



Missouri Department of Health and Senior Services

P.O. Box 570, Jefferson City, MO 65102-0570 | Phone: 573-751-6400 | FAX: 573-751-6010
RELAY MISSOURI for Hearing and Speech Impaired and Voice dial: 711



Paula F. Nickelson
Director

Michael L. Parson
Governor

October 29, 2024

Dave Simon
Product Specialist
Valencia Pipe Company
28305 Livingston Ave.
Valencia, CA 91355

Mr. Simon,

The State of Missouri Department of Health and Senior Services, Onsite Wastewater Program (OWP), received your request for approval of four models of tanks manufactured by The Valencia Pipe Company. [See the table on Pg #2]. The State of Missouri requires all tank manufactures seeking approval in the state to forward information on their product to verify it meets the *Missouri Laws Accompanied by Department of Health and Senior Services Rules Governing Onsite Wastewater Treatment Ssystems, 19 CSR 20-3.060 Minimum Construction Standards for On-Site Sewage Disposal Systems, (4)(A)-(B)*.

Via email, the Valencia Pipe Company addressed each of the septic tank requirements in 19 CSR 20-3.060 (4)(A)-(B). Also, Valencia Pipe Company forwarded a link to tank certifications for the following septic tank standards: [IAPMO/ANSI Z1000-2019 & CSA B66-2000]. The load tests for two (2) feet of cover on the tanks, was completed by The Consulting Bureau, Inc., located in New York, NY for the 1000-gal and 1500-gal single compartment tanks. The State Minimum Construction Standards, 19 CSR 20-3.060(4)(A)1, specifies the load test will be completed using saturated soils. The load testing was completed on the 1,000-gallon and 1,500-gallon single compartment septic tanks using unsaturated soils at three (3) tank stages: underground, empty and filled. The tank load test was completed by using unsaturated soil through load simulation. However, The Consulting Bureau, Inc. stated both tanks tested, passed the three stages of the load test with a safety factor in the range of 5 to 6 which is a sufficient safety factor to simulate saturated soil.

Valencia Pipe Company noted their inlet and outlet baffles currently do not meet the requirements of 19 CSR 20-3.060 (4)(B) 7-8. The company agreed to adjust the inlet and outlet baffles prior to shipment to Missouri. Any baffle requiring less than one inch of material to be trimmed can be shipped without trimming.

PROMOTING HEALTH AND SAFETY

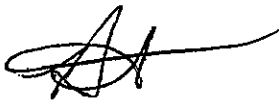
The Missouri Department of Health and Senior Services' vision is optimal health and safety for all Missourians, in all communities, for life.

Model Number (1)	Description
87-41718 (2)	1000 Gallon Single Compartment Septic Tank Yellow
87-41720	1000 Gallon Two Compartment Septic Tank Yellow
87-41758 (2)	1500 Gallon Single Compartment Septic Tank Yellow
87-41760	1500 Gallon Two Compartment Septic Tank Yellow

- (1) All tank models have been certified to the following standards: IAPMO/ANSI Z1000-2019 & CSA B66-2000. [*pld.iapmo.org*]
- (2) The single compartment 1000 gal (model 87-41718) and 1500 gal tanks (model 87-41753) were tested physically for weight of 2 ft of various soils as cover (1000 psf/7 psi)[07/29/24-1000gal; 08/17/24-1500gal]. Both size tanks (1000 gal & 1500 gal) passed the simulation of soil on the tanks with a safety factor of 5 to 6.
- (3) Equations used to calculate the mass of the soil on the tank and later used in the model simulation:
Force = Mass x Acceleration
Mass=(density of soil, lb/ft³) x (volume of soil on top of the tank, ft³)
Acceleration = gravity = 9.8 m/s² = 980 cm/s²
Depth of soil= 2 ft
Volume of soil = 2ft x L x W (for each tank)

Based on the interpretation of the test results supplied, the tank models provided in the above table passed the requirements to be used in the onsite wastewater treatment industry. The tanks are approved for use in Missouri.

Sincerely,



Dusty Johnson, Chief
Department of Health and Senior Services
Bureau of Environmental Health Services
P.O. Box 570
Jefferson City, MO 65102-0570