



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

September 21, 2022

Mr. Viktor Hlas, P.E.
Director, OptiRTC, Inc.
PO Box 170118
Boston, MA 02117

Dear Mr. Hlas:

Thank you for your August 20, 2020 submission to the Maryland Department of the Environment for Certification of Innovative Stormwater Management Technologies for Retrofit Applications. The Department recognizes that OptiRTC's Continuous Monitoring and Adaptive Control (CMAC) technology for dry and dry extended detention pond retrofit applications is an important tool for managing the impacts of stormwater runoff in the face of climate change. With increasing stormwater runoff and flood risks, smart ponds have the potential ability to adapt to future conditions and optimize both pollution reduction and flood management resulting in cleaner and more resilient communities.

In accordance with your submission, and data review, MDE authorizes the use of OptiRTC CMAC for dry and dry extended pond retrofit applications. These applications are eligible for a partial credit of 75% of the pollutant load reduction credit available for stormwater treatment or "ST" practices as defined in the 2021 Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated Guidance for National Pollutant Discharge Elimination System Stormwater Permits (Accounting Guidance). To qualify for these credits, dry or dry extended detention ponds shall be designed to minimize resuspension of sediment at the outlet. Acceptable design options include:

- A shallow (i.e., ≥ 6 -inch deep) permanent pool;
- A shallow wetland feature; or
- A micropool at the outlet.

Additionally, all existing ponds and dams must be in good condition with structural appurtenances and the dam embankment stable, in good repair and meeting applicable standards. In addition, applications of an OptiRT CMAC system are limited to ponds with a storage volume less than 20 acre feet and with a dam classified as a low hazard with no more than

15 feet in height. Applications of OptiRTC CMAC on dry or dry extended detention ponds located in Use III or Use IV watersheds may require special consideration to prevent thermal impacts to cold water aquatic life.

With respect to the calculation of the potential credits, Table 3 (see p. 8) of the Accounting Guidance provides the pollutant removal efficiencies for upland practices. For a dry or dry extended detention pond with CMAC technology that captures one inch of rainfall, the credits would be 75% of the values listed in Table 3 [i.e., 35% for total nitrogen (TN), 54.9% for total phosphorus (TP), and 69.9% for total suspended solids (TSS)]. This would result in reductions of 26.25%, 41.2%, and 52.4% for TN, TP, and TSS, respectively.

Thank you again for your patience and cooperation. If you have any questions, please contact me at 410-537-3567 or contact Jennifer M. Smith at 410-537-3561 or by email at jenniferm.smith@maryland.gov.

Sincerely,

D. Lee Currey

D. Lee Currey (Sep 27, 2022 17:58 EDT)

D. Lee Currey
Director, Water and Science Administration

CMAC Dry and Dry ED pond approvals(rev)

Final Audit Report

2022-09-27

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