HOUSE BILL 381

M4 5lr2530
CF SB 257

By: **Delegates Lafferty, S. Robinson, B. Barnes, Beidle, Carr, Clippinger, Cullison, Ebersole, Fraser–Hidalgo, Frick, Frush, Gaines, Gilchrist, Gutierrez, Hammen, Haynes, Healey, Hettleman, Hill, Hixson, Holmes, Jones, Kaiser, Korman, Lam, Lierman, Luedtke, McIntosh, A. Miller, Moon, Morales, Morhaim, Platt, Proctor, Reznik, B. Robinson, Rosenberg, Smith, Tarlau, Waldstreicher, A. Washington, and M. Washington**

Introduced and read first time: February 6, 2015
Assigned to: Environment and Transportation

A BILL ENTITLED

AN ACT concerning

Agriculture – Nutrient Management – Phosphorus Management Tool

FOR the purpose of incorporating by reference certain nutrient management plan requirements in the Maryland Nutrient Management Manual of the Department of Agriculture and any supplements to the Manual; establishing certain content and criteria for a nutrient management plan developed for an agricultural operation; requiring a certain license holder or certain certified consultant to file a certain report with the Department under certain circumstances and in accordance with certain requirements; providing that a certain agricultural certification does not prevent the application or enforcement of certain provisions of law; and generally relating to nutrient management by agricultural operations.

BY repealing and reenacting, with amendments,
Article – Agriculture
Section 8–801 and 8–1006
Annotated Code of Maryland
(2007 Replacement Volume and 2014 Supplement)

BY adding to
Article – Agriculture
Section 8–808 and 8–808.1
Annotated Code of Maryland
(2007 Replacement Volume and 2014 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

Article – Agriculture

8–801.

(a) In this subtitle the following words have the meanings indicated.

(B) "AVERAGE SOIL PHOSPHORUS FERTILITY INDEX VALUE" OR "AVERAGE SOIL P FIV" MEANS A VALUE:

(1) (I) DETERMINED FOR AN AGRICULTURAL OPERATION BY AVERAGING THE P FIV OF ALL FIELDS OR MANAGEMENT UNITS WITHIN THE OPERATION THAT HAVE A P FIV GREATER THAN 150; AND

(II) CALCULATED BY ADDING TOGETHER THE P FIV OF EACH FIELD OR MANAGEMENT UNIT WITHIN THE OPERATION THAT HAS A P FIV GREATER THAN 150 AND DIVIDING THIS SUM BY THE NUMBER OF ANY SUCH FIELDS OR MANAGEMENT UNITS; AND

(2) ESTABLISHED NO LATER THAN JUNE 30, 2016, USING SOIL TESTS NOT MORE THAN 3 YEARS OLD.

(C) "BEST MANAGEMENT PRACTICE" OR "BMP" MEANS A CONSERVATION OR POLLUTION CONTROL PRACTICE THAT MANAGES SOIL, NUTRIENT LOSSES, OR OTHER POTENTIAL POLLUTANT SOURCES TO:

(1) MINIMIZE NUTRIENT RUNOFF OR POLLUTION OF WATER RESOURCES; OR

(2) IMPROVE AGRICULTURAL PRODUCTION AND MANAGEMENT.

[(b)**] (D)** "Certified nutrient management consultant" means an individual certified by the Department to prepare a nutrient management plan.

[(c)**] (E)** "Commercial farm" means a farm that performs activities related to the production and sale of agricultural commodities, including row crops, fruits, vegetables, horticulture, and silvaculture.

[(d)**] (F)** "Enhanced efficiency fertilizer" has the meaning stated in § 6–201 of this article.

[(e)**] (G)** "Impervious surface" means any structure, surface, or improvement that reduces or prevents absorption of stormwater into land, and includes porous paving, paver blocks, gravel, crushed stone, decks, patios, elevated structures, and other similar structures, surfaces, or improvements.

[(f)**] (H)** "Natural organic fertilizer" has the meaning stated in § 6–201 of this article.

