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Standard Specifications and Design Manual for Erosion, Sediment, Pollution Control and Stormwater Management - Version 11.1, 2021

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HOW TO USE THIS MANUAL

Welcome to the eleventh edition (11.1) of the Filtrexx International Standard Specifications and Design Manual for Erosion, Sediment, and Pollution Control and Storm Water Management Practices. Although this manual may be used by anyone interested in the technical aspects of using compost practices and/or Filtrexx International products for erosion and sediment control and storm water management applications, it is intended to assist engineers, architects, land planners, and other technical and design professionals to more easily and readily specify and utilize these practices in their design plans.

Secondarily, as state agencies begin the needed process of updating their erosion and sediment control or storm water design manuals, this manual and the sections herein shall serve as templates or ready to use sections that can be adopted by state agencies for their updated standard specification and design manuals. This design manual has been expanded into seven principle sections:

Section 1.0: Erosion and Sediment Control - Construction Activities;

Section 2.0: Storm Water Management - Post-Construction Activities;

Section 3.0: Living Walls - Post-Construction Activities;

Section 4.0: Pollutant Removal;

Section 5.0: Filtrexx Support Practices;

Section 6.0: Filtrexx SWPPP Cut Sheets;

Section 7.0: Appendices – Technical Research Summaries and Federal Level Standard Specifications.

While there is significant overlap between sections, and common sense tells us they should not be separated, many existing state manuals currently divide these areas of design and planning. Specifically, pertaining to this manual, Section 1.0 will address practices for construction activities and land disturbing activities, Section 2.0 and 3.0 will address practices for post-construction and long-term management of storm water, and Section 4.0 and 5.0 describes specific support practices that can increase the performance of those practices described in Section 1.0, 2.0, and 3.0.

Whereas, this manual is intended primarily for design professionals it does not constitute a work of research but does, where applicable, rely on completed and published research, or test results from reputable laboratories, to generate the performance and design information provided herein. Preference is given to research published in peer-reviewed scientific journals, and secondarily to third party research conducted by universities and federal agencies or applied field research from known success on case studies. As new research and results from testing programs becomes available it shall be incorporated into the performance and design information in this manual, meaning this manual is a dynamic living document and will continually be updated.

Design drawing details and photographs have been included in each section for most Filtrexx products and practices; these may be used without permission for individuals or groups preparing erosion and sediment control or storm water pollution prevention plans. An appendix included at the end of the design manual will contain referenced and relevant technical reports and research papers. On behalf of the staff at Filtrexx International and the courageous team of technical reviewers who helped make this possible, we hope you find this manual useful and helpful in your endeavors.

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ACKNOWLEDGMENTS

Filtrexx International would like to thank our customers, progressive engineers in the field who have worked with us over the last seven years to understand where Filtrexx Products fit and most of all, our incredible Certified Installer network. Many of the new ideas that have been field tested and then end up in the design manual indeed have been from creative site work with our Certified Installer crews. Thanks for the hard work and valuable contributions.

Thanks to Alfie Vick and Karl Kerchner for many hours and months of technical review that has allowed this document to undergo its own peer review process, in addition to their extensive review and contribution to our Filtrexx Tech Link Series, provided in the appendix, and the Filtrexx Design Tool. An additional thanks to Alfie Vick for his original contributions to sections 2.7 and 2.8 as well as technical drawings scattered throughout this manual. Thanks also to Gretchen Gigley for her design drawings also used herein. Of course, without the entire Filtrexx Team none of this would have been possible, as this is truly the culmination of a long creative process which we all own equally. Cheers!

ADDITIONAL INFORMATION

For other references on this topic, including additional research reports and trade magazine and press coverage, visit the Filtrexx website at filtrexx.com

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