

READINGTON TOWNSHIP BOARD OF HEALTH MEETING

December 15, 2010

Chair William C. Nugent called the meeting to order at 7:11 p.m. and announced that all laws governing the Open Public Meetings Act have been met and that this meeting has been duly advertised.

Attendance Roll Call:

| | | | | | |
|--------------------|---------|-------------------|---------|-------------|---------|
| Christina Albrecht | absent | William C. Nugent | present | Wendy Sheay | absent |
| Jane Butula | present | Tanya Rohrbach | present | Donna Simon | present |
| Beatrice Muir | present | | | | |

Also Present: Hunterdon County Health Dept.: Bob Vaccarella
Board of Health Engineer, Ferriero Engineering, Inc. representative Joe Kosinski
Board of Health Attorney, Stanley T. Perlowski, Esq.

A. APPROVAL OF THE MINUTES

1. Minutes of July 21, 2010. (-Albrecht, Butula, vote).

A **MOTION** was made by Ms. Muir to approve the minutes. The motion was seconded by Ms. Simon.

On roll call vote, the following was recorded for approval of the 7/21/10 minutes:

Ms. Muir Aye Ms. Rohrbach Aye Ms. Simon Aye Chair Nugent Aye

2. Minutes of October 20, 2010. (-Muir, Sheay, vote).

A **MOTION** was made by Ms. Butula to approve the minutes. The motion was seconded by Ms. Rohrbach.

On roll call vote, the following was recorded for approval of the 10/20/10 minutes:

Ms. Butula Aye Ms. Rohrbach Aye Ms. Simon Aye Chair Nugent Aye

3. Minutes of November 17, 2010. (-Rohrbach, Sheay, Simon vote).

Deferred to 1/19/11.

B. CORRESPONDENCE

1. NALBOH – Newsletter - 4th quarter 2010.

Ms. Butula noted the article on the recognition of binge drinking; this is something that the HCDH is fully aware of and is involved in as one of the goals for the year, as is the Partnership for Public Health and the Hunterdon Prevention Resource, as well as the Coalition for Safe Communities.

2. Block 31/Lot 12 – NJDEP – dated 11/9/10 – No further action letter.

3. Letter from Hatch Mott MacDonald dated 11/16/10 regarding NJDEP Flood Hazard and Wetland Permit Application.

4. Block 31/Lot 37.02 - NJDEP – Flood Hazard Area Individual Permit.

5. Block 15/Lots 8 & 9 – Biennial certification monitoring report form for a deed notice & engineering control.

6. HCDH LINC'S – dated 11/19/10 – Public Health UPDATE – Influenza-Like Illness (ILI) Activity MMWR Week 45: Week ending 11/13/10.

7. Block 69.02/Lot 13.40 – NJDEP – dated 11/4/10 – No further action letter.

8. Block 4/Lot 101 – Gladstone Design – letter dated 11/17/10 - Notice of construction of a subsurface sewage disposal system.

9. Block 9/Lot 12 – Kleinfelder – letter dated 11/22/10 regarding certification monitoring report for a ground water classification exception area.

Chair Nugent asked that the summary report be included on the next agenda.

10. Block 21.13/Lot 8 – Quest Environmental & Engr. Svcs., Inc. – notification of immediate environmental concern in potable well.

Chair Nugent asked Mr. Vaccarella about the raw test vs the other tests from the sample; and the fact that the treated test didn't exhibit the same test in hours. Also there is a note about the residents and tenants. Mr. Vaccarella stated that the DEP would have a case management checklist for their caseworker to reference. The HCDH is only recently being notified of these cases, Ms. Vaccarella will follow up on this.

11. Block 21.13/Lot 8 – NJDEP site remediation program – receptor evaluation form.

Chair Nugent asked that code enforcement and the tax office be contacted for information on any activity at this location. Ms. Butula asked that this information be filed with wetlands/LOI file.

12. Block 44/Lot 34 – NJDEP – dated 11/23/10 – No further action letter.

13. NJDHSS – Public Health Alert dated 11/29/10.

Ms. Butula asked that a copy of this be forwarded to the Superintendent of Schools for distribution.

C. SEPTIC REPAIRS

D. OLD BUSINESS

1. Hunterdon County Dept. of Health Presentation – Register Ready Program and Demonstration for Readington Township Board of Health – February 16, 2011.

