. Langenfelder

PATRICIA A. LANGENFELDER
President

MARYLAND

Jo Mercer -MDA- <jo.mercer@maryland.gov>

Comments on new phosphorus management tool

1 message

Roy Hoagland <royhoagland@hopeimpacts.com> Mon, Feb 25, 2013 at 11:29 AM
To: Jo Mercer <jo.mercer@maryland.gov>
Cc: Royden.Powell@maryland.gov, coastkeeper@actforbays.org, Abel Russ <aruss@environmentalintegrity.org>, Tommy Landers <tlanders@environmentmaryland.org>, KRaettig <KRaettig@mdlcv.org>, Tom Simpson <toms@waterstewardshipinc.org>, riverkeeper@westrhoderiverkeeper.org, fjcoale@umd.edu, Mark Dubin <mdubin@chesapeakebay.net>

Dr. Mercer: Please note the attached comments filed on behalf of the signatory organizations regarding the proposed changes to the phosphorus site index (to amend Regulation .02 under COMAR 15.20.07 and Regulations .02 and 05 under COMAR 15.20.08). Thank you. Roy H.

Roy A. Hoagland, Esq.

HOPE Impacts, LLC

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HOPE IMPACTS

Hoagland Outcomes for the Preservation of our Environment

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Final comments.docx
33K

February 25, 2013

Jo A. Mercer, Ed.D.,
Administrator, Nutrient Management Program
Maryland Department of Agriculture
50 Harry S Truman Parkway
Annapolis, MD 21401

RE: Phosphorus Site Index Regulatory Changes

Dear Dr. Mercer:

We would like to take this opportunity to thank Dr. Frank Coale, Dr. Josh McGrath, and Ms. Nicole Fiorellino with the University of Maryland for all their hard work in revising the University of Maryland Phosphorus Management Tool. We would also like to thank Governor O'Malley and MDA for taking a proactive approach to revising Regulation .02 of COMAR 15.20.07, .05 of COMAR 15. 20.08, and the incorporated by reference sections of the Maryland Nutrient Management Manual and associated University of Maryland Phosphorus Management Tool: Technical Users Guide (UMD-PMT). The changes reflected in these documents—with the necessary changes we have specified in this letter—will reduce the rate of phosphorus (P) application, reduce the accumulation of P on farms fields, and reduce the risk for transport of P to the surface waters of Maryland. In so doing, the changes will help improve local water quality and the water quality of the Chesapeake Bay.

We offer these comments in hopes that MDA will incorporate the changes we have identified. The changes we suggest not only correct errors, but also restore integrity in a comprehensive manner to the program that the various documents together create.

Our comments are categorized into three components:
1) aspects critically important to the UMD-PMT for reductions in P transport to surface waters to be realized;
2) issues that could undermine the ability of the UMD-PMT to reduce excessive P accumulation and surface water pollution; and
3) recommendations to ensure that the latest science and research methods as well as new levels of transparency and public accountability are incorporated into Maryland's nutrient management program.

1. Aspects of the University of Maryland Phosphorus Management Tool that are critically important to reducing transport of phosphorus to surface waters:

- Phosphorus application is limited in some manner for all fields with fertilizer index values (FIV) above 150. Although the amount of P that can be applied at one time varies according to the assigned risk level, the UMD-PMT recognizes that all fields with FIV values above 150 contain P concentrations at rates that exceed agronomic requirements and that correspond with P saturation levels that pose various levels of risk to water quality. By limiting additional P applications, the UMD-PMT prevents future accumulation of excessive P on soils identified as sources for P transport.

- Subsurface transport is identified as an important pathway for P transport. The UMD-PMT takes into consideration landscape features such as tile drains, ditches,

hydrologic soil group and soil drainage class in determining the risk for subsurface P transport, a pathway that research has identified of particular concern in areas with artificial drainage and high soil P concentrations from continual use of manure or poultry litter as fertilizer.

- The UMD-PMT emphasizes the implementation of best management practices (BMPs) for fields categorized as high-risk for P loss. Interpretation guidelines for the final score recommend that "active remediation techniques should be implemented in an effort to reduce the P loss potential from this site." (See Table 9.) It is critical that this language in Table 9 of the UMD-PMT be included in the Maryland Nutrient Management Manual and the COMAR revisions. These high score fields pose the greatest risk for contributing P to surface waters of Maryland and BMPs implemented on these fields will likely yield the greatest return on investment in terms of pounds of P reduced per dollar invested. We also recommend that fields that receive a high risk rating from the UMD-PMT rank as a high priority for technical and financial assistance via both state and federal agricultural BMP cost share programs.

