



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

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Secretary of Natural Resources

David K. Paylor  
Director

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August 29, 2014

Mr. Chuck Lacey, Jr. P.E.  
Advanced Drainage Systems, Inc.  
12137 Deer Haven Road  
Hilliard, OH 43026

Re: Assignment of Percent Removal Efficiencies for Total Phosphorus

Dear Mr. Lacey,

Thank you for your submittal of the Manufactured Treatment Device (MTD) Registration Form and supporting documentation for the ADS Storm Water Quality Unit. The MTD information provided was reviewed for the purpose of assigning a pollutant removal efficiency for total phosphorus (TP). This review was performed in accordance with the Guidance Memo Number 14-2009 titled "Interim Use of Stormwater Manufactured Treatment Devices (MTDs) to meet the Virginia Stormwater Management Program (VSMP) Technical Criteria, Part IIB Water Quality Design Requirements". The review process included the analysis of the documents submitted and any other publically available reports.

In addition to the registration form, two performance studies were also submitted for review. These studies comprise of a laboratory study and a field study conducted at the University of New Hampshire Stormwater Center. Based on these studies ADS Storm Water Quality Unit is receiving an event mean concentration percent TP removal efficiency of 20%. As stated in the guidance memo, this information will be posted on the Virginia Stormwater Clearinghouse website. This MTD and the assigned removal efficiency can be manually added into Virginia Runoff Reduction spreadsheet to demonstrate compliance with Runoff Reduction Method.

If you have any questions regarding this information, please contact Robert E. Cooper, P.E. at (804) 698-4033 or e-mail at [Robert.Cooper@deq.virginia.gov](mailto:Robert.Cooper@deq.virginia.gov).

Sincerely;

A handwritten signature in black ink that reads "Fred K. Cunningham".

Fred K. Cunningham  
Director  
Office of Water Permits