

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT,  
HEALTH AND NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL HEALTH  
ON-SITE WASTEWATER SECTION

**SEPTIC TANK EFFLUENT FILTER APPROVAL**

**SEPTIC TANK EFFLUENT FILTER NO: EF-16**

**ISSUED TO:** Michael A. Treit

Treit Equipment Company

d/b/a Treit Products, Inc.

3404 57<sup>th</sup> St. NW, Suite A

Gig Harbor, WA 98335

(253)853-5340; (877)SAFE-TANK (723-3826); (253)853-4224 (Fax);

**FOR:** Treit Septic Tank Effluent Filter Model No. EF-2540

**DATE:** August 23, 1999

In accordance with North Carolina General Statute 130A-335, 130A-335.1, and 15A NCAC 18A .1954, an application by Michael A Treit of Treit Equipment Company d/b/a Treit Products, Inc. for approval of septic tank effluent filters has been reviewed and the above referenced filter model has been found to meet the requirements established by statute and rule for approved effluent filters, when the following conditions for use, installation, operation and maintenance are met:

I. Description:

- a. Filter shall be designed and manufactured in accordance with plans, specifications and supporting documents provided by the manufacturer in their application for approval submitted to the On-Site Wastewater Section. The On-Site Wastewater Section shall be notified in writing of any additions or modification to the approved filter models prior to use in septic tank systems.
- b. Filters shall meet the following specifications (see Table 1):

**Table 1. Approved Filter Model Specifications (Treit)**

Filter Model	Size	Support Case <sup>1</sup>	Case Dimensions		Min. Tank Liquid Depth Required <sup>2</sup>	Min. Access Opening Size <sup>3</sup>
			Above Liquid Level	Below Liquid Level		
EF-2540	4" dia. x 25"	4" PVC Tee with 17" base extension	7"	17"	42.5"	15 x 15 in. or 17 in. dia. or equal

Notes:

1. PVC Tee for Support case provided by filter manufacturer (Treit) of manufacturer designated supplier. Septic Tank manufacturer shall provide support case base extension using 4-inch Schedule 40 PVC pipe.
2. Minimum septic tank liquid depth required to meet 25% to 40% inlet intake requirement for filter support case.
3. 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 both adequate access is provided for filter maintenance and for pumping the tank outlet compartment.

c. This approval shall be amended to incorporate additional filter models when they are found to meet the requirements of GS 130A-335, 130A-335.1, and other applicable rules.

II. Use:

A septic tank manufacturer may use one or more of these approved effluent filters in one or more of their septic tanks. The septic tank manufacturer must notify the On-Site Wastewater Section in accordance with Rule .1953 of the tanks in which they propose to utilize any of these approved filters, showing any modifications to the approved tank plans which may be necessary to utilize the proposed filter.

III. Sizing:

Approved filter models may be used in systems that meet the capacities and wastewater characteristic limitations stated in the following table, in accordance with manufacturer's specifications:

<b>Table 2. Filter Sizing Criteria (Treit)</b>
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Filter Model	Maximum Design Flow for a Single Dwelling Unit (gpd) <sup>1</sup>	Maximum Design Flow for Other Than a Single Dwelling Unit (gpd) <sup>2</sup>	
		BOD 300-600 mg/l	BOD 600-1000 mg/l <sup>4</sup>
EF-2540	750	300	175

Notes:

1. For residential flows **without garbage disposals**. Design Flows based upon primary sewage effluent from septic tank (without filter installed) with contaminant concentrations or quantities which do not exceed those normally found in residential sewage, including:  
BOD<sub>5</sub> 300 mg/l; TSS 150 mg/l; TKN 150 mg/l; Oil & Grease 25 mg/l
2. For use in systems with higher strength wastewater, three-year minimum maintenance interval is unrealistic to expect without advanced pretreatment in addition to grease traps.

The filter sizing must be compatible with tank sizing requirements established based upon Rules .1949 and .1952(d). Both the maximum filter design flow and the maximum tank design flow must be equal to or greater than the maximum design flow rate for the system.

IV. Installation:

The effluent filters and filter support cases shall be assembled and installed in accordance with filter manufacturer's specifications and applicable rules. The filter case shall be located in such a manner that the filter can be readily accessible by the operator beneath the access manhole opening and removable by hand from above finished grade, while also providing enough room to allow for pumping of the tank outlet compartment.

V. Operation and maintenance:

The effluent filters shall be used and maintained in accordance with filter manufacturer's specifications and applicable laws and rules. Manufacturer-specified procedures shall be followed to minimize the bypass of unfiltered effluent while the filter is being serviced. Debris washed off the filter during servicing must be returned to the septic tank, or otherwise handled in accordance with an alternate approved sanitary disposal method.

VI. Literature:

The filter manufacturer shall furnish with each filter:

-Literature to be provided by the tank manufacturer to the system installer describing installation procedures.

-Literature to be provided by the installer to the system owner/user describing filter and recommended maintenance and servicing procedures.

VIII. Maintaining approval status:

The approval status is governed by Rule .1954(e).

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_