2. Issues that could undermine the ability of the UMD-PMT to reduce excessive phosphorus accumulation and surface water pollution:

We appreciate the importance of encouraging the implementation of BMPs to reduce the risk of P runoff from fields that are categorized as medium or high risk for P loss according to the UMD-PMT, since all these fields requiring the test already have soil P concentrations in excess of agronomic requirements. However, we have concerns regarding the application of BMPs to fields and the effect on the final UMD-PMT score specifically related to timing of changes in the UMD-PMT score. We are equally concerned about discrepancies between UMD-PMT language and the proposed COMAR changes for the Required Plan Recommendations for the medium and high P loss rating recommendations.

- The UMD-PMT does not propose reclassifications from high to medium or medium to low by implementing BMPs but suggests such implementation to reduce existing risk. If farmers implement BMPs, change management systems, or reduce soil P, this may change the loss rating for the fields in the future (when the BMP practices affect a change); however, the UMD-PMT language should prevail and the fields' current rating as medium or high risk should not change absent revision to the nutrient plan and full implementation of those revisions. The supplement language and the COMAR language needs to be consistent with the recommendations in the UMD-PMT language.

- There are three other discrepancies in language among the UMD-PMT, the Manual, and the COMAR revisions which require correction. All three of these discrepancies yield more relaxed standards in the COMAR revisions than those contained in the UMD-PMT documentation.

  The first: Table 9 of the UMD-PMT (Generalized Interpretation of P Loss Rating) states that for fields that are categorized as medium, "phosphorus applications should be limited to the amount of P expected to be removed from the field by the crop harvest immediately following P application or soil-test based P application recommendations." In contrast, subsection .05 of 15.20.08 of the COMAR revisions states that when the potential loss of phosphorus from the site is medium,

"[p]hosphorus rates shall be limited to the expected amount removed from the field by the crop or plant harvest in the year of application." There is no scientific justification for the changed language in the COMAR revisions; the language should parallel the UMD-PMT language.

The second: Table 9 also provides that for soils categorized as "high" for potential movement of P, "[n]o phosphorus should be applied to this site." The COMAR revisions allows application when the implementation of BMPs "reduce the risk of phosphorus loss to medium." These revisions also specifically note that application can occur to the extent of the expected amount of P removal "in the year of application," as opposed to the Table's restriction on removal "by the crop harvest immediately following P application." Simply stated, a "high" category, we believe, should prevent the application of any additional phosphorus. The COMAR revisions need to reflect the UMD-PMT language.

The third: The definition of surface water is limited in the Maryland Nutrient Management Manual in the newly revised nutrient management provisions governing land application of manure and biosolids. This definition specifically excludes ephemeral streams, irrigation and treatment ditches and field ditches; the purpose of these limitations was to restrict certain aspects of the new provisions, such as requirements for establishing setbacks. This definition was not intended to shape, and should not be permitted to impact, the revised phosphorus management tool which is the subject of the current COMAR revisions. The application of this definition would undermine the ability of the UMD-PMT to identify fields at high risk of transporting P to surface waters in Maryland. Amended language is necessary to correct this problem and ensure that the definition of surface water utilized for the UMD-PMT is not that contained in the Manual adopted pursuant to the recent nutrient management provisions.

- In light of the identified inconsistencies, the revisions to COMAR should include a statement that should there be a discrepancy between the UMD-PMT language, the Nutrient Management Manual (including its supplements) and COMAR provisions, the UMD-PMT language prevails.

3. Recommendations to ensure that the latest science and research methods are incorporated into Maryland nutrient management regulations in a timely manner in the future.