[(g)**] (I)** "Nutrient management plan" means a plan prepared under this subtitle 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 bioavailable nutrients and to maintain productivity.

[(h)**] (J)** "Organic fertilizer" has the meaning stated in § 6–201 of this article.

(K) "P FIV" MEANS THE PHOSPHORUS FERTILITY INDEX VALUE, WHICH IS AN INDEX DEVELOPED BY THE UNIVERSITY OF MARYLAND THAT IS USED TO DESCRIBE THE RELATIVE AVAILABILITY OF PHOSPHORUS TO A PLANT OR CROP.

(L) "PHOSPHORUS MANAGEMENT TOOL" OR "PMT" MEANS THE NEW PROCEDURE DEVELOPED BY THE UNIVERSITY OF MARYLAND, AND DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C, THAT:

(1) USES CHARACTERISTICS OF SOILS, LANDFORMS, AND MANAGEMENT PRACTICES TO IDENTIFY POTENTIAL RISK OF PHOSPHORUS LOSSES FROM SOILS TO WATERS; AND

(2) WILL BE PHASED IN BETWEEN 2016 AND 2021, ULTIMATELY REPLACING THE PHOSPHORUS SITE INDEX.

(M) "PHOSPHORUS SITE INDEX" OR "PSI" MEANS THE ORIGINAL PROCEDURE DEVELOPED BY THE UNIVERSITY OF MARYLAND, APPROVED BY THE DEPARTMENT, AND DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C, THAT USES CHARACTERISTICS OF SOILS, LANDFORMS, AND MANAGEMENT PRACTICES TO IDENTIFY POTENTIAL RISK OF PHOSPHORUS LOSSES FROM SOILS TO WATERS.

(N) "PHOSPHORUS TRANSITION MANAGEMENT PHASE 1" OR "TM1" MEANS THE FIRST OF TWO MANAGEMENT PHASES THAT FARMS WITH A SOIL P FIV OF 150 OR GREATER SHALL EMPLOY WHEN TRANSITIONING FROM USE OF THE PHOSPHORUS SITE INDEX TO THE PHOSPHORUS MANAGEMENT TOOL AS A MEANS TO DETERMINE THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT:

(1) CONSISTS OF THREE RISK CATEGORIES DETERMINED BY A CALCULATION OF THE PHOSPHORUS MANAGEMENT TOOL; AND

(2) INCLUDES A SCHEDULE FOR IMPLEMENTATION BASED ON THE AVERAGE SOIL P FIV FOR THE OPERATION.

(O) "PHOSPHORUS TRANSITION MANAGEMENT PHASE 2" OR "TM2" MEANS THE SECOND OF TWO MANAGEMENT PHASES THAT FARMS WITH A SOIL P FIV OF 150 OR GREATER SHALL EMPLOY WHEN TRANSITIONING FROM USE OF THE PHOSPHORUS SITE INDEX TO THE PHOSPHORUS MANAGEMENT TOOL AS A MEANS TO DETERMINE THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT:

(1) CONSISTS OF THREE RISK CATEGORIES DETERMINED BY A CALCULATION OF THE PHOSPHORUS MANAGEMENT TOOL; AND

(2) INCLUDES A SCHEDULE FOR IMPLEMENTATION BASED ON THE AVERAGE SOIL P FIV FOR THE OPERATION.

[(i)**] (P)** (1) "Professional fertilizer applicator" means any person who:

(i) Is certified to apply fertilizer in accordance with § 8–803.4 of this subtitle; and

(ii) Applies fertilizer for hire.

(2) "Professional fertilizer applicator" includes the owner or manager of property, or an employee of a government entity who applies fertilizer within the scope of employment.

[(j)**] (Q)** "Slow–release nitrogen" means nitrogen in a form that:

(1) Delays its availability for plant uptake and use after application; or

(2) Extends its availability to the plant significantly longer than a reference "rapidly available nutrient" such as ammonium nitrate or urea, ammonium phosphate, or potassium chloride.

