pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FEB 26 2015

Diane Hollenbach
Maidencreek Township
1 Quarry Road
PO Box 319
Blandon, PA 19510-0319

Re: Review of MS4 TMDL Strategy
Maidencreek Township MS4
NPDES Application No. PAG133521
Maidencreek Township, Berks County

Dear Ms. Hollenbach:

The Department of Environmental Protection (DEP) received your Notice of Intent (NOI) for coverage under the PAG-13 MS4 NPDES General Permit on September 7, 2012. Your NOI contained a Total Maximum Daily Load (TMDL) Strategy as required by the NOI instructions. DEP provides its comments on your TMDL Strategy below.

MS4 Area of Responsibility

MS4s are responsible for the stormwater that enters the permittee-owned or operated Municipal Separate Storm Sewer. The MS4 area of responsibility is the area within the municipality's urbanized area from which that stormwater drains, regardless of property ownership, with the exception of property covered under a separate NPDES permit for stormwater discharges.

The Lake Ontelaunee TMDL document states that 38.4 hectares (94.8 acres) drain from Maidencreek Township's MS4 permitted area (pages 4-8 through 4-9). Page 3 of the Maidencreek Township TMDL Strategy only reports 79 acres that drain from the urbanized area within Maidencreek Township. Supporting documentation is required to explain the discrepancy in MS4 drainage area. If any additional stormwater drains into the permittee-owned or operated MS4 and discharges into Lake Ontelaunee (from Calcium Road for example) then it must be documented in the TMDL Strategy.

TMDL Strategy Analysis

Pollutant loadings were calculated using a method similar to Worksheet 13 found in the Pennsylvania Stormwater Best Management Practices Manual (PA BMP Manual). However, the majority of the total phosphorus (TP) event mean concentration (EMC) values were taken from the New Hampshire Stormwater Manual Volume 1, Chapter 8 "Pollutant Loading Calculations". Given that most of the EMC values for TP taken from the New Hampshire Stormwater Manual are significantly lower than those in the PA BMP Manual, documentation is required to support the use of such values.

Page 12 of the Maidencreek Township TMDL Strategy states that BMP reductions are applied "the remaining area of the street rights-of-way are converted from lawn to meadow, to reflect a lower EMC associated with Township-controlled right-of-way". Supporting documentation is required to demonstrate how the lawn and meadow land use is altered through street sweeping in addition to the 85% reduction in pollutant load credited to street sweeping the medium traffic streets.

Please note that Table 3 on page 14 of the Maidencreek Township TMDL Strategy contains an incorrect MS4 total suspended solids load conversion from 26.6 metric tons per year to 53,200 pounds per year. The correct conversion is to 58,643 pounds per year.

Plan for Achieving Ultimate TMDL Obligations

The Strategy must describe in general the BMPs that will be used to achieve the TMDL-required pollutant loading reductions. The total reductions must equal or exceed the required total reduction. Claimed reductions must be supported by the Pennsylvania Stormwater Best Management Practices Manual or other credible sources. Street sweeping may be used as a BMP but claimed TMDL credits must be in accordance with the effort applied. To achieve the street sweeping load reductions in the BMP Manual requires the use of high-efficiency equipment and frequent sweeping (i.e., not less than monthly and must be thoroughly documented).

The BMP Manual states:

> Another factor to consider in street sweeping programs is "wash-on" or material that washes onto impervious areas from upgradient/upstream pervious surfaces. Obviously if large amounts of sediment and related-pollutants wash onto the paved surfaces during storm events themselves, street sweeping is going to be relatively ineffective.

The TMDL Strategy submitted by Maidencreek Township states that the drainage area to the outfall is 63.2 acres, of which 36.2 acres is agricultural land use, 11.4 acres is meadow, and 11.0 acres is lawn. Therefore, approximately 93% of the drainage area is composed of pervious areas providing "wash-on" materials.

The TMDL Strategy proposes to street sweep Orchard and Slater Roads once per year in the month of May, however the BMP Manual states:

> Although pollutant removal performance for street sweeping will vary with the frequency of the street sweeping program, evaluations are demonstrating remarkably high pollutant removal, especially if the program includes weekly street sweeping.

It is therefore unacceptable to propose that 85% of the sediment from the entire area which drains to a roadway will be collected by annual street sweeping.

The DEP would like to remind Maidencreek Township that materials removed from catch basins and street sweeping activities are not considered as clean fill and must be landfilled unless an alternative disposal or reuse strategy had been specifically approved by the DEP.

Public Participation and Involvement

DEP is requiring that you take measures to solicit public involvement and participation for your TMDL Strategy. The required measures are as follows:

- Make a complete copy of the plan available for public review.
- Publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments.
- Accept written comments for a minimum of 30 days from the date of public notice.
- Accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
- Consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

A resubmission of your TMDL Strategy addressing the issues identified in this letter is due no later than **December 31, 2015**. In your resubmission of the TMDL Strategy to DEP, please include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.

DEP has recently updated its Standard Operating Procedures (SOPs) relating to the review of TMDL Strategies. All MS4s are invited to review the SOPs, which may assist in understanding what DEP is seeking in the next submission of TMDL Strategies. To review the SOPs please visit DEP's website at www.depweb.state.pa.us, click on Program Integration, and then Standard Operating Procedures. Open the SOPs applicable to MS4s under the section for the Bureau of Point and Non-Point Source Management (see Section IV in the SOPs).

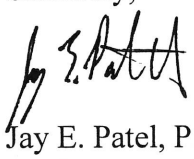
DEP wishes to clarify the issue of your current permit coverage. The PAG-13 General NPDES Permit that was originally issued in 2003 expired in 2008 and was administratively extended multiple times. Between 2008 and 2013, your MS4 operated under the administratively extended General Permit. On March 16, 2013, a new General Permit became effective. If you submitted a timely NOI, i.e., at least 180 days prior to the expiration of your General Permit coverage (unless a later date was approved by DEP), you are currently operating under the new PAG-13 General Permit. The General Permit is available on DEP's website (visit www.elibrary.dep.state.pa.us, select "Permit and Authorization Packages", "Point and Non-Point Source Management", "National Pollutant Discharge Elimination System – NPDES", "Municipal Separate Storm Sewer Systems – MS4s", and "PAG-13 General Permit"). You must comply with the terms and conditions set forth in the new General Permit. However, if you did not submit a complete TMDL Plan (i.e., TMDL Strategy and TMDL Design Details) with your

NOI, you are not required to develop the "TMDL Design Details" portion of the TMDL Plan unless and until DEP approves your TMDL Strategy.

Please be advised that DEP is currently planning for the subsequent permit term. At this time DEP is proposing that MS4s subject to wasteload allocations (WLAs) in a TMDL for nutrient and/or sediment will need to develop and submit a complete TMDL Plan (i.e., TMDL Strategy and TMDL Design Details) with an individual permit application for the subsequent permit term. For many MS4s the individual permit application will be due in September 2017. DEP is sharing this information with you now to help you prepare for work that may be necessary over the next two years. TMDL Plans would not be necessary where WLAs are assigned for pollutants other than nutrients and/or sediment. Please check DEP's website at www.depweb.state.pa.us/MS4 for additional updates in 2015.

If you have any questions concerning this notice, please contact J. Michael Hickman at johickman@pa.gov or (717)705-6640.

Sincerely,



Jay E. Patel, P.E.
Environmental Engineer Manager
Clean Water Program
Southcentral Regional Office

cc: Thomas S. Unger, P.E., System Design Engineering, Inc.
DEP Central Office, Bureau of Point and Non-Point Source Management