

ATTACHMENT 1

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Proprietary Best Management Practice (BMP) Registration Statement

Complete this form and submit it along with supporting documents to the Virginia Department of Environmental Quality (Department) at BMPClearinghouse@deq.virginia.gov. If approved by the Department, the device will be assigned a total phosphorus (TP) removal efficiency and listed on the Virginia Stormwater BMP Clearinghouse.

1. Proprietary BMP / Manufactured Treatment Device (MTD) Name (as it is to appear on the Virginia Stormwater BMP Clearinghouse): **FocalPoint HPMB**

2. Company Name: Convergent Water Technologies
Mailing Address: 13810 Hollister Drive, Suite 100
City: Houston
State: TX Zip: 77086

3. Contact Name (of person to be listed on the Virginia Stormwater BMP Clearinghouse): Scott Gorneau, P.E.
Mailing Address: 13810 Hollister Drive, Suite 100
City: Houston
State: TX Zip: 77086
Phone number: 207.831.2795
Fax number: 832.456.1055
E-mail address: sgorneau@convergentwater.com
Web address: www.convergentwater.com

4. Treatment Type

- Hydrodynamic Structure
- Filtering Structure
- Manufactured Bioretention System
Provide Infiltration Rate (in/hr): 100 to 160 in/hr
- Other (describe):

5. Certification (check all that apply and submit all certification letters from TAPE, NJDEP, etc.):

- TAPE**
 - TP (include Technical Evaluation Report if applying for greater than 50% TP removal efficiency)
 - TSS
- NJDEP (TSS)**
- Other** (specify) – see below

Vermont Department of Environmental Conservation (VTDEC) – under sections 4.41 and 4.42 of the Environmental Protection Rule Chapter 36, 2017 VT Stormwater Manual, the State self verifies, and self certifies alternative stormwater treatment

practices. Under these rules FocalPoint is approved as a stand-alone Tier 2 practice which is credited with 60-80% TP removal and 80-97% TSS removal.

Maine Department of Environmental Protection (MEDEP) – under Maine DEP’s Chapter 500 Stormwater Management Rules, Appendix B Proprietary Systems, the State self verifies, and self certifies systems to remove at least 60% total phosphorus. FocalPoint HPMBS is approved by MEDEP as meeting this standard.

Environmental Security Technology Certification Program (ESTCP) is the Department of Defense (DoD) environmental technology demonstration and validation program. ESTCP requires each project to develop a formal test and evaluation plan. Demonstration results are subject to rigorous technical reviews to ensure that the conclusions are accurate and well supported by data. The Naval Facilities Engineering Command – Engineering & Expeditionary Warfare Center (NAVFAC-EXWC) commissioned a field study designed to address the established performance objective focused on California Regional Water Quality Control Board (CRWQB), San Diego Region Water Discharge Requirements for the United States Department of the Navy, Naval Base Point Loma Complex of San Diego, NPDES Permit No CA0109363 and utilized Washington State TAPE protocol (Washington State Department of Ecology 2011) to collect and report the data. The Technical Report (TR-NAVFAC-EXWC-EV-2004) issued April 2020 demonstrates the FocalPoint HPMBS removes of at least 60% total phosphorus.

Maryland Department of Environment (MDE) – while this State caps their removal efficiency at 40% for total phosphorus and 80% for total suspended sediment, MDE self verifies, and self certifies innovative technologies under Maryland’s Stormwater Program. FocalPoint is approved by MDE as a stand-alone filtering practice capable of meeting the Department’s requirement of 40% TP and 80% TSS removal. It is worth noting that eight of the ten approved proprietary filtering listed on the VADEQ website (post Jan 1, 2022) have met this same requirement with the other two (Kraken Membrane Filter and the Hydro International Up-Flow Filter) meeting pretreatment practice standards. Additionally, the field monitoring data verified by MDE shows the FocalPoint achieves at least 50% TP removal and the VADEQ used this same field monitoring data to assign the FocalPoint a 50% TP removal efficiency prior to the updated rules and procedures that went into effect January 1, 2022.

6. Proprietary BMP History:

How long has this specific model/design been on the market? 10-Years

7. Maintenance:

What is the generic inspection and maintenance plan/procedure? (Attach necessary documents): Maintenance training and replacement mulch is included by Convergent or its value-added resellers (VAR) in the first year after activation at no additional cost to the owner. Typically, two (2) visits per year are recommended to remove sediment/debris, replace the mulch, weed, prune the vegetation, etc. These visits should be conducted in spring and fall, with spring visits targeting cleanup from winter pollutant loads and the fall visit targeting leaf litter and pine spills in addition to sediment loads. More information can be found in Convergent's operation and maintenance guide:

<https://convergewater.wpengine.com/wp-content/uploads/2021/06/focalpoint-operations-maintenance-guide.pdf>

Maintenance Visit Procedure

Each maintenance visit consists of the following tasks.

- *Inspect FocalPoint HPMBs and Surrounding Area* – Document with photographs and record on maintenance report (example document provided).
- *Remove Silt/Sediment/Clay* – Dig out silt (if any) and mulch and remove trash and foreign items. After removal of mulch and debris, measure distance from the top of the FocalPoint HPMBs engineered media soil to the flow line elevation of the adjacent overflow conveyance. If this is greater than that specified on the plans add FocalPoint HPMBs media (not top soil or other) to recharge to the distance specified.
- *Mulch Replacement* – Bags of clean, double shredded hardwood mulch are typically used for smaller biofiltration beds; however, larger systems may require truckloads of mulch.
- *Plant Health Evaluation and Pruning or Replacement as Necessary* – Examine the plants' health and replace if dying. Prune as necessary to encourage growth in the correct directions.
- *Clean Surrounding Area* – Clean area around the unit and remove all refuse to be disposed of appropriately.
- *Complete Paperwork* – Including date stamped photos of the tasks listed above. Submit maintenance reports to local jurisdictions in accordance with approvals.

Is the maintenance procedure and/or are materials/components proprietary?

The maintenance procedure is not proprietary and is typical of vegetated, green infrastructure practices that include rain gardens, bioretention, bioswales and high flow media biofiltration systems.

Components that are not proprietary include:

- Double shredded hard wood mulch or in some cases rock mulch
- Bridging stone

Components that are proprietary

- High performance media that has been NJDEP certified, and field verified and certified by many regulatory agencies.
- High performance modular box underdrain

Yes, proprietary

No, not proprietary

8. Comments

Include any additional explanations or comments: See cover letter attached.

9. Certification

Signed by the company president or responsible officer of the organization:

"I certify that all information submitted is to the best of my knowledge and belief true, accurate, and complete."

Signature:  _____

Name: Scott Gorneau, P.E.

Title: Vice President

Date: February 24, 2022

NOTE: All information submitted to the Department will be made publicly accessible to all interested parties. If the device is approved by the Department, this Proprietary BMP registration form will be posted on the Virginia Stormwater BMP Clearinghouse.