

Facilities Manager Report

Septic Update – 04/23/2018

There is a lot of current information to present, but I need to include a bit of history for you to truly understand our situation. I've tried to include enough of past and present into my presentation so you have a fairly good understand of where we are today.

History:

Our Meadow drain field was built in 1973. 45 years ago. The average life for a septic field is 25-30 years, but can last longer with great care. The Meadow drain field was built for dry weather usage, as a seasonal RV park, without year round occupancy. We have greatly exceeded the lifespan and design abilities of this essential unit and it has served us well.

How does the Meadow septic operate?

(Photo 1) It is basically a large swimming pool that only empties through evaporation. It is one of the last like it in the State and this type of drain field is no longer allowed to be built. The Meadow consists of two separate drain fields, Field A and Field B.

Due to an issue dealing with a break in one of our septic lines, I felt it was prudent to get an engineer to assess the overall health and longevity of our Meadow septic field, as it has been a concern for many years. After an exhaustive search for local engineers, I finally had to contact WA. DOH, and based on their recommendation, we hired ADC Wastewater in Tacoma. The engineer (ADC) conducted a site visit and had our contractor dig several test holes on the meadow and the green space by 2nd St. It was determined that the green space on 2nd St. is not currently suitable for a septic drain field, as it is composed of fill material from the construction of the park. In the process of digging on the Meadow, a lateral line was broken, so we were able to view the interior condition of our lines. (Photo 2)

As you can see, we have some serious issues. The soil and gravel around this line was clean, probably because the drainage holes were plugged. We dug in other areas, and found the drainage gravel to be contaminated with bio-material, which prevents the effluent water from spreading, but the lines were much cleaner. (Photo 3)

We have been using just our little B field for many months. (Photo 1) Our B field always retains more water than our A field, so we have known for many years that it is not working as well as it should. It has always been the less healthy of the two, but it has held up and worked well to support us over the winter. Now that our population is rising, it is a growing concern, as this little field cannot support the water and sewage use of additional residents. I assume that the conditions in the "B" field are similar to those discovered in our "A" field.

The fenced area on the meadow is where we did the repairs to the broken line. (photo 4) This event is considered a septic failure by Wa. DOH, which is extremely serious, and I have been reporting to the

State every update in the status of this situation. The fence is a requirement of Wa. DOH, and is there for our and our pets safety, as is disinfection of the area and photos sent to the State prove I am following the law. Four days ago, I put this field back into service and allowed the pump to run it's course. The pump ran for 16 minutes with no change in surface moisture. I checked it over the weekend, and it still appears to be operating normally. I don't trust it completely, but I am cautiously hopeful. Filed a report with Wa. DOH today that we are back to normal operation using both fields. Our case with Wa DOH will be closed unless I report another failure.

Oversight:

Washington DOH (the State) oversees our Meadow septic field, and Jefferson County oversees our other two septic fields. The only way Jefferson County can involve themselves in our Meadow Septic is if "there is a threat to public health", ie: leakage of sewage. There is a power struggle going on between the two entities, but Wa. DOH seems willing to work with us if we make decisions that are in everyone's best interest. I feel that Wa. DOH will allow us to make necessary "repairs", even if extraordinarily extensive, and will fight to keep Jefferson County out of the decision IF we present a plan that will extend the life of our system and protect public health.

Engineers Initial Recommendation:

After the site visit, our engineer requested that we dig up and replace all the plugged lateral drain lines and replace the contaminated gravel that surround it. (Photo 2) Washington Dept. of Health initially approved this request. The State placed a courtesy call to Jeff. Co., informing them of our "repairs". Jeff. Co. raised concerns. Wa. DOH then stepped back and indicated that this large scale work consisted of more than just a repair. Wa. DOH is now requesting engineered drawing to show the improvements that we want to make to our system.

More History:

This is where history again comes into play. Due to excellent management of our system over the last numerous years, Wa. DOH is on our side and doing what they can to work with us, while keeping public health in mind. Even our Engineering Company is baffled as to why DOH is so willing to work with us. This type of system is no longer allowed by law, so the State may allow us to do major repairs, but there is a very fine line between the "repairs" we need to do and what might be considered new construction. A "repair" means we can replace what is currently there as shown in our original As-built designs. We cannot move drainage pipes to other locations, such as in between our existing lines where soil may be less disturbed and contaminated.