It has been thirteen years since Maryland first released a phosphorus site index and we are concerned that this is too long of a timeframe to incorporate research and on-the-ground findings into subsequent Maryland nutrient management regulations. This thirteen year time lag has occurred despite evidence that the first version of the Maryland Phosphorus Site Index allowed for continued P accumulation to occur far in excess of agronomic requirements—despite research that documented subsurface transport of P to surface waters as a significant transport pathway, particularly in Maryland's Lower Eastern Shore region (where farmers routinely land apply poultry litter). To address the timing of UMD-PMT updates and revisions, as well as the need for future research support, we recommend the following:

- We propose that the effectiveness of the UMD-PMT at identifying fields at high risk for P loss to surface waters and reducing that risk be continuously evaluated and

that MDA establish a method to revise and update the UMD-PMT on a timely basis. Given the timeline associated with implementation of the Bay TMDL, we propose 2017 as an appropriate year for completing any revisit of the UMD-PMT and evaluate whether or not it is achieving its stated goals and determine whether or not the there is sufficient scientific evidence to update the UMD-PMT. [i]

- The need for transparency around implementation of nutrient management plans demands change. There is a startling lack of data on a nutrient management plan's soil test phosphorus levels, for example. This lack of transparency makes technical experts, environmental groups, public health officials and others completely unable to verify the real-world effectiveness of ongoing nutrient management efforts. The consistent resistance towards transparency is widely perceived by many as an effort by Maryland agriculture to obfuscate the problem of increasing accumulation of excess soil phosphorus concentrations.

  Thus, we remain concerned about the availability of data to determine whether or not the UMD-PST is actually achieving changes on the ground, particularly in those areas where manure production exceeds local crop nutrient requirements.

  To address this issue, we recommend that the COMAR revisions include an MDA commitment to the development of reports that reveal on a field by field basis soil test data (including P saturation results), UMD-PMT ratings, recommended and applied P and other such information necessary for the public, scientists and others to be able to assess effectiveness of the UMD-PMT, the Maryland Nutrient Management Manual (including its supplements), and the COMAR revisions are achieving the dual goals of promoting robust crop production while avoiding nutrient application at rates that harm water quality. We would note for your reference that, according to the Maryland WIP, "Beginning in 2013, the State will report aggregated data reflecting phosphorus applications to cropland within specifically defined geographic areas. Data will be gathered from annual nutrient management reporting information and will reflect phosphorus applications by crop type before and after changes to the P-site index." This just scratches the surface of need for transparency.

Thank you for taking these comments into consideration. Please don't hesitate to contact us if you would like any further clarification.

Sincerely yours,

ASSATEAGUE COASTAL TRUST
ENVIRONMENTAL INTEGRITY PROJECT
ENVRONMENT MARYLAND
MARYLAND LEAGUE OF CONSERVATION VOTERS
WATER STEWARDSHIP, INC.
WEST/RHODE RIVERKEEPER, INC.

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Chris Trumbauer
Riverkeeper and Executive Director

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[i] Please note the following language from MD's Phase I WIP: "Additionally, the entire P-site index will be peer reviewed every five years by a scientific panel of subject matter experts, appointed by BayStat, beginning in 2015. This review of the P-site index will be based on the pounds of reduction of phosphorus applied for crop production as it relates to achieving the intended goal of minimizing transport and reducing phosphorus reserve levels in soil." See page 181 the Maryland WIP.

Jo Mercer -MDA- <jo.mercer@maryland.gov>

FW: Comment letters due today nutrient management

1 message

Doug Myers <DMyers@cbf.org> Mon, Feb 25, 2013 at 2:03 PM
To: "Jo.Mercer@maryland.gov" <Jo.Mercer@maryland.gov>

Dear Maryland Department of Agriculture,

Please accept these comments Chesapeake Bay Foundation. If you have any questions, feel free to contact me. Hard copies are being sent under separate cover.

Thank You

Doug R. Myers

Maryland Senior Scientist

Chesapeake Bay Foundation

Phillip Merrill Environmental Center

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Annapolis, MD 21403

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2 attachments

Draft PSI2 Regulation comment ltr DM 2.25.13.pdf
184K

Non-Ag Fertilizer Regs comment ltr DM 2.25.13.pdf
183K

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

February 25, 2013

Jo A. Mercer, Ed.D., Administrator,
Nutrient Management Program
Maryland Department of Agriculture
50 Harry S. Truman Parkway
Annapolis, MD 21401

RE: Phosphorus Site Index incorporation into COMAR Subtitle 20

Dear Dr. Mercer:

Thank you for the opportunity to comment on the draft soil and water conservation regulations incorporating a new Phosphorus Site Index (PSI) otherwise known as the Maryland Nutrient Management Manual Supplement #8 (December 2012) for the purpose of determining phosphorus as a limiting nutrient in agriculture practices as it relates to protection of Chesapeake Bay and the rivers and streams of Maryland. A principle concern with nutrient management in Maryland is the opportunity afforded users of organic nutrient sources (i.e. manure) for the application of phosphorus beyond that needed for plant uptake resulting in a buildup of excessive phosphorus in the soils and risk of loss to state waters. The updated Phosphorus Site Index was compelled and designed for this very reason.

