



October 31, 2011

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Mr. Thomas Mansfield
Deputy Health Officer
Town of Charlotte
P.O. Box 119
Charlotte, Vermont 05445

RE: 95 Inn Road WW-138-1115

Dear Tom:

This letter is in response to Condition # 14 (E) of the Water Supply and Wastewater Disposal Permit # WW-138-1115 issued on August 26, 2011. We observed construction of the disposal system serving this project on October 5 and 11, 2011 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 R&J Trucking.
2. We met on the site to stakeout the work on September 29, 2011.
3. The pump station is a 1,000 gallon pre-cast concrete tank that contained the pump, check valve, ball valve, and union.
4. The force main is 1.5-inch PVC SDR 21.
5. The mound surface was plowed prior to sand fill being brought in. A copy of the sieve analysis is attached.
6. Prior to the distribution piping being covered, the pump was activated to observe distribution in the disposal field. The orifice spacing was 6.08 feet on center with 1/8-inch holes. Distribution was observed to be equal.
7. The absorption trenches were constructed level.

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.

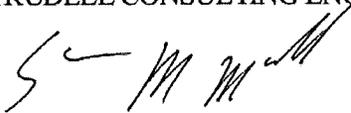
1. The owner is responsible for operating the disposal system in a manner which will protect the public health and prevent pollution.
2. New disposal systems require adjustments or modification during start up and during the life of the system. These adjustments include leveling the septic tank, pump 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. 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.
8. If the system is designed using the performance based design according to previous state permits the system shall be inspected each spring for three consecutive years by a licensed engineer to demonstrate that the system is working as designed.

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 R&J Trucking, we are not anticipating any problems.

Regards,
TRUDELL CONSULTING ENGINEERS

A handwritten signature in black ink, appearing to read 'S M M', is written over the printed name of the engineer.

Shane M. Mullen, P.E.

Certification Statement:

I, Shane M. Mullen, P.E., hereby certify that the design-related information is true and correct and that, in the exercise of my reasonable professional judgment, the design of the potable water supply and wastewater system meets the technical standards of the Rules.

“I hereby certify that in the exercise of my reasonable professional judgment the installation-related information submitted is true and correct and that the potable water supply and wastewater system was installed in accordance with the permitted design and all permit conditions were inspected; were properly tested; and have successfully met those performance tests.”

Shane M. Mullen, P.E.

Enclosures: Sieve Analysis

cc. Jim Baker
Don McComack

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Sieve Analysis Test Report

HINESBURG SAND & GRAVEL
14010 ROUTE 110
HINESBURG, VT 05401

Material Tested Mound Sys. Sand

Sample Identification P-2 Test No. 1

Retained					Passing					
Required Limits	Cumulative Percent	Cumulative Weight	Percent	Weight	Screen Size	Weight	Percent	Cumulative Weight	Cumulative Percent	Required Limits
			14	19	4		99.6			
			5.9	14.2	8		93.7			
8			3	7.2	10		90.7			85-100
			32.2	79.5	30		57.5			
52			17	40.7	40		40.5			30-50
			252	602	100		15.3			
35			13.9	33.2	200		1.4			0-10
5			1.4	3.4	PAN					

239.3

Time: 0930

Date: 5-7-11

Certified By: DAW

HINESBURG SAND & GRAVEL
14010 ROUTE 110
HINESBURG, VT 05401

ATTN: SHANE

Re: Baker Inn Rd

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