

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Larry Hogan Governor Ben Grumbles Secretary

Boyd Rutherford Lieutenant Governor

January 27, 2016

Ms. Jamie Lefkowitz, P.E. Senior Water Resources Engineer, OptiRTC Inc. 356 Boylston Street, 2nd Floor Boston, MA 116

Dear Ms. Lefkowitz:

Thank you for your letter to the Maryland Department of the Environment (MDE) regarding the use of the Continuous Monitoring and Adaptive Control (CMAC) system for new development, retrofitting, redevelopment, and infill applications. MDE has evaluated the product's description and supporting information with respect to potential treatment applications in Maryland. We offer the following:

When considering new development applications in Maryland, environmental site design (ESD) must be used to the maximum extent practicable (MEP) to reduce runoff and mimic natural hydrologic conditions. The use of ESD techniques and practices must be exhausted before structural practices may be used. Based on your application, MDE understands that the CMAC system is used to monitor facility performance, regulate outflow, and maximize storage capacity of wet pond variants. Please understand that wet ponds are considered as structural practices when designed in accordance with the criteria found in Chapter 3 of the 2000 Maryland Stormwater Design Manual (the Manual). MDE believes that the CMAC system can be used to augment the hydraulic controls for wet ponds. However, as a component of these practices, the CMAC is subject to the same conditions for the use of wet ponds (see pp. 3.2 to 3.15 of the Manual) in Maryland. This includes a maintenance agreement ensuring long term performance of the CMAC system.

MDE has determined that the CMAC system also may be used in wet ponds as retrofit applications to meet National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) Phase I permit restoration requirements provided it is accepted locally. When used in this manner, pollutant removal efficiencies equivalent to those assigned to structural treatment (ST) practices as shown in Tables 1.E and 2.E in MDE's guidance, Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated (MDE 2014) may be used provided the design meets the conditions listed above. With respect to redevelopment, the local approval authority may allow the use of alternative



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TTY Users 1-800-735-225 Via Maryland Relay Service

¹ 2000 Maryland Stormwater Design Manual, Volumes 1 and 2 (MDE, 2000 & 2009)

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stormwater management measures if impervious area reduction and ESD have been implemented to the maximum extent practicable (MEP). Therefore, MDE has no objections to the use of the CMAC system for redevelopment provided it is accepted locally.

In conclusion, the CMAC system may be used for new development and retrofitting if it meets the conditions as described above. Similarly, MDE has no objections to use of the CMAC system for redevelopment provided it is accepted locally. However, local jurisdictions may request a copy of a letter from MDE verifying product classification. Please consider this that letter. Thank you again for your interest. If you have any questions, please contact me at (410) 537-3550 or by email at stewart.comstock@maryland.gov.

Sincerely,

Stewart R. Comstock, P.E.

Senior Regulatory and Compliance Engineer

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Program Review Division

Sediment, Stormwater, and Dam Safety Program