First, Chesapeake Bay Foundation challenges some fundamental assumptions stated in **I. Summary of Economic Impact** and **II. Economic Impact on Small Businesses.** The Department claims to have no data to assess the number of acres potentially impacted by the proposed regulation or costs for management changes. Clearly the application of the new PSI is likely to indicate different areas than those identified under the existing index. However, within section III D., the Department acknowledges that University of Maryland scientists who developed the PSI indicate the greatest potential impact will be on soils with high soil phosphorus in areas where ground water is closest to the surface. Data sharing between University of Maryland and the Department and use of modern Geographic Information Systems would allow the Department to at least, approximate the areas that would be affected.

The Department suggests that in certain cases, the farmer will be required to reduce the rate of phosphorus application, but presumes this will always be a cost to the farmer by way of requiring additional land, commercial fertilizer purchase or manure transportation rather than a potential cost savings. Stating the potential need for additional land to utilize manures and increased costs for manure transportation fails to acknowledge the potential for manure storage as a way to manage excess manure and is therefore disingenuous.

PHILIP MERRILL ENVIRONMENTAL CENTER | 6 HERNDON AVENUE | ANNAPOLIS, MD 21403
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We reviewed the documentation provided by University of Maryland on how the updated PSI is calculated and, in general agree that the tool provides a more accurate assessment of risk of phosphorus loss than the tool it replaces. Regardless, the value of a mostly qualitative Phosphorus index for linking on-farm phosphorus loss to offsite water quality is limited, especially in regard to quantifying load reductions required under the WIP load allocations for the agricultural sector. Reviewed literature on the subject suggests that simpler and more quantitative tools exist adapted from landscape ecology and watershed planning disciplines, such as the Soil and Water Assessment Tool (SWAT), which has a fully integrated phosphorus module (Journal of the American Water Resources Association -08-0027-P). These process-based tools not only allow for better quantification of loads overall, but also assist in prioritization of nutrient management practices spatially that have the best overall nutrient reduction effectiveness across the watershed. The Department should take under advisement the incorporation or replacement of the PSI with one of these watershed assessment tools in future iterations of the Nutrient Management Regulations.

As stated in our letter of March 14, 2011 on the Nutrient Management Regulations, CBF still recommends a lower threshold than Fertility Index Value (FIV) of 150 or greater to initiate a PSI given that optimum plant growth is accomplished between 50-100 FIV. The Maryland Manure Transport Program requires phosphorus-based nutrient management plans for soils above 100 FIV for receiving manure and prohibits farms above 150 FIV from receiving manure. We acknowledge that this would necessitate revision of 15.20.08.05E(3), reducing the soil FIV at which nitrogen may be used as the limiting factor in manure or biosolids applications.

Finally, we challenge the logic of amendments to 15.20.08.05 and corresponding sections of the PSI that prescribe phosphorus application rates designed to reduce P loss. In 15.20.08.05 E, assuming the Department fails to reduce the above mentioned FIV 150 threshold, requirements E(3) and E(4)(b) are appropriate. Further, we assume that the allowed choices under (4)(c)(i-ii) in regards to medium phosphorus risk of whichever is **greater** represents the Department's assertion that either choice would prevent soil buildup of phosphorus and therefore be protective of water quality. However, in E(d) for high risk of phosphorus loss as indicated by the PSI, the similar choices in (i-ii) gives us little confidence that the choice of P application rate doesn't matter to protect water quality and request that the language read "**whichever is less**". Even more, to allow anything other than a prohibition of further phosphorus application as in E(4)(e)(ii) in areas with very high risk of phosphorus loss is irresponsible and could constitute a violation of the Clean Water Act. Therefore, we request that E(4)(e)(ii) be stricken and E(4)(e)(i) be amended to read "**No** additional phosphorus may be applied until soil P tests indicate a PSI category of **high** or below".

