

**MEMORANDUM**

**Date:** December 17, 2014

**To:** Environmental Health Managers  
District Health Directors  
Virginia Tech Contract Soil Scientists  
Private Consultants

**From:** Stephen R. Elgin, P.E., Technical Services Engineer  
Office of Environmental Health Services

**Subject:** Approval of Roth Global Plastics RMT-500 MultiTank for use in Virginia as a pump tank, dosing tank, or septic tank (when used as the second septic tank in series and with an effluent filter).

**Listing Determination:** The subject tank does not meet the following *Sewage Handling and Disposal Regulations* (12VAC5-610-815) criteria for a septic tank:

| Reference | Reference Description  | Provided by RMT-500 |
|-----------|--|---------------------|
| 815.A     | 750 gallon minimum tank capacity   | 500 gallon          |
| 815.B.    | Length to liquid depth to width greater than or equal to 2:1:1 and less than or equal to 3:1:1 | 1.5:1:1.6 provided  |
| 815.B.    | 48 inch minimum liquid depth   | 40 inch provided    |
| 815.B.    | 12 inch minimum freeboard  | 10.5 inch provided  |
| 815.C.    | 2 inch maximum drop from inlet to outlet   | 3 inch provided     |
| 815.C.    | Inlet 8-10 inches above liquid level   | 6.5 inches provided |
| 815.C.    | Outlet 8-10 inches above liquid level  | 6 inches provided   |

The manufacturer specifically requested that when used as a septic tank, the RMT-500 only be allowed as a second tank in a series of septic tanks. 12 VAC 5-610-820.A. states that “the required volume for a septic tank may be satisfied by the utilization of two septic tanks in series; however, the first septic tank in series shall equal to 1/2 to 2/3 the required total volume”. As a result, the Roth

tank may be used as a second septic tank in series when the first tank provided in a given design meets the regulatory requirement of 1/2 to 2/3 of the required septic tank volume.

After reviewing the information provided by Roth Global Plastics, Inc., the Office of Environmental Health Services has determined that the Roth RMT-500 MultiTank substantially complies with the *Sewage Handling and Disposal Regulations*, and is listed for use as a dosing tank, pump tank, or a septic tank. Its use as a septic tank is qualified with the condition that it only be used in a series arrangement as the second septic tank and with an NSF-certified effluent filter.

This tank must be installed in accordance with the manufacturer's recommendations and installation guidelines. Designers are responsible for determining that use of this tank will comply with the specific regulatory requirements for dosing, pumping, or septic tanks applicable to their site-specific designs.

Listing of this product does not constitute endorsement for use.