[(k)**] (R)** "Soil test" means a technical analysis of soil conducted by a laboratory using standards recommended by the University of Maryland.

(S) "TIER A OPERATIONS" MEANS THOSE FARMS THAT HAVE AN AVERAGE SOIL P FIV OF 150 OR GREATER BUT LESS THAN 300.

(T) "TIER B OPERATIONS" MEANS THOSE FARMS THAT HAVE AN AVERAGE SOIL P FIV OF 300 OR GREATER BUT LESS THAN 450.

(U) "TIER C OPERATIONS" MEANS THOSE FARMS THAT HAVE AN AVERAGE SOIL P FIV OF 450 OR GREATER.

[(l)**] (V)** "Turf" means land, including residential property and publicly owned land that is planted in grass, except land that is used in the sale and production of sod, as defined in § 9–101 of this article.

[(m)**] (W)** "Water–soluble nitrogen" means nitrogen that is readily soluble in water.

[(n)**] (X)** "Waters of the State" has the meaning stated in § 5–101 of the Environment Article.

8–808.

THE NUTRIENT MANAGEMENT PLAN REQUIREMENTS FOR AGRICULTURAL OPERATIONS IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL OF THE DEPARTMENT OF AGRICULTURE, INCLUDING ANY SUPPLEMENTS TO THE MANUAL, ARE INCORPORATED BY REFERENCE INTO THIS SUBTITLE.

8–808.1.

(A) (1) A CERTIFIED NUTRIENT MANAGEMENT CONSULTANT OR CERTIFIED FARM OPERATOR SHALL:

(I) USE THE CRITERIA IN THIS SUBSECTION TO DETERMINE WHICH NUTRIENT IS THE LIMITING FACTOR IN THE APPLICATION OF NUTRIENTS; AND

(II) RECOMMEND SUBSEQUENT NUTRIENT MANAGEMENT STRATEGIES CONSISTENT WITH THIS SUBSECTION.

(2) SOIL FERTILITY SHALL BE USED AS AN INDICATOR OF WHETHER NUTRIENT RECOMMENDATIONS SHOULD BE ADJUSTED TO ADDRESS POTENTIAL NUTRIENT POLLUTION PROBLEMS.

(3) IF THE SOIL SAMPLE ANALYSIS RESULTS SHOW A P FIV OF LESS THAN 150, NUTRIENT RECOMMENDATIONS MAY BE BASED ON NITROGEN PLANT NEEDS AS THE LIMITING FACTOR IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION 1–B.

(4) (I) EXCEPT FOR NUTRIENT MANAGEMENT PLANS DEVELOPED IN ACCORDANCE WITH SUBPARAGRAPH (V) OF THIS PARAGRAPH, THE CERTIFIED NUTRIENT MANAGEMENT CONSULTANT SHALL:

1. PROVIDE THE OPERATOR INFORMATION OUTLINING THE CHANGES IN THE MANAGEMENT OF THE OPERATION THAT WILL BE REQUIRED WHEN THE PHOSPHORUS MANAGEMENT TOOL BECOMES EFFECTIVE;

2. CALCULATE THE AVERAGE SOIL P FIV FOR THE OPERATION; AND

3. REPORT, NO LATER THAN SEPTEMBER 1, 2016, THE AVERAGE SOIL P FIV FOR THE OPERATION TO THE DEPARTMENT ON A FORM PROVIDED BY THE DEPARTMENT.