Ms. Butula stated that this demonstration will be presented to the Board of Health at the February 16, 2011 meeting. An invitation is extended to Ms. Clapp, Social Services, and Mr. Kerwin, Emergency Management.

E. NEW BUSINESS

1. Rabies Clinic – January 8, 2011, 10:00 a.m. – 12:00 noon , at Readington Township Garage/Recycling Center, Mountain Road.

Ms. Petzinger stated that this free rabies clinic will be advertised in the Hunterdon Democrat, the Readington News, the township website www.readingtontwp.org as well as postings at area stores.

2. Safe Communities Coalition –

Ms. Butula stated that a program was run at Hunterdon Central High School, Teen Safety, featuring Pam Fisher, and they were pleased that 800 people attended. The primary message was that individuals can be responsible for saving someone's life.

F. APPROVALS

Category A. – Single Lots

Heard @ 7:30 p.m.:

1. Block 38/Lot 38.19 – ACT Engineering, Patel, N. Honeyman Rd.

Escrow fees paid 5/18/10; ck# 331, \$750.00.

Previously heard 10/20/10. Revisions mailed with 11/17/10 packet.

Mr. Doug Fine, ACT Engineering, NJ licensed engineer appeared before the board representing Mr. Hitesh and Ms. Ushma Patel, 16 North Honeyman Road. Mr. Patel was also in attendance. Mr. Fine stated that this design is based in accordance with the NJDEP Guidance Documents. Soil logs were done about 4 years ago, they were unable to come up with a pit bail or a basin flood, which is the same result they had this year, which determined that they go to a drip dispersal system which is a shallow design, so shallow percolation tests were performed in accordance with the Guidance Document. The type of treatment and design was discussed at their last hearing. Mr. Valentine had attended that meeting as well. Mr. Fine stated that the systems which are currently installed are being maintained continuously.

There was some discussion of the party responsible for the maintenance of the system.

Mr. Fine stated that whoever does the maintenance, which in this case would likely be himself, is a certified O & M by the manufacturer and the Guidance Document from the DEP puts that onus on the manufacturer to put that data together and do the reporting. The locals, the manufacturer and the DEP would be copied on it.

Ms. Muir stated just so it is clear who is responsible for getting that information to whom.

Mr. Fine stated ultimately the GD states that it is up to the manufacturer to comply.

Ms. Butula asked where the auto dialer goes to ?

Mr. Fine stated it goes to the local service provider.

Chair Nugent stated that there are some outstanding escrow funds that must be taken care of by the homeowner.

Chair Nugent asked if there were any further questions or discussion from the board members or counsel.

Mr. Perlowski asked Mr. Fine to review the corporate structure of the contracting parties to this action, for example, is American Manufacturing Inc., the primary contracting company ?

Mr. Fine stated that American Manufacturing Inc. is the manufacturer of the Perc-Rite Drip Dispersal and Puraflo Peat Biofilters System, which is the system proposed here. They provide the drip system as well as the controls of the system. This is an integration of two technologies, the second company is Bord Na Mona which manufactures the peat system. When the two are combined, the American Manufacturing Inc. company becomes the system integrator, which is why there is a letter from them stating that the system conforms with the manufacturers requirements.

Mr. Perlowski asked what the legal relationship is between the two companies, who is the party that is making the representation to the board ?

Mr. Fine stated that he wasn't aware of the legal relationship between the companies, and felt that he was the responsible party presenting this to the board.

Ms. Butula stated at the last meeting, Mr. Valentine from American Manufacturing Inc. presented part of the case as the integrator, and indicated that he is the lead person on this proposed project.

Mr. Perlowski stated that he would like to expand on the previous discussion of the direction that this technology was taking. Up until now the board has been operating on the basis of design specifications, the title 7:9A has specific requirements that the application must meet for approval. There is another type of approval, that is the specification design and requirements which speaks not in terms of what is designed, but what the system can perform. Certain parameters are put into place, and if those parameters are met, it is considered a successful operation, if not met, they must be brought up to speed. In this example, there is high regional water, which previously may have been a disqualification. Under this system of specifications, it is possible for that problem to be overcome, at least to a certain extent. In order to do that they must know who is responsible for the guarantee of the system, the proper balancing of interests in an application such as this indicates that the applicant is the responsible party.