Again, thank you for the opportunity to comment. Please feel free to contact me at (443)-482-2168 or dmyers@cbf.org if you require any clarifications.

Sincerely,

Doug R. Myers
Maryland Senior Scientist

Jo Mercer -MDA- <jo.mercer@maryland.gov>

PMT Feedback

1 message

LynneHoot@aol.com <LynneHoot@aol.com> Mon, Feb 25, 2013 at 3:36 PM
To: jo.mercer@maryland.gov

Jo, please find the attached letter from MGPA outlining their position on the proposed regulations.

Lynne Hoot
Maryland Grain Producers Utilization Board
Maryland Grain Producers Association
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Edgewater, MD 21037
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"We will Clean Up the Bay ~ One Meeting at a Time!"

"Not everyone farms ~ but everyone Eats."

"Every man owes part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere." - President Theodore Roosevelt

MGPA PMT Letter, 2.13.pdf
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Maryland Grain Producers Association

53 Slama Road • Edgewater • Maryland 21037-1423

The voice of Maryland's grain industry

February 25, 2013

Jo A. Mercer, Ed. D
Administrator, Nutrient Management Program
Maryland Department of Agriculture
50 Harry Truman Parkway
Annapolis, MD 21401

Dear Dr. Mercer:

I am writing on behalf of the Maryland Grain Producers Association (MGPA) to ask that the Department of Agriculture delay the introduction of the new regulations on the Phosphorus Management Tool (PMT) until the following four issues have been addressed:

1. The research has been peer reviewed and amended as necessary.
2. The infrastructure has been developed to handle manure and litter movement.
3. An economic evaluation is completed.
4. MDA demonstrates that it has the staff and competence to roll out another set of new regulations.

At our recent MGPA Board meeting, Dr. Josh McGrath, UMD noted that the amended PMT is undergoing peer review and he has already received feedback that indicates the need for changes to the tool. While we understand that research on the PMT will be ongoing and we can expect amendments many times in the future, we believe that the Department should wait for the first peer review of this current research work, which calls for major changes from the old Phosphorus Site Index (PSI), before moving forward. We have been working to clean up the Bay for over 25 years, surely the Department can justify a few months delay to assure that the new regulations farmers are being subjected to be based on peer-reviewed science.

When the Water Quality Improvement Act of 1998 was passed, livestock producers were given until 2005 to prepare. During that time livestock farmers were able to adjust their operations, build poultry litter and manure storage facilities, develop the infrastructure to move manure and poultry litter, and for Perdue to build the Agricylce Facility so the livestock and poultry industries could comply with the PSI. Based on the limited sampling that has been completed on the new PMT, 81% of the soils tested on the Lower Shore and 51% of the soils tested in the Piedmont will now be in the High category and unable to use poultry litter or manure. A study needs to be conducted on how much poultry litter has to be moved from the lower Shore counties or from dairy farms in Central Maryland, how many trucks it will take, where must it be moved to, if alternative uses are available, etc. This must be done BEFORE the regulations are put in place, not as an afterthought.

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There are many impractical ways to improve water quality; if people were banned from driving cars, restricted to only eating the calorie intake necessary for necessary growth and maintenance, and going outside the Bay watershed to flush a toilet then the Bay water quality would improve dramatically. To grain farmers across Maryland, requiring them to purchase nutrients mined in foreign countries or made from fossil fuels rather than using organic nutrients produced here in Maryland is absurd. The poultry industry on Maryland's Eastern Shore is a major economic driver. There needs to be a serious cost to benefit analysis of these regulations and the potential impact of maintaining a viable poultry industry.

MGPA members are very disturbed about the way MDA handled the most recent amendments to the nutrient management law. It appears to outsiders looking in that MDA promulgated the regulations and only after they came into effect started to work on guidance documents, training and discussion on the practical implication of complying with the regulations. MGPA members believe that only after the regulations were promulgated did MDA decide to find a way to offer guidance on when incorporation would be necessary in spite of all the concerns raised at the public meetings about the move away from notill. It appears that MDA is still in the throes of providing this guidance and training and because there is a lack of a coordinated flow of correct information to the agricultural community, there are many concerns and rumors that MDA must address. We believe strongly that the Department should not undergo the release of new regulations until it clears up the mess from the last ones.