Jefferson County:

Jefferson County has reasons to be concerned about our septic field. It was constructed in 1973, and failed one year later in 1974 due to poor design and infiltration of water from the park. Jefferson County has a long list of documented issues and repairs that have occurred over the years, to keep this septic field working. This is mostly prior to our ownership. Documentation shows that since DBLA took

ownership, management and oversight has been extraordinary. This is truly the only reason Washington State DOH is willing to work with us now. Prior to our ownership, there were many incidences of shoddy construction, repairs and severe mismanagement.

More History:

In 2008 and 2011, there were complaints to Jefferson County about our septic. One complaint was that we were exceeding our permit as an RV park, which is a whole different issue beyond our septic, but a topic that concerns us greatly to this day. This person took water samples from our Old Gardiner Rd. ditch, which he claimed were positive for fecal bacteria. There was another complaint that said our ditch smelled like sewage. In both cases, Jefferson County investigated, and required a long list of various expensive tests (that we had to pay for) to find we were in compliance. One test was of a minor concern, but it labeled our system as "Suspect". Because of that, and our poor record dating back to 1974, we will probably always be "Suspect" in the eyes of Jefferson County.

I have taken my own water samples from the 3 ditches that surround our septic field and I had them tested them for fecal bacteria. I took one control sample up stream on Old Gardiner Rd. All samples, with the exception of the control sample, came back positive for fecal bacteria. The levels are below the allowable limit, but it does indicate that our system is probably leaking, which is an additional concern for us.

Summing us what we know thus far:

- 1) Our septic system is old and severely compromised.
- 2) Our drain pipes are plugged or surrounded with bio-material that is preventing the drain field from working as it should.
- 3) Our drain field is possibly leaking contaminated water into our ditches, which drain to other properties and Discovery Bay.
- 4) We need to find a long term solution for the longevity of our Community.

What we have asked ADC Engineering to present to Wa. DOH is that we be allowed to dig up our clogged lines and contaminated gravel and replace with new, as initially suggested, removing much of the contaminated bio-material. We have also added that we include a pre-treatment unit (which the County has recommended in the past). We are hoping that removing the old lines and bio-hazard material from our drain field, replacing it with new, and including a pre-treatment system that further cleans the water, Wa. DOH will allow us to move forward with our "repair", and appease Jeff. Co. Removing the contaminated soil and adding the pre-treatment unit will make any water leaked from our site much cleaner than what is leaving now.

For the longevity of the Community, we really have no other options. You have seen what the interior of our drain pipes look like, and we know that our field is leaking. If we want to get another 40 years from this field, we need to act now while they still allow us to "repair" this site. We have no other feasible options for a drain field to replace the Meadow. If our system were to catastrophically fail, which I believe it is close to doing, Wa. DOH would require us to pump our septic tanks daily, at a cost

up to \$2300 per day, until our septic is repaired. 12-16 weeks at \$2300 per day. \$258,000 in septic pumping fees while waiting for someone to come help us, assuming the State approves a solution! We need to act now and fix this before it is truly broken.

So, what can YOU do to help right now?

Conserve water!

Every drop of water that goes down a drain has to leave our septic field by evaporation. If it is raining and the humidity is high, our septic field fills and is stressed.

Turn off water while brushing teeth and while washing dishes. Collect water in a tub in your sink and dump on the ground as opposed to down the drain. Only flush when necessary. Put TP in the garbage and flush urine every two or three times. (Don't flush excess TP or it will clog the pipes. Voice of experience.) Take short showers or reduce showers to every other day. Use the showers or restrooms in the common areas whenever possible, as these do not drain into our meadow septic field.

With our "A" field back up and running, the situation is not as emergent it has been. If we all start conserving, we can prevent it from becoming so.

Barb Gilger – Discovery Bay Resort, Facilities Manager