Chair Nugent asked if that implies that if American Manufacturing is taking lead, if there were any culpability regarding the malfunction or failure of the system to operate as expected, does that fall on American Manufacturing to resolve it ?

Ms. Butula stated, asking Mr. Vaccarella and Mr. Kosinski to interject, that any system is designed by an engineer to the best of their ability and knowledge that is available. In this case, these systems have been presented to the state DEP, they have done research on them, they are certified by the state, and there is warranty on both systems that the person is buying them. There is a limit as to how much is guaranteed on a septic system, if there is an obvious problem, they have warranty for it.

Ms. Rohrbach asked if the warranty stated the manufacturer, or the homeowner, or which company is responsible for which component?

Mr. Fine stated it is separate, ultimately they are responsible for their components. If there is something wrong with the design, it is coming back to him. The companies involved warranty a certain part.

Mr. Perlowski asked Mr. Fine if the statement regarding effluent qualities percentage of base reduction was a performance specification?

Mr. Fine stated yes it is, that is how these systems are treated, tested and given an NSF certification.

Mr. Perlowski stated so what you are referring to as a performance requirement is this set of parameters which if they are met, if the system meets them, then it has done what it is supposed to do, but if it doesn't, then it has to be rectified. In the drafting of the documents delineating the responsibilities of each, there is a possibility of one or more of these companies being non-existent, they don't have perpetual existence. The only way to make it safe to the board is to hold the parties supplying the various components to be jointly and severally reliable, so there is responsibility down the line, therefore there would be a third party brought against the guilty one between themselves. Mr. Perlowski suggested that the relationship between the parties be established.

Mr. Fine asked if those suggestions were in concern for the board and the homeowner ?

Mr. Perlowski stated yes.

Mr. Patel stated as the homeowner, it is his feeling that he would be taking on that responsibility, if the system didn't perform as designed/implemented/warranted, etc. As the homeowner, they would have to choose another solution, or move on to legal action or whatever, but the responsibility is the homeowners. The contract would be between the homeowner and these multiple parties.

Mr. Perlowski stated in dealing with corporations, which may be here tomorrow or not, if the homeowner is unable to respond to the obligations, that situation must be provided for.

Mr. Patel stated that corporations are transient by nature, and if that corporation is unavailable, there is no guarantee, the homeowner is responsible.

Mr. Perlowski stated that the reduction numbers if accurate should be certified and be part of the contract between the parties. The manufacturer should certify that they would be responsible for achieving those numbers, and if not, they should do something to correct it.

Ms. Butula asked Mr. Fine if it was physically possible to do that kind of testing.

Mr. Fine stated absolutely.

Chair Nugent asked if the design as proposed would have to be altered ?

Mr. Fine stated that the system as designed would allow for sampling, or checking these numbers. They would be able to sample at the tank, that would be the influent numbers, also they could sample at the drip dosing pump tank which is directly after the peat treatment, so there would be influent and effluent accessibility for sampling.

Ms. Butula stated so it is really only one component of the system that is being proposed, the peat treatment system, and would not have any effect on the drip dispersal system.

Mr. Fine stated that is correct.

There was some discussion of the expectation of how efficiently any system will work.

Chair Nugent asked Mr. Perlowski if the point had been sufficiently made that in addition to the expectation that the design is done properly, that the performance as indicated by the manufacturer will work and meet expectations.

If the approval is conditional on the standards, does that protect the homeowner and the health of the homeowner ?

Mr. Perlowski stated that there is a statement in the Guidance Document that says "many times the application will be a trade off, a reduction in the size of the septic system requirement" that may or may not be the case here, but the board will have to act on this basis. In order to put this solution into effect, it has to be demonstrated that it would work, and we have the documentation that would do that.

Chair Nugent asked if there were any other points.

Ms. Butula asked that Mr. Fine state, considering all the field test findings, that this is the system that will work the best under these circumstances ?

Mr. Fine stated that is correct.

Ms. Rohrbach asked if the maintenance contract is renewed automatically, but is canceled, who confirms or verifies that the homeowner has renewed with someone else?

Mr. Fine stated that it is pretty much self policing, in that the original contractor will notify the local authority and there is a stipulation in the Guidance Document that states that it is the homeowner's responsibility.

There was some discussion of the reporting mechanism.