(II) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BEFORE JULY 1, 2018, SHALL:

1. BE DEVELOPED USING BOTH THE PHOSPHORUS SITE INDEX AND THE PHOSPHORUS MANAGEMENT TOOL, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C; AND

2. USE THE PHOSPHORUS SITE INDEX SET FORTH IN SUBSECTION (B) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(III) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2018, AND JUNE 30, 2019, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 1 IN SUBSECTION (C) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(IV) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2019, AND JUNE 30, 2020, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 2 SET FORTH IN SUBSECTION (D) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(V) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION AFTER JULY 1, 2020, SHALL USE THE PHOSPHORUS MANAGEMENT TOOL SET FORTH IN SUBSECTION (E) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(5) (I) EXCEPT FOR NUTRIENT MANAGEMENT PLANS DEVELOPED IN ACCORDANCE WITH SUBPARAGRAPH (V) OF THIS PARAGRAPH, THE CERTIFIED NUTRIENT MANAGEMENT CONSULTANT SHALL:

1. PROVIDE THE OPERATOR INFORMATION OUTLINING THE CHANGES IN THE MANAGEMENT OF THE OPERATION THAT WILL BE REQUIRED WHEN THE PHOSPHORUS MANAGEMENT TOOL BECOMES EFFECTIVE;

2. CALCULATE THE AVERAGE SOIL P FIV FOR THE OPERATION; AND

3. REPORT, NO LATER THAN SEPTEMBER 1, 2016, THE AVERAGE SOIL P FIV FOR THE OPERATION TO THE DEPARTMENT ON A FORM PROVIDED BY THE DEPARTMENT.

(II) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BEFORE JULY 1, 2017, SHALL USE THE PHOSPHORUS SITE INDEX SET FORTH IN SUBSECTION (B) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(III) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2017, AND JUNE 30, 2018, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 1 SET FORTH IN SUBSECTION (C) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(IV) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2018, AND JUNE 30, 2020, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 2 SET FORTH IN SUBSECTION (D) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(V) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION AFTER JULY 1, 2020, SHALL USE THE PHOSPHORUS MANAGEMENT TOOL SET FORTH IN SUBSECTION (E) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(6) (I) EXCEPT FOR NUTRIENT MANAGEMENT PLANS DEVELOPED IN ACCORDANCE WITH SUBPARAGRAPH (V) OF THIS PARAGRAPH, THE CERTIFIED NUTRIENT MANAGEMENT CONSULTANT SHALL:

1. PROVIDE THE OPERATOR INFORMATION OUTLINING THE CHANGES IN THE MANAGEMENT OF THE OPERATION THAT WILL BE REQUIRED WHEN THE PHOSPHORUS MANAGEMENT TOOL BECOMES EFFECTIVE;

2. CALCULATE THE AVERAGE SOIL P FIV FOR THE OPERATION; AND

3. REPORT, NO LATER THAN SEPTEMBER 1, 2016, THE AVERAGE SOIL P FIV FOR THE OPERATION TO THE DEPARTMENT ON A FORM PROVIDED BY THE DEPARTMENT.

(II) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BEFORE JULY 1, 2016, SHALL USE THE PHOSPHORUS SITE INDEX SET FORTH IN SUBSECTION (B) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(III) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2016, AND JUNE 30, 2018, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 1 SET FORTH IN SUBSECTION (C) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(IV) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION BETWEEN JULY 1, 2018, AND JUNE 30, 2020, SHALL USE THE PHOSPHORUS TRANSITION MANAGEMENT PHASE 2 SET FORTH IN SUBSECTION (D) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(V) NUTRIENT MANAGEMENT PLANS DEVELOPED FOR IMPLEMENTATION AFTER JULY 1, 2020, SHALL USE THE PHOSPHORUS MANAGEMENT TOOL SET FORTH IN SUBSECTION (E) OF THIS SECTION TO DETERMINE PHOSPHORUS APPLICATIONS.

(B) (1) IF THE SOIL SAMPLE ANALYSIS RESULTS SHOW A P FIV OF 150 OR GREATER, THE PHOSPHORUS SITE INDEX, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C1, SHALL BE USED TO DETERMINE THE POTENTIAL RISK OF PHOSPHORUS LOSS DUE TO SITE CHARACTERISTICS.

(2) IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS LOW ACCORDING TO THE PHOSPHORUS SITE INDEX, NUTRIENT RECOMMENDATIONS BY THE CERTIFIED NUTRIENT MANAGEMENT CONSULTANT OR CERTIFIED FARM OPERATOR MAY USE NITROGEN PLANT NEEDS AS THE LIMITING FACTOR.

