

**NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH**

SEPTIC TANK EFFLUENT FILTER APPROVAL

Septic Tank Effluent Filter Approval Number: EF-22-R5

Issued to: Watercore LLC
146 Clifton Hall Ct
Shepherdsville, KY 40165

Contact: Mike Hornback
502-493-4550

For: Watercore LLC Septic Tank Effluent Filter Models C4, C4C, and C4CBF

Date:	April 21, 2020	
	September 9, 2020	Correction to Table 2
	March 16, 2022	Addition of LT-1/16, LT-1/32, and LT-1/64
	December 31, 2024	Updated for 18E and Renewed for 2025
	December 31, 2025	Renewed for 2026

In accordance with G.S. 130A-335 and 130A-335.1 and 15A NCAC 18A .1404 and .1405, an application by Watercore LLC for renewal of the approval for septic tank effluent filters has been reviewed and approved when the following conditions are met.

I. Description

- A. Effluent filters shall be designed and manufactured in accordance with plans, specifications, and documents submitted by the manufacturer with the application.
- B. Effluent filters shall meet the specifications in Table I.

II. Sizing

The approved effluent filter models may be used in approved septic tanks. The approved flow capacities are shown in Table II. The effluent filter sizing must be compatible with the design daily flow and the minimum septic tank size in accordance with 15A NCAC 18E .0801.

Table I. Approved Filter Model Specifications						
Filter Models	Size	Support Case ¹	Case Dimensions		Min. Tank Liquid Depth Required	Min. Access Opening Size ²
			Above Liquid Level	Below Liquid Level		
C4	4.5"	4" T-Baffle	6"	18"	36"	15 in x 15 in, 17 in dia, or equal
C4C	4.5"	4" T-Baffle	6"	18"	36"	15 in x 15 in, 17 in dia, or equal
C4CBF	4.5"	4" T-Baffle	6"	18"	36"	15 in x 15 in, 17 in dia, or equal
LT-1/16	9.25"	10" housing	6"	12"	36"	15 in x 15 in, 17 in dia, or equal
LT-1/32 ³	9.25"	10" housing	6"	12"	36"	15 in x 15 in, 17 in dia, or equal
LT-1/64 ³	9.25"	10" housing	6"	12"	36"	15 in x 15 in, 17 in dia, or equal

Notes:

1. Support case provided by septic tank manufacturer.
2. Other minimum opening sizes or configurations proposed by the septic tank manufacturer shall be approved by the State on a case-by-case basis if documentation is provided showing adequate access is provided for both filter maintenance and pumping the tank outlet compartment.
3. These models can be used in commercial applications. An audio-visual alarm is recommended due to the potential for short service intervals.

Table II. Filter Sizing Criteria	
Filter Models	Maximum Residential Design Flow (gpd)
C4	1,000
C4C	1,000
C4CBF	1,000
LT-1/16	3,350
LT-1/32	3,000
LT-1/64	2,500

Notes:

1. Sizing based on typical residential strength septic tank effluent meeting the following criteria: $\text{CBOD}_5 \leq 300 \text{ mg/l}$; $\text{TSS} \leq 150 \text{ mg/l}$; $\text{TKN} \leq 150 \text{ mg/l}$; and $\text{Oil \& Grease} \leq 25 \text{ mg/l}$.

III. Installation

The effluent filters and filter support case shall be assembled and installed in accordance with the effluent filter manufacturer's specifications and applicable rules. The effluent filter case shall be located so that the effluent filter is readily accessible by the operator from the access opening and removable by hand from finished grade. The access opening shall also provide enough room to allow for pumping of the tank compartment.

IV. Operation and Maintenance

Effluent filters shall be used and maintained in accordance with effluent filter manufacturer's specifications and applicable laws and rules. Manufacturer-specified procedures shall be followed to minimize the bypass of unfiltered effluent while the effluent filter is removed when servicing is needed. Debris shall be washed off the effluent filter during servicing into the septic tank and the effluent filter placed back into service.

Approved by: _____ Date: _____