



## MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Martin O'Malley, Governor  
Anthony G. Brown, Lieutenant Governor

Shari T. Wilson, Secretary  
Robert M. Summers, Ph.D., Deputy Secretary

January 13, 2008

Mr. Thomas Pank  
BaySaver Technologies, Inc.  
1302 Rising Ridge Rd.  
Mount Airy, MD 21771

Dear Mr. Pank:

*Tom*

This is in response to BaySaver Technologies' request to approve the BaySeparator/BayFilter system as a stand alone best management practice (BMP) for stormwater treatment in Maryland. The Maryland Department of the Environment (MDE) has reviewed the following documents:

- "Efficiency Assessment of BaySeparator and BayFilter Systems in the Richard Montgomery High School – Preliminary Test Report" dated June 12, 2008 (updated on October 1, 2008)
- The Richard Montgomery High School Stormwater Management System #2 Design Computations Asbuilt Conditions and Test Configuration for MASWRC Testing
- The NJCAT BaySeparator and BayFilter QAPP Submittal
- The University of Maryland's (UMD) study entitled, "Evaluation of MASWRC Sample Collection, Sample Analysis, and Data Analysis" dated December 22, 2008

The entire submittal includes field monitoring data from sampled influent and effluent, laboratory results, pollutant removal efficiencies, a third party study of all monitoring and data analysis, and sizing criteria in conjunction with MDE design requirements. MDE believes this information is sufficient to approve the BaySaver Technologies system as a stormwater management BMP for water quality control. This approval is specific to systems similar to the configuration at the Richard Montgomery High School and noted below.

The BayTechnologies' system is comprised of three components that include the BaySeparator pretreatment chamber, underground storage pipes, and the BayFilter. When the BaySeparator system is not used, an acceptable pretreatment measure in accordance with the "2000 Maryland Stormwater Design Manual" will be required. The underground detention system shall be sized to hold 75% of the water quality volume ( $WQ_v$ ) prior to discharge into the BayFilter. The  $WQ_v$  will then flow through the BayFilter for treatment at a maximum rate of 15 gallons per minute or 1 BayFilter cartridge for every 2,500 cubic feet of water to be filtered. The storage chamber may also be sized to treat for channel protection when designed according to the requirements in the "2000 Maryland Stormwater Design Manual."

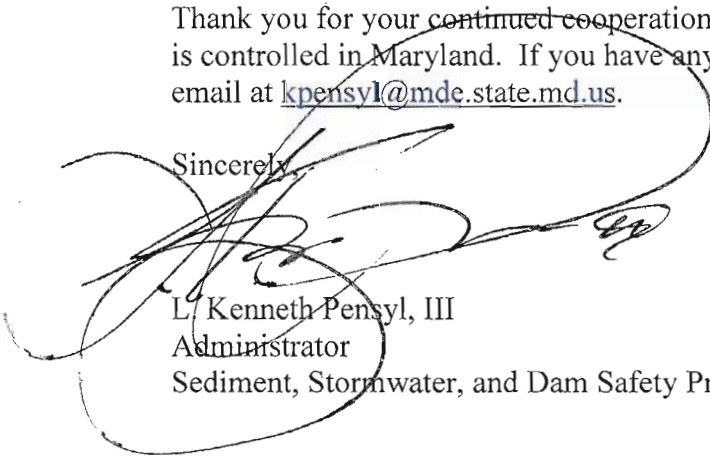
This approval is based on the field monitoring data provided by BayTechnologies that show that the BMP performance criteria of 80% total suspended solids (TSS) and 40% total phosphorus

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(TP) removal rates have been met. In addition, the UMD study provides an independent, third party review of all monitoring protocols, sampling, and data analysis, and concludes that the methods and techniques are satisfactory. MDE, however, does support those recommendations made by UMD for future monitoring efforts.

Thank you for your continued cooperation and for your interest in improving the way stormwater is controlled in Maryland. If you have any questions please contact me at 410-537-3543 or by email at [kpensyl@mde.state.md.us](mailto:kpensyl@mde.state.md.us).

Sincerely,



L. Kenneth Pensyl, III  
Administrator  
Sediment, Stormwater, and Dam Safety Program