(3) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (III) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS MEDIUM ACCORDING TO THE PHOSPHORUS SITE INDEX, NUTRIENT RATES SHALL BE BASED ON NITROGEN PLANT NEEDS AS THE LIMITING FACTOR NO MORE THAN 1 OUT OF EVERY 3 YEARS.

(II) PHOSPHORUS RATES FOR THE OTHER 2 YEARS SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(III) NUTRIENT RECOMMENDATIONS MAY USE NITROGEN PLANT NEEDS AS THE LIMITING FACTOR IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS WHICH, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS SITE INDEX, REDUCE THE RISK OF PHOSPHORUS LOSS TO LOW.

(4) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS HIGH ACCORDING TO THE PHOSPHORUS SITE INDEX, PHOSPHORUS RATES SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS WHICH, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS SITE INDEX, REDUCE THE RISK OF PHOSPHORUS LOSS TO MEDIUM, NUTRIENT RATES MAY BE BASED ON NITROGEN PLANT NEEDS AS THE LIMITING FACTOR NOT MORE THAN 1 OUT OF EVERY 3 YEARS.

(III) PHOSPHORUS RATES FOR THE OTHER 2 YEARS SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(5) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS VERY HIGH ACCORDING TO THE PHOSPHORUS SITE INDEX, NO ADDITIONAL PHOSPHORUS MAY BE APPLIED.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS SITE INDEX, REDUCE THE RISK OF PHOSPHORUS LOSS TO HIGH, RECOMMENDED RATES OF APPLICATION OF PHOSPHORUS SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST, OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH RECOMMENDATIONS DESCRIBED IN THE

MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(III) THE OPERATOR SHALL CONSIDER THE IMPLEMENTATION OF MANAGEMENT PRACTICES AND TECHNOLOGIES THAT ARE EFFECTIVE IN LOWERING THE RISK OF PHOSPHORUS LOSS, BASED ON RESEARCH AND DEMONSTRATION OF THE UNIVERSITY OF MARYLAND, OR ANOTHER LAND GRANT UNIVERSITY, OR BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL PLANNING PROCEDURES HANDBOOK AND PRACTICE STANDARDS ADOPTED FOR MARYLAND.

(C) (1) IF THE SOIL SAMPLE ANALYSIS RESULTS SHOW A P FIV OF 150 OR GREATER, THE PHOSPHORUS MANAGEMENT TOOL, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C2, SHALL BE USED TO DETERMINE THE POTENTIAL RISK OF PHOSPHORUS LOSS DUE TO SITE CHARACTERISTICS.

(2) (I) IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS LOW ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, NUTRIENT RECOMMENDATIONS BY THE CERTIFIED NUTRIENT MANAGEMENT CONSULTANT OR CERTIFIED FARM OPERATOR MAY USE NITROGEN PLANT NEEDS AS THE LIMITING FACTOR.

(II) NUTRIENT APPLICATIONS MAY NOT EXCEED THE AMOUNT OF PHOSPHORUS REMOVED BY THE PLANNED CROP OVER A 3–YEAR PERIOD.

(3) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS MEDIUM ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, TOTAL PHOSPHORUS APPLICATIONS RELATED TO CROPS ANTICIPATED TO BE PLANTED IN A 3–YEAR PERIOD SHALL NOT EXCEED THE AMOUNT OF PHOSPHORUS REMOVED BY THE PLANNED CROPS OVER THE 3–YEAR PERIOD, OR THE AMOUNT INDICATED BY SOIL TESTING, IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO LOW, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (2) OF THIS SUBSECTION.

(4) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS HIGH ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, PHOSPHORUS RATES SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO MEDIUM, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (3) OF THIS SUBSECTION.