MGPA has been a strong supporter of using sound science to drive the nutrient management program and in fact our sister organization, the Maryland Grain Producers Utilization Board, has frequently funded research to improve the state's knowledge on the management of nutrients. We recognize that there is a need to update the Phosphorus Site Index and that the science calls for the changes in the Phosphorus Management Tool that more accurately addresses phosphorus transportation. We do however ask that MDA address our four areas of concern before moving forward with this regulatory change that could have a devastating impact, particularly in the short term, until infrastructure and guidelines are developed.

Sincerely,

H Kevin Anderson

Kevin Anderson
President

Maryland Association of Municipal Wastewater Agencies, Inc.
Harford County
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Bel Air, Maryland 21014
Tel: 410-638-3300· Fax: 410-638-3024

February 25, 2013

By Electronic & First Class Mail

Ms. Jo A. Mercer, Ed.D.
Administrator
Nutrient Management Program
Maryland Department of Agriculture
50 Harry S. Truman Parkway
Annapolis, MD 21401

Re: Comments in Response to Proposed Action to Amend COMAR 15.02.07 and 15.02.08

Dear Ms. Mercer:

On behalf of the Maryland Association of Municipal Wastewater Agencies (MAMWA), please find attached our comments regarding the above referenced matter.

Thank you for considering MAMWA's views on this important matter. If you have any questions, please feel free to contact me by email (jpippel@washco-md.net) or by phone (240) 313-2621.

Sincerely,

Julie Pippel

Julie Pippel
President

cc: MAMWA Membership
Chris Pomeroy, General Counsel
Lisa M. Ochsenhirt, Deputy General Counsel

COMMENTS OF THE
MARYLAND ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, INC.
REGARDING NOTICE OF PROPOSED ACTION TO AMEND COMAR 15.02.07 (AGRICULTURAL OPERATION NUTRIENT MANAGEMENT PLAN REQUIREMENTS) AND COMAR 15.02.08 (CONTENT AND CRITERIA FOR A NUTRIENT MANAGEMENT PLAN DEVELOPED FOR AN AGRICULTURAL OPERATION)

FEBRUARY 25, 2013

I. INTRODUCTION

On January 25, 2013, the Maryland Department of Agriculture (MDA) published in the *Maryland Register* a Notice of Proposed Action (Notice) to Amend .02 of COMAR 15.02.07 (Agricultural Operation Nutrient Management Plan Requirements) and .05 of COMAR 15.02.08 (Content and Criteria for a Nutrient Management Plan Developed for an Agricultural Operation). The Maryland Association of Municipal Wastewater Agencies (MAMWA) has reviewed the Notice and submits the following comments.

MAMWA is comprised of local wastewater treatment agencies that own or operate publicly owned treatment works (POTWs) that serve approximately 95% of the state's sewered population. Many MAMWA members rely on land application to recycle biosolids (the residuals from the wastewater treatment process) in a safe and beneficial manner. If adopted as proposed, MDA's regulatory changes would reduce the acreage available for biosolids land application, and force the State's POTWs to consider other options for managing these materials, options which are either non-existent (long-term storage) or highly limited and costly (landfilling).

MAMWA objects to the proposed regulatory changes for two reasons. First, MDA has not carefully reviewed impacts on the regulated community, including POTWs. Second, it appears that neither MDA nor the University of Maryland has not completed the scientific review needed to support the changes in the phosphorus-site index (PSI). For these reasons, MAMWA recommends that MDA withdraw these regulations until impacts are addressed and the scientific review is finalized and peer reviewed.

In the alternative, at a minimum, MAMWA requests that MDA provide access to all of the supporting data and provide sufficient time (a minimum of 60 days) for review and comment on the information after it is provided.

II. REQUEST FOR WITHDRAWAL OR EXTENSION

MDA has provided few details on the scientific basis for the regulatory changes, making it impossible for MAMWA to understand MDA's proposed PSI revisions or on likely impacts to POTWs. MAMWA has numerous questions about the scientific work, including, but not limited to:

- Has the University of Maryland completed its review of phosphorus levels across the state?
- Has the University of Maryland run the revised PSI using biosolids as the source material?
- If so, is there a significant change in the amount of land available for land application?
- Has the work been peer reviewed?
- If so, by whom and what were their conclusions?[1]

In addition, MAMWA requests the opportunity to receive and understand the assumptions included in the proposed PSI revisions to gauge whether they are reasonable. As a concrete example, the proposed University of Maryland Phosphorus Management Tool (UM-PMT), which will replace the 2005 PSI, includes standard coefficients for various types of organic and inorganic materials (Table 5). In the short time given for public review and comment, and without supporting documentation, MAMWA has been unable to assess whether the coefficients appear to be well-founded.

