LENGTH OF GRAVITY TRENCHES

Responses to Utah Question re length of gravity trenches on State Onsite Regulators Alliance listserv:

Arkansas
60’ recommended; 100’ max

Colorado
Right now it is 100 feet in Colorado. However, we are discussing regulation revisions. 150 feet was proposed and received both positive and negative reactions. Several stakeholders suggested that 150 feet is fine if effluent is applied in the middle – so is that one 150 feet or two 75s?

Delaware
Delaware is 100’. We are nearing the end of a Reg. amendment and no questions or comments have been made about that point. I think every other point in the Regs have been questioned, but not that........

Florida
Florida - 100 feet

Illinois
Illinois regulations allow for 100’ from the point of entry into a subsurface seepage trench, so you could have a 200’ foot trench (level = +/-1/2”) as long as the point of entry is in the center of the trench.

Kansas
100 feet

Kentucky
In Kentucky -- 200 feet maximum trench length for gravity systems

Louisiana
Here in Louisiana, the maximum length is 100 feet.

Massachusetts
Here in Massachusetts, it’s 100 feet.

Minnesota
No max in Minnesota. Use to be 100’ when folks where using hand levels.

Nebraska
Nebraska Title 124 regs have a little twist on the 100 foot theme most states seem to have:

Trenches and beds shall not be more than 100 feet in length unless it is installed using an instrument to insure that the trench is level, then trenches can be up to 150 feet in length for gravity systems. Pressure systems are not restricted in length when an instrument is used to insure that the system is level.
One of the other responses mentioned splitting – the above just applies to individual trenches/beds, so you could split the flow (with a header pipe, drop box, or distribution box) and go out 100 foot on either side (150 if instrument leveled).

**Nevada**
110 feet max in Nevada.....
Dosing required for trench systems in excess of 500 linear feet.

**New Mexico**
155’ in NM. Pressure-dosing beyond that. Most contractors nowadays are using laser levels. We have inspection ports at the trench end.

**Ohio**
The current rules in Ohio have a limit of 100 feet which is usually ignored because the rules are so old, and the local health districts can currently have different rules than the state minimums. We are working on new state rules (projected to be effective in early 2013) and in the current draft there is no limit on length (we use the Tyler Table to determine length along contour), although the rules recommend center feeding the trenches if the trenches exceed 100 feet with a gravity fed system.

**Oklahoma**
In Oklahoma we allow 150 feet maximum on either side of the distribution box. We also have a caveat in our rules that state that you can have no more than a 150 feet continuous run of perforated pipe. This basically requires the use of distribution boxes to center feed the lines. Most installers typically limit line length to 100 feet or less.

**Ontario**
Max. 30 m (100 feet) in Ontario.

**Oregon**
150’ in Oregon.

**South Dakota**
100 feet

**West Virginia**
It’s 100’ here in West Virginia, as in many other jurisdictions, but in prior discussions, no one can definitively say where this comes from. Some theorize that with poor instruments for checking elevations back in the day, that 100’ was as far as installers could be trusted, to get it close. That is certainly true.

It was a good thing then also, as our rules previously allowed 3” of drop in 100’. So, there would have only been more wasted trench, with longer runs. (Of course, folks thought if 3” is good, six would be better.)

I’m thinking we may do away with the maximum when we re-do the design standards this time. If not eliminate it, perhaps double it.

**West Virginia P.S.**
I failed to mention, our design standards do specifically allow for longer runs than 100’, when dosing (pump or siphon) is employed.
When I said previously we may consider doing away with the 100’ restriction, this is for two reasons: 1) To allow for optimizing length on contour, in keeping with the concept of minimizing lineal loading rates, and, 2) to limit the need for excess sewer line connections resulting in deeper installations or wasted installation area.

What I mean by this second part is, we also allow for as much as 100’ runs in opposite directions on the same contour, as several other states have mentioned. Too often, however, in an effort to transport the effluent to the mid-point, elevation is lost in an effort to allow proper fall on the sewer line, resulting in either the absorption lines being deeper than optimal, or, the drainfield is moved downslope, wasting potentially valuable area.