

APPENDIX H – MINUTES FROM BOARD DISCUSSION WITH BOARD OF HEALTH

JSM 1/ 2013

January 29, 2013

Gary Annabal met with Austin Godfrey, Rick Barrett, Bob Edgar, Tawyna Kabnick, and Joyce Murray to answer some of the questions that had been posed by community members at the inform meeting held in December. Our meeting was to continue fact finding on the issue of risk. The well head projection area map shared at our Board meeting on January 7th was provided by the NJDEP and was done for all public/community water supplies. The map showed areas where something introduced into the environment would take 3/5/10 years to reach a water source.

Question: How deep are our wells?

Answer: 200 and 275 feet

Question: Can septic reach our wells?

Answer: No, septic cannot get to lower areas. It is able to get to the lake. Septic goes through a field of bacteria virus which latches on to the nutrients which take each other out and convert to oxygen. Septic is under the influence of surface water and cannot get to the lower areas. Casing is a solid pipe and in the lake's case goes 50-60 feet into bedrock beyond the soil of 8-20 feet.

Question: What about spills?

Answer: Surface spills tend to stay at the surface. Protected below that top layer. Surface spills are under the influence of the surface water and not in deeper areas. Petroleum discharge has a lot of the components leached out.

Question: What is the life of a casing?

Answer: Casings are made up of 19 pound heavy gauge equal to a one foot casing. 100 year casings with no problems are common. When a casing might fail, it will be near the top and exposed. A common bacteria is coliform. Water is tested for coliform once a month. The state monitored and remediated the old Sunoco area. Its materials flowed down 202 toward the Passaic River. Since 1960 wells have been tested.

Question: Can you tell us about oil tank leaks?

Answer: When a tank leaks, it is removed and soil samples are taken and continue to be taken until no more hydrocarbons appear. The oil leak on Blue Mill at the Deer estate moved a bit but never made it to the stream. Gary said he has never seen it go down 200 feet in NJ.

Question: What exactly does fracture rock mean?

Answer: It appears 10 to 20 feet below topsoil and is made up of rock basalt (hardened lava) is not solid and has cracks intersecting. Cracks are the faults on the order of tens of feet long not hundreds. It is unlikely for anything from the surface to get into the water. NJ geologists have great records. They have walked the areas and house sales require data which also gets recorded. 202 (our side) is shale; Post Hose Road is highland complex.

Question: What about bacteria contamination?

Answer: Coliforms are not necessarily harmful. It can mean other 'stuff' is present. As water comes out of the pump house chlorine is added. DEP tests the water at its further most point. It makes no difference whether it is a close, middle or a far end test. Gary never heard of it being a problem anywhere in NJ not just at the lake. The VSA type of testing is the recommended type used by water companies. Our system is not a loop. Many systems are not and if we flush the system once a year (which we do) that is sufficient. Water sitting at the end of a line may develop a zooglea-like slim that causes odor but is not a health issue.

Question: In the summer can our tanks get so hot that they build up a bacterial level on the top layer?

Answer: With 30,000 gallons coming into the tanks at a temperature of 50-55 degrees each day, it is unlikely that the temperature could get hot enough. Gary had never heard of it happening. You could check around the United States with any of the hundreds of small water companies but it is unlikely. Go to EPA.gov.