For these reasons, MAMWA requests that MDA withdraw the regulations until stakeholders are afforded a reasonable opportunity to understand the policy and scientific bases for the proposal. In the alternative, MAMWA asks that MDA provide at least 60 additional days, once background materials are released, for stakeholders to review the data and recommendations.

Respectfully, if MDA moves forward without allowing stakeholders a meaningful review and public comment opportunity, MDA will be acting contrary to the spirit of the state's Administrative Procedure Act (APA) (State Gvt. Title 10), which requires that an agency "give persons an opportunity to comment before adoption of the proposed regulation."[2]

III. COMMENTS

MDA's regulatory proposal consists of two parts. First, MDA proposes to incorporate by reference Supplement No. 8 (December 2012) of the Nutrient Management Manual, entitled "University of Maryland Phosphorus Management Tool: Technical Users Guide (SFM-7, December 2012)." Supplement No. 8 includes the University of Maryland's discussion of the current P-Index (PSI), as well as an explanation of the proposed University of Maryland Phosphorus Management Tool (UM-PMT). Second, MDA proposes parallel changes to the

[1] MAMWA requests copies of any review reports or correspondence in addition to other background material.
[2] MD Code State Gvt. §10-112.

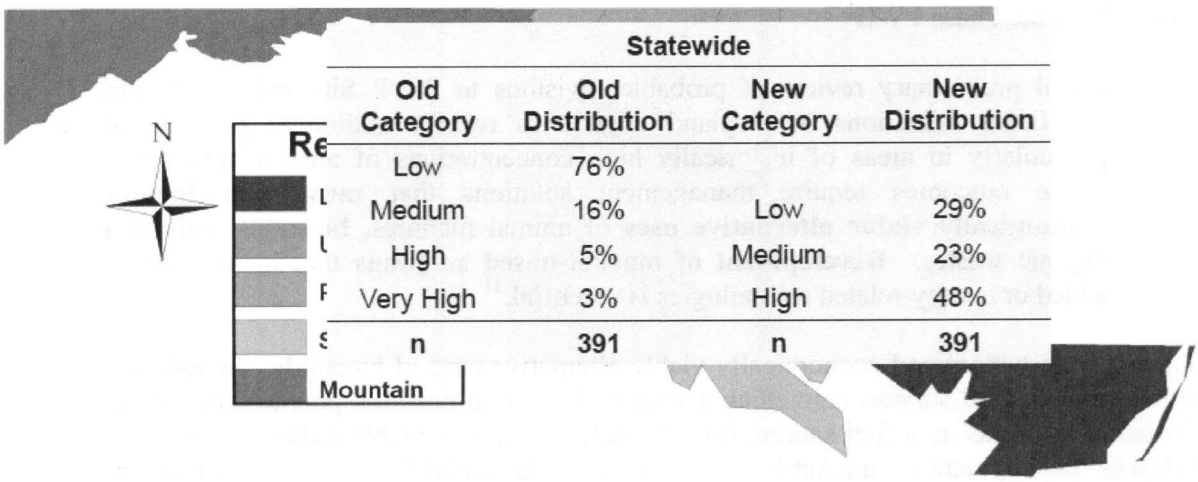
Nutrient Management Plan (NMP) Content and Criteria regulations to make them consistent with the UM-PMT.

MAMWA is concerned that the UM-PMT and regulatory changes will significantly impact the state's biosolids land application program. Specifically, the UM-PMT and proposed regulations would reduce the application rate for sites with a phosphorus fertility index value (FIV) greater than 150. Currently, if a site is low-risk (its FIV is above 150, but the PSI places it in the low risk category for phosphorus loss), an NMP can be written using nitrogen (N) as the limiting nutrient.[3] Under the proposal, the NMP for this low-risk site would now be written with phosphorus (P) as the limiting nutrient at a 3-year crop removal rate. If a site is medium-risk, the application rate would be further reduced to the 1-year P removal rate. As we explained in our comments to MDA's proposed changes to the Nutrient Management Manual (Supplement 7),[4] it is operationally infeasible to land apply biosolids at such a low rate.[5]