Mr. Fine stated there is a stipulation in the Guidance Document that says failure of the homeowner to have that contract is a violation of Section 2.2 or 3.

Ms. Rohrbach asked if it were possible that there would be an extended time without a maintenance contract because there hasn't been a follow up?

Mr. Fine stated that if the service provider has lost a service contract, they would follow up on reporting to the health department.

Ms. Butula stated that there is a deed restriction on this so that it will never change hands without someone being aware of everything connected with this.

Chair Nugent asked if there were any further questions or comments ?

There were no comments.

A **MOTION** was made by Ms. Butula for **approval for the installation of the proposed system**, which is for survey is dated 7/19/10. Reports from Ferriero Engineering are dated 8/26/10, 9/24/10, 11/17/10. The HCDH report is dated 8/5/10. Mr. Fine and the applicant have provided the brochure from Puraflo wastewater treatment entitled Wastewater Solutions. This is a mounded soil replacement alternate technology drip dispersal system utilizing the Puraflo Peat Biofilter module and a drip dispersal system manufactured by American Manufacturing Co., called American Manufacturing Co. PercRite drip dispersal system. There is testimony from Mr. Eric Valentine, who represented American Manufacturing at the October meeting. There are various brochures, articles provided by Mr. Valentine and Mr. Fine. From Puraflo Peat Fiber Biofilter, there is the following: the installers checklist, the design guide installation manual, the operations and maintenance manual, the owners manual, and the regulators checklist. From PercRite there is the following: Operations and Maintenance monitoring agreement. Designs submitted in a letter dated 6/18/10 from NJ PercRite. There is a letter from Bayer-Risse Engineering from previous testing dated 5/17/06. From American Manufacturing Co., there is the following: a certifying letter dated 7/19/10; Innovative Technology for Environmental Age for Onsite Wastewater; Dripper Line/Drip Tubing and Drip Disposal Systems Integrations and Applicable Manufacturing; American PercRite Drip Dispersal Systems Engineering Design and Guidelines. From NJDEP, the Drip Dispersal Wastewater Disposal System Guidance Document dated January 2008; Peat Biofilter Wastewater Treatment Systems Guidance Document dated January 2008. Certification for Mr. Doug

