

Indiana Application of 410 IAC 6-8.3-64 and 410 IAC 6-10.1-72: Septic Tank Outlet Filters

The Indiana State Department of Health *Rule 410 IAC 6-8.3, Residential On-site Sewage Systems*, was effective November 18, 2012, and revised on September 28, 2013 and May 9, 2014. Indiana State Department of Health Rule 410 IAC 6-10.1, *Commercial On-site Sewage Systems*, was effective on November 18, 2012, and revised on September 28, 2013, and May 17, 2014. Both rules require that new septic tanks be equipped with a septic tank outlet filter. Section 64 of the residential rule and section 72 of the commercial rule outline the requirements for the septic tank outlet filters. In order to be approved an outlet filter must:

- 1. conform to ANSI/NSF Standard 46-2010a, Evaluation of Components and Devices Used in Wastewater Treatment Systems, maintain a current product listing with an ANSI accredited third-party certifier, and bear a listing mark;
- 2. prevent the passage of solids larger than one-eighth (1/8) inch;
- 3. have inlets and outlets of at least four (4) inches in diameter;
- 4. function without a bypass of unfiltered sewage, sludge, or scum, during normal use and during cleaning or exchange;
- 5. be made of a noncorrosive material designed for use in sewage applications;
- 6. maintain structural integrity, not tearing or distorting so as to make it inoperable during normal operation throughout the life of the device;
- 7. have removable outlet filter cartridges;
- 8. be provided with a gas deflection baffle; and
- 9. have an outlet filter housing that provides a minimum scum space of five (5) inches and that extends below the liquid level at least ten (10) inches, but not more than forty percent (40%) of the tank liquid depth.

The department also recommends that all filters be equipped with an alarm system, and that existing tanks be retrofitted with a filter when the soil absorption field is replaced.

ANSI/NSF, under Standard 46, lists septic tank outlet filters that have a rated flow capacity of 400 to 1,500 gallons per day which meets its testing protocol. That listing is available at http://www.nsf.org/Certified/Wastewater/Listings.asp?TradeName=&Standard=046.

Many manufacturers provide septic tank outlet filters with rated flow capacities greater than those tested by ANSI/NSF under Standard 46. Those filters with the higher rated flow capacities are listed by the department for use in Indiana. The flow ratings listed are determined by the filter manufacturers based on their own calculations/test data and their field experience with maintenance intervals. The filter must be selected based on the design daily flow through the septic tank and the flow rating of the manufacturer. The flow rating must be equal to or greater than the design daily flow through the tank. As of this date, the department has reviewed the following septic tank outlet filters with flow ratings greater than 1,500 gpd based on documentation provided by the manufacturer and have no objection to their use in Indiana in accordance with the provisions of 410 IAC 6-8.3-64 for residential systems or 410 IAC 6-10.1-72 for commercial systems:

Clarus Environmental:

#5000-0007, Model WW4, flow rating of 4,000 gpd

Lifetime Filter LLC:

Residential or Domestic Strength effluent

LT-1/8"/Black, flow rating up to 3500 gpd.

LT-1/16"/Grey, flow rating up to 3350 gpd.

LT-1/32"/Green, flow rating up to 3000 gpd.

LT-1/64"/White, flow rating up to 2500 gpd.

Non-domestic strength effluent

Product #:	Non-domestic strength effluent (GPD)			Primary
lid color	<300	300-600	601	Filtration
	CBOD ⁵	CBOD ⁵	$CBOD^5$	size
LT-1/8:Black	3000	2500	2000	1/8"
*LT-1/16:Grey	2750	2000	1500	1/16"
**LT-1/32:Green	2500	1875	1500	1/32"
**LT-1/64:White	2500	1750	1500	1/64"

^{*} The use of this filter in commercial applications recommends the installation of an audio visual alarm.

Polylok, Inc.:

Pl-122, flow rating of 3,000

Pl-525, flow rating of 10,000 gpd

Pl-625, flow rating of 8,000 gpd

Tuf-Tite, Inc.:

Model EF-6 Combo, flow rating of 3,000 gpd

Zabel Environmental Technology, Inc.:

A100 8x18 VC, flow rating of 3,000 gpd

A100 8x26 VC, flow rating of 3,800 gpd

A100 8x32 VC, flow rating of 5,100 gpd

A100 12x20 VC, flow rating of 5,700 gpd

A100 12x28 VC, flow rating of 8,600 gpd

A100 12x36 VC, flow rating of 10,000 gpd

A300 8x18 VC, flow rating of 1,700 gpd

A300 8x26 VC, flow rating of 2,600 gpd

A300 8x32 VC, flow rating of 3,500 gpd

A300 12x20 VC, flow rating of 3,900 gpd

A300 12x28 VC, flow rating of 5,900 gpd

A300 12x36 VC, flow rating of 7,900 gpd

The following outlet filters are no longer being manufactured; however, they were previously approved for use at the flow ratings indicated below. If these filters are still available, they are approved for use at the stated flow rating, or if they are currently in use, they are approved for continued use.

Bear Onsite, LLC:

ML3-910, flow rating of 3,350 gpd

ML3-916, flow rating of 2,750 gpd

ML3-925, flow rating of 2,750 gpd

ML3-932, flow rating of 2,750 gpd

^{**}The use of these filters in commercial applications will **require** the installation of an audio visual alarm.

Additional filters with rated flow capacities greater than 1,500 gpd may be listed upon written request of the manufacturer. The request must clearly include the name of the manufacturer, address, contact information, product number, verification of ANSI/NSF certification under Standard 46-2010a, data and testing for verification of flow capacity, product schematics, and product pictures.

Approved: March 10, 2011 Revised: March 31, 2011 Revised: November 20, 2012 Revised: May 17, 2014

Revised: May 3, 2018 Revised: April 27, 2020

MICHAEL METTLER, REHS, DIRECTOR ENVIRONMENTAL PUBLIC HEALTH DIVISION

miles). mens