In addition to changing the application rate based on the limiting nutrient, the UM-PMT will shift a large number of sites to the high-risk category, making them ineligible for additional nutrient applications. Dr. Josh McGrath from the University of Maryland acknowledged this possibility last fall during a presentation to the Nutrient Management Advisory Committee (NMAC).[6] Here is a copy of one of Dr. McGrath's slides that clearly shows a potential 40% shift in high risk sites between the current PSI and the UM-PMT:

[3] COMAR 15.02.08.05(4)(b).
[4] MAMWA's comments and background materials provided by Synagro regarding this issue are attached as Appendix A. All appendices are incorporated hereto by reference.
[5] MDA's proposed regulations do allow for an operator to reduce the UM-PMT risk to low by implementing BMPs. Unfortunately, a land applier will likely not be able to work individually with a farmer on each site to plan BMPs, revise plans to reduce the risk level, etc. This is an administrative burden given the number of sites involved.
[6] A copy of Dr. McGrath's presentation is attached as Appendix B.

Statewide Distribution of Final Scores



Statewide			
Old Category	Old Distribution	New Category	New Distribution
Low	76%		
Medium	16%	Low	29%
High	5%	Medium	23%
Very High	3%	High	48%
n	391	n	391

Although MAMWA understands that these risk distributions were presented in draft, the materials nonetheless illustrate the potential for widespread changes in nutrient applications across the State.

MDA has not addressed this issue nor suggested any alternatives to land application. In the Notice, MDA acknowledges that certain farmers who spread manure may be negatively affected, but concludes that it "does not have data to assess the number of acres potentially impacted by the proposed regulation or costs for management changes."[7] Further, MDA lists the economic impacts for regulated industries or trade groups as "Indeterminable."[8]

Preliminarily, MAMWA questions how MDA's conclusions on economic impacts meet the requirements of the state's APA. By law, the *Maryland Register* notice must: "(i) state the estimated economic impact of the proposed regulation on: 1. the revenues and expenditures of units of the State government and of local government units; and 2. groups such as consumer, industry, taxpayer, or trade groups;"[9] MDA does not mention impacts on local government at

[7] Notice at 162.
[8] Notice at 162.
[9] MD Code, State Gvt. §10-112.

all, despite the fact that many of the state's POTWs that are land applying biosolids will be financially impacted by MDA's proposals. Furthermore, MDA glosses over potential impacts to the agriculture sector.

MAMWA submits that MDA should perform a review of existing P levels and potential impacts on farming before changing the PSI.[10] Failure to do so is inconsistent with what the State said it would do in the Phase I WIP:

> Initial preliminary review of probable revisions to the P Site Index indicates significant reductions in cropland eligible to receive additional phosphorus, particularly in areas of historically high concentrations of animal agriculture. These outcomes require management solutions that **must also include economically viable alternative uses** of animal manures, **biosolids** and other organic wastes. **Development of market-based solutions** that include value-added or energy-related technologies **is essential**.[11]

There are no widespread economically viable alternative uses of biosolids. In addition, although we would support convening a state task-force to consider potential incentives for using biosolids as a fuel source, this alternative is not available today. If the State believes development of market-based solutions is "essential," it should withdraw the proposed regulation until impacts are considered and such solutions are developed. These actions and impacts must be coordinated.

MAMWA also questions whether the University of Maryland has completed its scientific review of the PSI. MAMWA received a copy of the University of Maryland's presentations and materials from the November 8, 2013 NMAC meeting.[12] It is clear from these materials that as of last November, less than three months before the Notice was published, the University of Maryland's work on the P-Index revisions was in draft. One of the documents that was circulated, entitled "University of Maryland Phosphorus Management Tool (Revised Phosphorus Site Index)," was marked with a "DRAFT" watermark.

In addition, the following slide showed various options for completing the scientific work:

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[10] The Phase II WIP suggests that some of this data is available: "The P Site Index has been used in Maryland to implement nutrient management requirements since 2001. The length of program implementation has yielded a large data-set allowing University of Maryland scientists to assemble information from 9000 fields from 2001-2008." Phase II WIP, App. A at A-47-48.

[11] Phase I WIP, Chapter 5 at 5-14.

[12] Dr. McGrath's presentation is attached as Appendix B. The remaining materials are attached as Appendix C.