

**GUIDELINES FOR STATE-APPROVAL  
EFFLUENT FILTERS**

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

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1. Introduction

The North Carolina General Statutes and wastewater systems rules require that each septic tank to be installed in North Carolina as a part of a septic tank system shall contain an Approved effluent filter. Herein are summarized the requirements for effluent filter approval which are to be followed by the filter manufacturer in order to obtain State approval.

2. Requirements for Filter Use:

All septic tank systems shall utilize a septic tank of approved construction with an approved effluent filter and support case. The support case shall be solvent welded to a PVC Schedule 40 outlet pipe with a minimum diameter of three inches inserted through the outlet connective sleeve creating a watertight and mechanically sound joint which extends at least 24 inches beyond the tank outlet (other equivalent methods of supporting the effluent filter may be proposed for approval by the On-Site Wastewater Section on a case-by-case basis). The filter and support case shall be installed and maintained in accordance with filter manufacturer's specifications. The effluent filter shall be accessible without the operator entering the septic tank and removable by hand. The effluent filter shall be secured in the support case and located under the outlet access opening or manhole. [Rule 15A NCAC 18A .1955(a)].

The support case shall serve as a functioning sanitary tee with the bottom inlet extending down between 25 and 40 percent of the liquid depth. [Rule 15A NCAC 18A .1954(a)(6)].

The septic tank manufacturer shall provide the approved effluent filter and support case approved for use with each septic tank, and the person who installs the septic tank system shall install the effluent filter in accordance with specifications provided by the filter manufacturer. [(G.S. 130A-335.1(a), Rule 15A NCAC 18A .1954(a)(6)].

3. Application:

Application must be submitted to the On-Site Wastewater Section, Division of Environmental Health, 1642 Mail Service Center , Raleigh, N.C. 27699-1642 and shall include the following for each proposed filter to be approved:

a. Manufacturer's name, address, phone and fax numbers, and plant location(s).

- b. Supporting documentation and notarized certification of compliance by the principal of the filter manufacturer with the North Carolina Statutory filter requirements, which are:

For any filter that is to be installed as a part of a septic tank system that is designed to treat 3,000 gallons per day or less of sewage, the filter shall:

- (1) Be made of materials that are capable of withstanding the corrosives to which septic tank systems are normally subject.
  - (2) Prevent solid material larger than one-sixteenth of an inch, as measured along the shortest axis of the material, from entering the drainfield.
  - (3) Be designed and constructed to allow for routine maintenance.
  - (4) Be designed and constructed so as not to require maintenance more frequently than once in any three-year period under normally anticipated use.
- [verbatim requirements of G.S. 130A-335.1(a)(1, 2, 3 and 4)].

Documentation may include third-party testing, design criteria/calculations, performance studies, comparisons with other approved products and any other relevant information.

- c. Sizing as to capacity and wastewater strength for all models of proposed filters to be approved [Rule 15A NCAC 18A .1954(a)(8)(b)].

Please refer to Tables 1 and 2 in approvals granted to existing effluent filters, retrievable from our Homepage ([www.deh.enr.state.nc.us/oww](http://www.deh.enr.state.nc.us/oww)), and provide comparable information/conditions/criteria for each model proposed to be approved.

- d. Specifications for application, installation, operation and maintenance [Rule 15A NCAC 18A .1954(a)(8)(c)].

4. Approval:

Applications will be considered on a first-come, first-served basis. If the information provided is incomplete, approval will be withheld pending the receipt of all necessary information. Upon approval, the manufacturer will be notified in writing of the approved filter serial number. At the same time, the local health departments will be informed of the approval (via email), and the approval information shall be posted on the Section's Homepage ([www.deh.enr.state.nc.us/oww](http://www.deh.enr.state.nc.us/oww)).

Filters must be manufactured to meet all minimum requirements of the applicable Laws and Rules and by in accordance with the design information submitted as the basis for approval. Approvals are subject to suspension or revocation upon a finding that the information submitted is falsified, the product has been subsequently altered, or subsequent experience with the product results in altered conclusions about its design or performance.