

8/31/2018



Mr. Aaron Brown
Town of Charlotte Sewage Control Officer
159 Ferry Road
Charlotte, Vt. 05445

RE: Frank & Kathleen Weidman, 602 Church Hill Road, Charlotte, our file 18-091

Dear Aaron,

This letter is in response to Condition # 1.5 of the Water Supply and Wastewater Disposal Permit # WW-138-1806 issued on July 10, 2018. We observed construction of the disposal system serving this project, on 8-30-2018 using a reasonable standard of care customary for this scope of work.

Listed below is a brief summary of our findings:

1. The contractor is Bradley Hayden, HLG Construction.
2. We met on the site to stakeout the work and discuss the plans on 08-27-2018.
3. The septic tank is a 1000 gallon step type pre-cast concrete tank that was set level and contained appropriate baffles.
4. The pump station is located in the second chamber of the step type tank which contains the pump, check valve, ball valve, and union. The pump is a Goulds 3885, .75 hp pump.
5. The pump station vent was installed with an odor control device.
6. The force main is 2 inch PVC SDR 26. A hydrostatic pressure test was conducted on the force main. Pressure was established at 50 psi. The pressure held constant for a period in excess of 2 hours with no measurable loss.
7. The mound surface was plowed prior to sand fill being brought in.
8. Prior to the distribution piping being covered, the pump was activated to observe distribution in the disposal field. The orifice spacing was 6'-3" on center with 1/4" inch holes. Distribution was observed to be equal.
9. The manifold was insulated with Styrofoam board.
10. The absorption trenches were constructed level.
11. The uphill swale had been installed to route storm water away from the mound.
12. The distribution box was observed and found to be level.

The following recommendations were made to the contractor prior to completing the job.

1. Insulation should be placed on top of the manifold and header.
2. All disturbed areas shall be top soiled, seeded, and mulched for soil stabilization.

The following are notes and recommendations that should be followed by the homeowner to aid in the proper operation and longevity of the disposal system.

1. The owner is responsible for operating the disposal system in a manner which will protect the public health and prevent pollution.

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2. New disposal systems require adjustments or modification during start up and during the life of the system. These adjustments include leveling the septic tank, pump station or siphon due to settlement or frost action. Fill may be added to repair erosion or level settled areas.
3. The septic tank and effluent-filter should be inspected annually, and the tank pumped out every 3 years. It is recommended that the septic tank be pumped out during dry times of the year and if it is pumped out during any other time of the year it be immediately filled with water after pumping to prevent the tank from floating.
4. The effluent-filter should be cleaned annually during the inspection of the septic tank. This involves grabbing the filter by the handle, pulling it straight up, and rinsing it off with a garden hose, (letting and debris and water fall back into the septic tank).
5. The life of the disposal system can be affected by a variety of operational and environmental factors. The presence of excess groundwater, rainwater, introduction of material other than human wastes, or excessive sewage flows will adversely affect operation of any disposal system. Soil settlement, freezing of components and clogging due to organic solids accumulation will require repairs.
6. The owner is responsible for compliance with state and local operation and maintenance requirements. It is understood if the water softener system continues to be flushed through the wastewater system, the engineer and contractor assume no responsibility for the improper use and/or maintenance of the system.
7. The owner is responsible for all state and local permits and required conditions of said permit. This includes but is not limited to annual inspections and reporting. The owner is also responsible for recording permits in the town land records office.

Based on the above observations, this letter can serve as confirmation that the system was installed in general conformance with the approved plans. This does not relieve the contractor of minor adjustments that may be needed during the initial startup of the system, nor does it relieve the owner of proper use and maintenance. This letter is not intended to imply any type of warranty or guarantee from the engineer since both the use and maintenance are beyond our control. However, given the good workmanship of Bradley Hayden, we are not anticipating any problems.

Very truly yours,
TRUDELL CONSULTING ENGINEERS (TCE)

Andre Lambert Jr.
State of Vermont, Lic. Designer, 406-B

Encl. Certification Statement

cc. Frank & Kathleen Weidman

Certification Statement:

"I, Andre Lambert Jr., hereby certify that in the exercise of my reasonable professional judgment the installation-related information submitted is true and correct and that the wastewater system was installed in accordance with the permitted design and all permit conditions was inspected, was properly tested, and has successfully met those performance tests."

Andre Lambert Jr., Vermont Lic. Designer, 406-B.