(III) THE OPERATOR SHALL CONSIDER THE IMPLEMENTATION OF MANAGEMENT PRACTICES AND TECHNOLOGIES THAT ARE EFFECTIVE IN LOWERING THE RISK OF PHOSPHORUS LOSS, BASED ON RESEARCH AND DEMONSTRATION OF THE UNIVERSITY OF MARYLAND, OR ANOTHER LAND GRANT UNIVERSITY, OR BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL PLANNING PROCEDURES HANDBOOK AND PRACTICE STANDARDS ADOPTED FOR MARYLAND.

(D) (1) IF THE SOIL SAMPLE ANALYSIS RESULTS SHOW A P FIV OF 150 OR GREATER, THE PHOSPHORUS MANAGEMENT TOOL, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C2, SHALL BE USED TO DETERMINE THE POTENTIAL RISK OF PHOSPHORUS LOSS DUE TO SITE CHARACTERISTICS.

(2) IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS LOW ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, TOTAL PHOSPHORUS APPLICATIONS RELATED TO CROPS ANTICIPATED TO BE PLANTED IN A 3–YEAR PERIOD MAY NOT EXCEED THE AMOUNT OF PHOSPHORUS REMOVED BY THE PLANNED CROPS OVER THE 3–YEAR PERIOD OR THE AMOUNT INDICATED BY SOIL TESTING, IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(3) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS MEDIUM ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, TOTAL PHOSPHORUS APPLICATIONS RELATED TO CROPS ANTICIPATED TO BE PLANTED IN

A 2–YEAR PERIOD MAY NOT EXCEED THE AMOUNT OF PHOSPHORUS REMOVED BY THE PLANNED CROPS OVER THE 2–YEAR PERIOD, OR THE AMOUNT INDICATED BY SOIL TESTING, IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO LOW, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (2) OF THIS SUBSECTION.

(4) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (III) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS HIGH ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, PHOSPHORUS RATES SHALL BE LIMITED TO 50% OF THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION, OR THE AMOUNT INDICATED BY SOIL TESTING, IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF LIMITS OF TECHNOLOGY OF AVAILABLE APPLICATION EQUIPMENT PREVENT APPLICATION AT 50% OF THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION, PHOSPHORUS RATES SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION, OR THE AMOUNT INDICATED BY SOIL TESTING, IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(III) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO MEDIUM, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (3) OF THIS SUBSECTION.

(IV) THE OPERATOR SHALL CONSIDER THE IMPLEMENTATION OF MANAGEMENT PRACTICES AND TECHNOLOGIES THAT ARE EFFECTIVE IN LOWERING THE RISK OF PHOSPHORUS LOSS, BASED ON RESEARCH AND DEMONSTRATION OF THE UNIVERSITY OF MARYLAND, OR ANOTHER LAND GRANT

UNIVERSITY, OR BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL PLANNING PROCEDURES HANDBOOK AND PRACTICE STANDARDS ADOPTED FOR MARYLAND.

(E) (1) IF THE SOIL SAMPLE ANALYSIS RESULTS SHOW A P FIV OF 150 OR GREATER, THE PHOSPHORUS MANAGEMENT TOOL, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C2, SHALL BE USED TO DETERMINE THE POTENTIAL RISK OF PHOSPHORUS LOSS DUE TO SITE CHARACTERISTICS.

(2) IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS LOW ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, TOTAL PHOSPHORUS APPLICATIONS RELATED TO CROPS ANTICIPATED TO BE PLANTED IN A 3–YEAR PERIOD MAY NOT EXCEED THE AMOUNT OF PHOSPHORUS REMOVED BY THE PLANNED CROPS OVER THE 3–YEAR PERIOD.

(3) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS MEDIUM ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, PHOSPHORUS RATES SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH THE RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS THAT, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO LOW, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (2) OF THIS SUBSECTION.

(4) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPHS (II) THROUGH (VI) OF THIS PARAGRAPH, IF THE RISK FOR POTENTIAL LOSS OF PHOSPHORUS FROM THE SITE IS HIGH ACCORDING TO THE PHOSPHORUS MANAGEMENT TOOL, NO ADDITIONAL PHOSPHORUS MAY BE APPLIED.

