



Design Basics - Mound Design Refresher

Soils treatment mounds are pretty common in rural Saskatchewan and the new Saskatchewan Onsite Wastewater Guideline has brought into play some pretty significant changes that impact how mound systems are designed. Mounds must be designed with Linear Loading in mind. Linear Loading determines how much water flows down the contour of the sand layer and penetrates the soil before breaking out. Properly designed mounds should not break out at the toe.

Here are some questions we get in the office on mound design:

1. **How deep should my sand layer be?** a. Answer – The layer of clean, washed sand must be a minimum of 12 inches deep. If the vertical separation on the property is less than three feet, you must add an inch of sand for every lost inch of vertical separation. For instance, if you only have two and a half feet of vertical separation, your sand layer will have to be 18 inches in depth.
2. **How long will my sand layer be?** a. Answer – The length of the sand layer is determined by dividing your peak flow from the residence being served by the Linear Loading Rate determined for the type of soil texture and structure, the per cent of slope, and the depth of vertical separation.
3. **How wide will my sand layer be?** a. Answer – The width of your sand layer is determined by dividing the area of your sand layer by the length of your sand layer. (Hint – the width of your sand layer will be very close to the Linear Loading Rate.)
4. **How many orifices should I have in my mound?** a. Answer – Under the new Guideline, you need one orifice for every 5.5 square feet of sand layer. The equation is simple: square footage of sand layer divided by 5.5 = minimum number of orifices. For example, if your sand layer is 520 square feet, then 520 divided by 5.5 = 94.54 orifices. Round up to 95 orifices.
5. **What will the distance between my orifices be?** a. Answer – Once you have determined how many orifices you need, divide them by the number of laterals you have to determine how many orifices will be in each lateral. Then take your lateral length and divide it by the number of orifices per later to get your spacing.

Need worksheets? Worksheets to calculate system size and pressure distribution are available on the SOWMA website in the member interface. <http://www.sowma.ca/>

Advertising & Sponsorship Opportunities

Did you know that are plenty of opportunities to support your industry organization and promote your business? We have options for a variety of price points.

Contact our office today advertise in this newsletter or our upcoming printed magazine (download an information package: <http://www.wcowma-bc.com/files/2019/05/Media-Kit-2019.pdf>). You can also sponsor training events throughout the province. For more information, call us toll free at 1-855-872-2650.

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Request for Articles

The association is sourcing articles for publication in our WCOWMA family of newsletters, and our printed magazine. Newsletters are published monthly, and magazines are published twice per year. Both include information, news and events from each Western province.

Articles submitted may be on any topic relevant to our membership and stakeholder group, such as those related to wastewater, septage and the onsite wastewater industry. Article length should be between 200 to 500 words for the newsletter and 800 to 1,500 words for the magazine. In both cases the article should be research or case study based. Relevant pictures are welcome; a photo release may be required. Promotional articles or those that are heavily proprietorial are considered advertorial and are subject to advertising rates. These will be identified in the publications as advertorials.

Banner and feature advertising is also now available in our newsletter – please contact the association office more information.

WCOWMA newsletters and magazines are distributed to over 5000 onsite wastewater stakeholders across Western Canada.

Articles may be submitted to info@wcowma.com. The deadline for each newsletter is the 15th of each month. Articles submitted may be published immediately or held for future publications.

Upcoming Events

You can keep up-to-date on industry events on our events page!

Have an industry event you'd like to see posted? Feel free to contact us!

National Insurance Awareness Day
June 28, 2019

Imagine a Day Without Water
October 23, 2019

**NAWT/NOWRA Onsite Wastewater
Mega-Conference**
October 13 – 16, 2019
Loveland, Colorado

WWETT 2020
February 17, 18 & 19, 2020
Indianapolis, IN