Fine being a certified installer dated 7/28/09. This motion for approval is being made by the board with the knowledge that they are approving this, granting a waiver for 2 pumps, and the variance to use the peat moss system, and the drip dispersal system with considerations of the constraints of this property. The lack of permeability was demonstrated by the testing process, that the new system will be a significant improvement over the existing one. The new system will increase the health and safety standards of the occupants of this house and the surrounding community. The installation of the peat biofilter system to treat the effluent that enters the drip dispersal system is an additional safeguard, and we believe will meet the standards that have been presented in various documents, one of which is the Puraflo Wastewater Treatment pamphlet. The drip dispersal technology is a better solution to deal with the permeability constraints of this homeowners property. For the primary soil log 504-3, at a depth of 72", mottling at 20 – 72", no seepage. Soil log 504-4, to a level of 96", mottling at 30 – 38" and 72 – 96", seepage @ 84". Soil logs were performed on 5/4/06. Permeability tests were done 6/1/10, the final were perc 1 @ .75', results 34.67 min/in. or 1.73"/hour; perc 2 @ .85', results 16.17 min/in. or 3.71"/hour; perc 3 @ 12", results 26 min/in. or 2.03"/hour – this was the permeability referred to in the presentation at the shallow levels. There is no LOI presented, but there is a note on page 2 of 17 that the engineer gives testimony to the absence of wetlands on this property and that there were no neighboring wells or septic within 150' of the system. Included in this motion is a waiver for the use of a pump, along with the accompanying deed restriction and maintenance and reporting procedures which must be filed at the Hunterdon County Clerk's office and a copy of the deed restriction returned to the Readington Township Board of Health within 60 days, noted as Exhibit 7. As an important part of this motion, the applicant engineers and installers and manufacturers of all components of this alternative system must comply with all of the conditions and requirements of the DEP drip dispersal wastewater disposal system Guidance Document dated January 2008, and they must comply with all of the conditions and requirements of DEP Guidance Document dated January 2008 entitled Peat Biofilter Systems Guidance for Approving Alternative Systems for Existing Malfunctioning Systems. The NJDEP and the Hunterdon County Health Department should be notified by applicants, engineers and installers at least one week prior to the installation, and inspections should be coordinated with both. An authorized installer must be present at all times. This is the applicant and engineers responsibility to make sure that the authorized installer knows his responsibilities during the drip dispersal system installation. No work on the drip dispersal system may be conducted unless under the direct supervision of that authorized installer. A water tightness of any septic processing and dispersal system dosing tank and peat fiber biofilter module specified in the design must be watertight, tested at the installation site after being installed using hydraulic or vacuum tests which shall include all the upper portions of the tank including the riser joints and the testing must be done in accordance with DEP regulations. The dripper line shall be installed by a method that will prevent pulling, stretching, or crimping of the dripper line and smearing, compaction or alteration of the soil texture. This method must be acceptable to the dripper line manufacturer and the system integrator and the authorized designer. Drip tubing shall not be installed when the soils are saturated. Both the authorized designer and the engineer and system integrator representative are required to conduct a final construction inspection and must certify that as built conditions are in conformance with the approved system design and they must submit as built plans. The authorized service provider shall inspect the drip dispersal system following the installation, and shall complete the drip dispersal system start up checklist and provide the completed start up checklist to the HCDH. The Readington Township Board of Health will require that a deed restriction be recorded with the Hunterdon County Clerk within 7 days. The deed restriction will identify the technology utilized and acknowledge the owners responsibility to operate and maintain the system through the authorized service provider and grants access to the property for the purpose of system monitoring and inspection. Said notice shall be filed with the Hunterdon County Clerk within 7 days of installation and file copies of the notice shall be returned to the Board of Health and the HCDH within 15 days. In the event of the sale of this property, Hitesh Patel must provide the new owner with a copy of the deed restriction prior to entering into a contract sale of the subject property. The treatment system must be covered for a minimum of a transferable 5 year warranty for all components of the Peat Fiber Biofilter system and the American Manufacturing Drip Dispersal System. In addition to the minimum 5 year warranty, this system shall be covered by a renewable and fully transferable contract which can never be canceled. The Readington Township Board of Health shall have the authority to verify the validity of the same and request and receive all relevant information from the service provider. Hitesh Patel must provide a valid copy of the original warranty and service contract for the system to the board clerk at the time of issue and no later than 2 weeks after the installation. Mr. Patel and future owners must provide written verification annually to the Readington Township Board of Health and the Hunterdon County Health Dept. following the initial 5 year

warranty and service contract that a new annual service contract is currently valid and in effect for the subject system. Annual service contracts can never be canceled. The engineer shall inspect the system at the conclusion of the installation before the backfilling is begun. The design engineer shall inspect the site 30 days after the installation and ascertain proper functioning of the system and he shall give this information to the Hunterdon County Health Dept. The service contract also shall include a reasonable estimate of the cost to repair any of the problems associated with the adequate function of the disposal system. This information has been provided to the owners. The service contract shall authorize the undertaking of any maintenance or repairs determined to be necessary during any inspection or a result of any observation, however it shall be the responsibility of the property owner to assure proper maintenance and service of the disposal area and that all necessary permits are obtained prior to any repairs to the system. Notice of failure to renew the service contract should always be directed to the Readington Township Board of Health, the service provider and the Hunterdon County Health Dept. within 7 days. This approval does not exempt current or future property owners or their agents from the responsibility to comply with all applicable Federal, State or County or Township ordinances. The Readington Township Board of Health reserves the right to take any and all necessary action to compel the property owner to cease use of this system if the property owner fails to comply with the conditions contained herein. This installation of the system will be in full compliance with the Guidance Document of NJDEP regarding both the dispersal wastewater disposal system and the peat fiber biofilter guide dated January 2008. Whereas an application has been before the Readington Township Board of Health by Hitesh Patel to replace a malfunctioning individual subsurface sewage disposal system to be located on the premises known as Block 38/Lot 38.19 at 16 North Honeyman Road, Whitehouse Station, Readington Township, NJ. A drip dispersal wastewater disposal system is proposed for the dispersal of wastewater effluent into the soil as a tertiary treatment. The drip system incorporates filtration, time and level control applications with ultra low rate distribution under guidelines provided by the American Manufacturing Co., of Elkwood, VA. This drip dispersal system may be considered by the local administrative authority at their discretion the use of a drip dispersal system may be allowed to alter an existing malfunctioning system. This is an approved system by the NJDEP and the Hunterdon County Health Dept.. It is an alternate and not an experimental system. The location of the onsite wastewater treatment system must conform with all of the provisions of NJAC 7:9A for the location of new and expanded systems, save and except the variances referred to during this approval. Alterations to existing malfunctioning systems must be made in a manner that is more compliant with the current standards than the malfunctioning system. Now therefore, the Readington Township Board of Health in the Township of Readington, County of Hunterdon, State of New Jersey, does hereby approve the application for matters within its purview subject to the NJDEP Guidance Document of January 2008. A warranty shall cover any failure of the good operation of this system, included but not limited to all of the effluent and it will eliminate public or private health nuisance. Hatish Patel in consideration of the acceptance of the Readington Township Board of Health and other good and valuable considerations agrees to defend and indemnify and save harmless the said Board of Health and the Township of Readington and its elected officials, its appointed officials and employees from and against any and all claims and liabilities arising out of or relating to the septic system to be supplied for this project. This indemnification agreement shall be given to Mr. Patel, signed, and the Board of Health would like it back within 10 business days. This indemnification agreement shall apply notwithstanding the actual or alleged negligence of the indemnities but shall not apply to claims or liabilities arising solely from their negligence. The foregoing indemnification is in addition to and not in lieu of the requirement of the ordinances of the Township of Readington pertaining to the indemnification for pump systems.