(II) IF BMPS ARE IMPLEMENTED BY THE OPERATOR BEFORE OR DURING THE APPLICATION OF ADDITIONAL PHOSPHORUS THAT ADDRESS SITE OR MANAGEMENT CHARACTERISTICS WHICH, ACCORDING TO THE OUTCOME OF A RECALCULATION USING THE PHOSPHORUS MANAGEMENT TOOL, REDUCE THE RISK OF PHOSPHORUS LOSS TO MEDIUM, NUTRIENT RATES MAY BE ESTABLISHED AS PROVIDED BY PARAGRAPH (3) OF THIS SUBSECTION.

(III) IF THE CROP TO BE PRODUCED IS CERTIFIED AS ORGANIC IN ACCORDANCE WITH THE REQUIREMENTS OF THE FEDERAL ORGANIC FOODS PRODUCTION ACT, 7 U.S.C. § 6501 ET SEQ., INCLUDING IMPLEMENTING FEDERAL REGULATIONS, AS AMENDED, RECOMMENDED RATES OF APPLICATION OF PHOSPHORUS SHALL BE LIMITED TO THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION OR THE AMOUNT INDICATED BY SOIL TESTING IN ACCORDANCE WITH RECOMMENDATIONS DESCRIBED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, WHICHEVER IS GREATER.

(IV) EXCEPT WHEN SUBJECT TO COLD AND WET GROWING CONDITIONS, CROPS DETERMINED TO BE DEFICIENT IN PHOSPHORUS, AS DEMONSTRATED BY A REPRESENTATIVE TISSUE ANALYSIS BY AN ACCREDITED LABORATORY, MAY RECEIVE AN APPLICATION OF PHOSPHORUS NOT TO EXCEED 25% OF THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION.

(V) CROPS WITH A RECOMMENDED PHOSPHORUS APPLICATION RATES OF 100 POUNDS OR MORE AT OPTIMUM FERTILITY LEVELS AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION I–B, MAY RECEIVE A PHOSPHORUS APPLICATION AT PLANTING NOT TO EXCEED 25% OF THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION.

(VI) AGRICULTURAL OPERATIONS IMPLEMENTING TECHNOLOGIES TO REDUCE THE PHOSPHORUS CONTENT OF ANIMAL MANURES BY AT LEAST 75% SHALL LIMIT PHOSPHORUS APPLICATION RATES TO 50% OF THE EXPECTED AMOUNT REMOVED FROM THE FIELD BY THE CROP OR PLANT HARVEST IMMEDIATELY FOLLOWING THE PHOSPHORUS APPLICATION.

(VII) THE OPERATOR SHALL CONSIDER THE IMPLEMENTATION OF MANAGEMENT PRACTICES AND TECHNOLOGIES THAT ARE EFFECTIVE IN LOWERING THE RISK OF PHOSPHORUS LOSS, BASED ON RESEARCH AND DEMONSTRATION OF THE UNIVERSITY OF MARYLAND, OR ANOTHER LAND GRANT UNIVERSITY, OR BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL PLANNING PROCEDURES HANDBOOK AND PRACTICE STANDARDS ADOPTED FOR MARYLAND.

(F) THE 6–YEAR TRANSITION SCHEDULE IS AS FOLLOWS:

6–YEAR TRANSITION SCHEDULE
CROP YEAR (JULY 1 – JULY 30 OF THE FOLLOWING YEAR)

	2016	2017	2018	2019	2020	2021
AVERAGE P FIV >450 (TIER C OPERATIONS)	**PSI**	**TM1**	**TM1**	**TM2**	**TM2**	**PMT**
AVERAGE P FIV 300–450 (TIER B OPERATIONS)	**PSI**	**PSI**	**TM1**	**TM2**	**TM2**	**PMT**
AVERAGE P FIV 150–299 (TIER A OPERATIONS)	**PSI**	**PSI**	**PSI**	**TM1**	**TM2**	**PMT**

