pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER MANAGEMENT

September 26, 2014

Mr. Jon Capacasa, Director
Water Protection Division
U.S. EPA Region III
Mail Code: 3WP00
1650 Arch Street
Philadelphia, PA 19103-2029

RE: EPA Objections to Nutrient Trading Provisions in Draft NPDES Permits PA0110582, PA0008231, PA 0046680, PA0038415, PA0027049, PA0021687, PA0026557, PA0021644, PA0009326, PA232513, PA0008281, PA00220273, PA0045985, PA0027171

Dear Mr. Capacasa,

The U.S. Environmental Protection Agency (EPA), through your office, has submitted general or specific objections to the above-captioned draft National Pollutant Discharge Elimination System (NPDES) permits issued by the Pennsylvania Department of Environmental Protection (DEP) based on concerns with the nonpoint source agricultural baseline requirements in Pennsylvania's trading program regulations. EPA asserts that DEP has not made a quantitative demonstration that these requirements achieve the load allocations for agricultural sources in the Chesapeake Bay Total Maximum Daily Load (TMDL). Therefore, EPA asserts they are inconsistent with the Chesapeake Bay TMDL and the federal Clean Water Act. As I have indicated in my responses to you to date, DEP does not agree with this assertion.

Based on our recent discussion relating to EPA's objections, I am providing the following information regarding our trading program to clarify our approach and explain more fully our current efforts to develop a modeling tool to quantify potential nutrient loading from nonpoint sources.

Under Pennsylvania's regulations (25 *Pa. Code* § 96.8(d)), an agricultural operation can only generate credits for use in compliance with NPDES permit requirements when the following applicable requirements are met:

- Compliance with erosion and sedimentation requirements for agricultural operations in 25 *Pa. Code* Chapter 102;
- Compliance with the pollution control and prevention requirements for agricultural operations in 25 *Pa. Code* § 91.36;
- Compliance with the requirements for concentrated animal feeding operations (CAFOs) at 26 *Pa. Code* § 92a.29;
- Compliance with nutrient management requirements at 25 *Pa. Code* Chapter 83, Subchapter D;
- Compliance with one of the following at the location of credit generation:

- No mechanically applied manure within 100 feet of a perennial or intermittent stream with a defined bed or bank, a lake or a pond;
- A minimum 35-foot permanent vegetative buffer between the field and these same waterbodies; or
- A minimum 20% reduction in the total credits to be certified based on the proposed pollutant reduction activity.

DEP is confident that the best management practices implemented by the agricultural operations participating in Pennsylvania's trading program meet the Chesapeake Bay TMDL requirements. Unlike point source discharges with NPDES permits, agricultural operations cannot quantitatively measure the potential nonpoint sources loading of nutrients from their fields. As a result, data to provide EPA with a quantitative demonstration of compliance for agricultural nonpoint sources similar to that provided by point source discharges does not exist. In an effort to satisfy EPA's request for a quantitative demonstration, DEP is evaluating several modeling tools that can be used to provide quantitative estimates of nutrient loadings from agricultural operation complying with Pennsylvania's regulatory requirements.

In order to move forward DEP is willing to make the following specific adjustments to its NPDES permits and trading program to address EPA's concerns.

Increased Sampling Frequency

EPA has expressed concern that increased sampling is necessary in NPDES permits for discharges in the Chesapeake Bay watershed to ensure nutrient loading is consistent with the Bay TMDL. DEP will increase the sampling frequency for total nitrogen (TKN, NO2/NO3, NH3-N) and total phosphorus from one sample per week to two samples per week for all significant Chesapeake Bay dischargers. This increase in sampling will take place as the NPDES permits are renewed. DEP will begin by resubmitting the draft permits that EPA has objected to since April 10, 2014, and will include this requirement in all subsequent draft permits issued.

Nonpoint Source Trading Ratio/Baseline Evaluation

DEP will process and approve agricultural nonpoint source credit certification proposals as follows:

1) Credits generated from existing non-point source certifications and those containing non-point practices will not be used for NPDES permit compliance after Compliance Year 2016.

2) All new or reissued agricultural nonpoint source credit certification proposals received by DEP will be required to achieve the current regulatory baseline and threshold requirements, and to apply a 3:1 trading ratio. These certifications will expire on September 30, 2017, subject to the qualifying language in number four below.

3) The use of credits generated by manure hauling for NPDES permit compliance will be discontinued after Compliance Year 2015.

4) Upon development and implementation of a performance-based model that is consistent with the Chesapeake Bay TMDL for agricultural nonpoint source baseline calculations, all new

agricultural nonpoint source credit certification proposals will be required to calculate baseline using this model. These certifications will have a five-year term. If the tool is not available for use by September 30, 2017 due to unseen complications, the process described in number two of using a 3:1 ratio will continue to be used until the tool is available.

5) All NPDES permittees and holders of existing agricultural nonpoint source credit certifications will be notified of these requirements by November 15, 2014. DEP will post these changes on DEP trading web page. Dep will share re-drafts of the currently submitted NPDES permits with EPA for full review.

Point Source Baseline

Credits generated by an NPDES permittee based on available capacity can be used for compliance by another NPDES permittee through Compliance Year 2015. In order to generate credits for sale in Compliance Year 2016 and beyond, an NPDES permittee must achieve a performance level of 6 mg/l for total nitrogen and 0.8 mg/l for total phosphorus. Credits will be calculated using the following equations:

TN Credits = (Compliance year annual flow (MG) X 6.0 mg/l-TN X 8.345) – Compliance year annual TN loading (lbs)
TP Credits = (Compliance year annual flow (MG) X 0.8 mg/l-TP X 8.345) – Compliance year annual TP loading (lbs).

Next Steps

Based on the assurances provided above in response to EPA's outstanding general and specific objections to the draft NPDES permits related to Pennsylvania's trading program, DEP will amend draft NPDES permits previously submitted to the Agency. DEP requests that EPA withdraw these permit objections. Please be advised that nothing in this letter should be construed as waiving DEP's requests for public hearings if the objections are not withdrawn, DEP's right to further contest the general and specific objections, or its right to take other actions it deems appropriate to defend its current program and regulations.

I hope we can move forward in a cooperative manner to complete the important work of developing a performance-based model for use in calculating agricultural nonpoint source baseline for use in Pennsylvania's nutrient trading program. DEP remains committed to this useful tool in achieving the goals of the Chesapeake Bay TMDL and improving water quality in Pennsylvania, and hopes that EPA will continue to support its efforts in this regard.

Sincerely,

Kelly Jean Heffner

Kelly Jean Heffner
Deputy Secretary