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

SEPTIC TANK RISER ASSEMBLY CONDITIONAL APPROVAL

SEPTIC/PUMP TANK RISER ASSEMBLIES CONDITIONAL APPROVAL: SR-15

ISSUED TO: Gary Koteskey
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FOR: STF-R824 Septic Tank Riser Assembly

DATE: February 7, 2005

In accordance with North Carolina General Statute 130A-335, 130A-335.1, and 15A NCAC 18A .1954, an application by Gary Kotesky of Sim/ Tech Filter, Inc. for approval of their riser assembly has been reviewed. This product has been found to meet the minimum requirements established by statute and rule as a septic tank riser, when the following conditions for use, installation, operation and maintenance are met, as follows:

I. Description:

a. Riser assemblies and associated accessories 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 new assemblies or modifications to the approved riser assembly and accessories prior to use in septic tank systems.

b. Conditionally approved riser assemblies and other accessories shall meet the specifications outlined in Table 1:

Table 1. Conditionally Approved Riser Model Specifications (GAG Sim/Tech Filter, Inc.)			
Riser Models	Inside dia.	Min. Tank Top Width Required	Installation Limitations[1,2]
23.5" ABS Round Riser (8" high stackable sections) and Lid Assembly with Tamper-Resistant Stainless Steel Screws, Sim/Tech's STF-N24 security net, and STF-C124 cast iron riser lid	23.5"	32"	Septic Tank must be installed 6" below finished grade or at least 3" above finished grade.

Notes:

1. These riser systems must not be subjected to vehicular or other excessive live loads, or buried deeper than three feet below finished grade.

2. Mechanisms to prevent accidental entry to the tank include use of tamper-resistant screws (No. 10 x 1-1/2" square notched head, or approved equal), at least two horizontal safety screws; and security net, internal concrete plug or cast iron riser lid.

II. Use:

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

III. Installation:

A. The riser assemblies shall be assembled and installed in accordance with the manufacturer's specifications, applicable rules and approval conditions.

B. **Septic Tank Installations**: For new installations (for systems constructed on or after January 1, 1999), the GAG Sim/Tech risers shall be cast into the tank during tank construction.

1. Cast-in-place with internal collar: The bottom riser section may be cast in the concrete (with the riser lid in place), retaining a concrete inner collar around the internal circumference of the riser (to form at least a 17-inch diameter opening). The riser shall be placed in the tank top mold in such a manner that 1-½ inches of concrete shall be cast below the riser bottom. A tapered concrete support collar shall surround the riser beginning at a height of at least four-inches above the bottom of the riser tapering away from the riser on a projected slope of 1:8. Four No. 3 rebars (one each on every side of the riser, making a picture frame) shall be placed one inch away extending three to six inches beyond the riser.

2. Cast-in-place without internal collar: The bottom riser section may be cast directly into the tank fully penetrating the tank top. When the tank top slab is less than four inches thick, a concrete fillet shall be provided around the pipe so that the total thickness of the concrete slab will be at least four inches around the pipe, tapering away from the riser on a projected slope of 1:8. Four No. 3 rebar (one each on every side of opening, making a picture frame) shall be placed one inch away from the opening extending three to six inches beyond the tank opening. The riser must be installed with at least four, 3/8-inch or larger diameter threaded stainless steel screws secured to the riser and extending outward from the riser at least three inches, to be cast into the top slab to anchor the riser in place.

C. Riser retrofit installations may be approved by the local health department on a case-by-case basis when used with an existing septic tank. Risers shall be attached in a structurally sound, watertight fashion in accordance with the riser manufacturer's specifications.

D. Multiple Riser sections must be sealed together with vinyl nitrile gasket to be provided by the riser manufacturer, and secured with six number 10 x 1-1/4 inch stainless steel sheet metal screws provided by the riser manufacturer.

E. The riser lid shall have a watertight gasket and be screwed down with at least six tamper-resistant stainless steel screws, with gasket and screws as provided by the riser manufacturer. At least two horizontal safety screws shall be provided and located as indicated on top of the riser lid. Alternately, use STF-C124 cast iron riser lid

F. For additional security, a safety net (Sim/Tech STF-N24) shall be provided by the riser manufacturer and secured with eye-bolts in the riser. In place of a safety net, an internal concrete lid with handle, weighing at least 50 pounds, shall be provided by the tank manufacturer, to be placed on the internal concrete lid or riser safety pan (septic tanks), as described in detail above. If the STF-C124 cast iron riser lid is used, no safety net or other internal security device is required.

G. This riser system must not be installed in areas subjected to vehicular traffic, or where the tank shall be buried more than three feet below finished grade.

IV. Literature:

The riser assembly manufacturer shall furnish with each riser assembly (and/or with associated riser assembly components) all pertinent installation and maintenance details.

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

Approved by:_____Date:_____