(G) (1) A PERSON WHO HOLDS A LICENSE ISSUED UNDER THIS SUBTITLE OR A CERTIFIED NUTRIENT MANAGEMENT CONSULTANT WHO IS NOT OPERATING UNDER A LICENSE SHALL FILE A REPORT WITH THE DEPARTMENT THAT INCLUDES INFORMATION RELATING TO NUTRIENT MANAGEMENT PLANS DEVELOPED FOR OPERATIONS THAT HAVE SOILS WITH A PHOSPHORUS FERTILITY INDEX VALUE OF 150 OR ABOVE.

(2) THE REPORT SHALL INCLUDE INFORMATION THAT THE DEPARTMENT DETERMINES NECESSARY TO EVALUATE THE IMPLEMENTATION OF THE PHOSPHORUS MANAGEMENT TOOL, AS PROVIDED IN THE MARYLAND NUTRIENT MANAGEMENT MANUAL, SECTION II–C2.

(3) THE REPORT SHALL BE FILED ON A FORM DEVELOPED BY THE DEPARTMENT IN ACCORDANCE WITH A SCHEDULE DETERMINED BY THE DEPARTMENT.

(4) THE DEPARTMENT SHALL MAINTAIN THE CONFIDENTIALITY OF INFORMATION PROVIDED IN THE REPORT AS REQUIRED BY § 8–801.1(B) OF THIS SUBTITLE.

8–1006.

(a) Except as provided in subsection (b) of this section, an agricultural operation that is in compliance and certified under this subtitle is not subject to:

(1) State or local laws or regulations enacted or adopted after the date of certification that require the reduction of agricultural sources of nitrogen, phosphorus, or sediment to meet:

(i) Chesapeake Bay total maximum daily loads, including the requirements in a watershed implementation plan;

(ii) Local total maximum daily loads; or

(iii) Other water quality requirements for managing agricultural sources of nitrogen, phosphorus, or sediment; or

(2) State or local laws and regulations enacted or adopted after the date of certification related to meeting a reallocation of nitrogen, phosphorus, or sediment load reductions necessary to meet:

(i) Chesapeake Bay total maximum daily loads, including the requirements in a watershed implementation plan;

(ii) Local total maximum daily loads; or

(iii) Other water quality requirements for managing nitrogen, phosphorus, or sediment.

(b) Subsection (a) of this section may not prevent the application or enforcement of any other laws, regulations, or permits, including:

(1) Orders seeking a corrective action for a violation of Title 4, Subtitle 4 of the Environment Article;

(2) Titles 5 and 16 of the Environment Article;

(3) Title 9, Subtitles 2 and 3 of the Environment Article;

(4) Title 8, Subtitle 18 of the Natural Resources Article;

(5) The adoption of a growth tier map by a local jurisdiction under Title 1, Subtitle 5 of the Land Use Article;

(6) Any State or local law or regulation that regulates the development of land;

(7) The federal Clean Water Act;

(8) §§ 8–808 AND 8–808.1 OF THIS ARTICLE;

[(8)**] (9)** Any regulation governing the management of agricultural sources of nitrogen, phosphorus, or sediment initiated by the Department before the enactment of this subtitle; or

[(9)**] (10)** Any applicable laws or regulations that have been enacted, but are subject to a delayed implementation period.

(c) A local government entity may not enforce State or local laws, regulations, rules, ordinances, or standards adopted after the date of certification relating to agricultural sources of nitrogen, phosphorus, or sediment for an agricultural operation certified under this subtitle until the end of the certification period.

(d) If the Program established under this subtitle is terminated, an agricultural operation certified under the Program shall:

(1) Remain certified for the remainder of the certification period for the agricultural operation; and

(2) Be subject to State and local laws or regulations applicable at the time of certification, including this subtitle and the terms and conditions of the certainty agreement entered into under this subtitle.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2015.