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This report is for the evaluation done Nov. 11th, 2024, at the Hosmer Fire and Community Hall in Hosmer, BC done on the onsite wastewater treatment system (septic). The original septic filing was dated April/May , 1983 with the system as build layout appearing to be correct.

The system appears to be a type 1 gravity system with an 800 Gallon single chamber tank, distribution box and 2 runs of approximately 75' long.

The tank lid is located about 12" below the concrete patio under the larger steel plate lid with the heavy concrete access lid centred 80" from the concrete building foundation. The tank appeared to be good condition and has minimal corrosion for its age. The tank contained about 7" of sludge on the bottom and 1" scum at the surface. A pump-out is not needed at this time.

The flows from the building were tested and appeared normal and the tank levels adjusted as they should with the incoming and then outgoing flows.

The distribution box is under the concrete slab at the back of the hall about 30cm North of the Southern lean-to post and not directly accessible. The location was checked using a locator put through the piping. The lateral pipe farther from the building was slightly higher than the closer line point loading where most of the liquid drains in 1 location instead of going down the whole pipe. The other line was not accessed as it would not see much for flows based on the distribution box layout.

Conclusion:

This system appears to be functioning overall but has areas of concern.

- 1. The distribution box is not accessible to be able to install levelers to spread the flows out to a large portion of the field area.**
- 2. The sagging pipe near the distribution box should be leveled to help the liquid flow further down the pipe and avoid point loading.**
- 3. The lean-to should have a gutter added to direct the extra rainwater away from the field area.**
- 4. The sewer drain field piping goes under the addition and that is against sewerage and building codes. The building is probably a slab on grade with-out a full frost depth footing as otherwise the septic piping would have been cut short.**

5. The tap in the fire hall was left running and that adds extra load to the system as the solids need to break down in the tank as much as possible. I was told that was due to freezing concerns but that it was also not known from where the issue actually is. I suggested to place the plowed snow as a berm where the located waterline from the well runs underground to stop people from driving there a pushing the frost down. The average depth of the water line is 1.5metres with the shallowest being about 1.4m. the more that tap can be left off the better as even a leaking toilet in some cases can produce over 400 gallons of water per day.

Ongoing Maintenance:

For all septic systems there are a few basic rules for keeping a healthy treatment system.

Only put into the system items that would compost easily. Basically, if it can not go in the compost, it does not go down the drain.

Avoid harsh chemicals and cleaners, dump extras on the driveway instead of the drain. Anti-bacterial soaps also reduce the good bacteria in the system so avoid them.

Avoid FOG – Fats, Oils, Grease. For example, allow your bacon grease to harden and place in the garbage instead of the drain.

I recommend Wrights Vacuum and Septic when the time comes to get the tank pumped out and they can be reached at 250-417-6578.

You can also look-up basic information online at www.wcowma.com

The next pages have pictures from the site and notes as to what they represent.

If you have any questions or concerns, please give me a call

Regards

Mark Paul Koeman
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The back patio area of the hall.



Your tank lid locations are under the steel covers under your lean-to roof at the back of the hall. The main tank steel lid is to the side for access in this picture.



The sludge judge used to take a core sample of your tank contents. The sludge can be seen at the bottom



The distribution box is about 30cm in front of the post and the lateral closest to the building follows the roof drip line along the C can and goes under the shovel handle seen in the background by the dirt pile. Note the line goes under the building.



The exposed pipe with the top cut to gain access to the lateral and do the location to confirm of the lateral ends.



The end of the lateral is just to the right of the orange lid on the paint can.



The lengthwise view.

Pipe camera pictures.



The inside of the distribution box coming in from the tank pipe. The far pipe is the lateral that was accessed and as you can see, the bottom is in the liquid. The pipe on the left would be going to the other lateral and is higher than the liquid and as such does not receive any unless there is a very high flow rate. The laterals should be evened out with levelers to have the flows evenly distributed.



The inside of the lateral, with the drain holes seen, shows very little usage at about 3m from the distribution box. This is likely due to the pipe having sagged near the distribution box and the liquid draining out through the holes at that location.