The motion was seconded by Ms. Simon, on roll call vote, the following was recorded:

| | | | | | |
|------------|-----|--------------|-----|--------------|-----|
| Ms. Butula | Aye | Ms. Rohrbach | Aye | | |
| Ms. Muir | Aye | Ms. Simon | Aye | Chair Nugent | Aye |

Heard @ 8:50 p.m.:

2. Block 75/Lot 2 – Engineering and Land Planning, DeMarco, Lazy Brook Road.

Escrow fees paid 11/18/10; ck# 9110, \$750.00.

Mr. Wayne Ingram, Engineering and Land Planning, NJ licensed engineer, appeared before the board.

This application is presented for the DeMarco's, 6 Lazy Brook Road. Mr. Ingram performed the soil testing in front of the board, and also the design. This is an existing 2 bedroom residence. The existing system consists of the septic tank and one single lateral trench. The state of failure was discovered during a real estate transaction. Soil testing was performed in 9 logs throughout the property over 3 days. The area chosen is where the majority of the testing was focused and seemed the most suitable location. They did not achieve passing permeability. Four soil basin floods were done, one draining test was followed by a second filling, which did not completely drain. All basin floods in the chosen proximity exhibited between 6 – 9" of movement on the first fill. Soil log 1 in the southwestern portion of the property, very poor soils, no passing tests, no movement of water. Soil log 2, also in the southern portion of the site, also no possibility of movement of water, shallow refusal as well as basin flood 3 which is part of soil log 5, which exhibited the least amount of movement. The property to the south has between a 6 – 7' mound on it for very shallow ground water conditions, and also exhibited poor permeability. Part of what they did was analyze the permeability of surrounding properties that had recent systems, and led them to choose the proposed location. To combat the lack of permeability, they designed the system as a pressure dosing system utilizing the multiplying factor of 1.61, not the reduced factor of 1.33. The system is oversized by over 25%, in addition, there is a 2' select fill collar due to the mounding, which will provide additional perimeter area to allow for infiltration. The zone of disposal is at 83" which is the depth of the deepest basin flood, so they have given it as much depth of disposal within the rock layer as providable given the limitations. A pump system is also proposed, gravity can't be maintained with the level of mounding that is required. As part of the system a new 1,000 gallon septic tank is proposed, and a 1,000 gallon pump tank, which are more than adequate given the state regulations for a 2 bedroom house. A check valve will be installed outside of the pump tank. The distance is over 400' to the house, so to limit the horsepower to the pump, they will put the pump lines below the frost line so that there are no concerns, while allowing that a more reasonable sized pump will operate without tiring or lack of pressure to the field. The pump is ½ horsepower which is standard for this size. If the check valve weren't holding the water, they would need a much more powerful pump, which could have a detrimental effect to the rest of the system. That is a basic overview of the system.

Chair Nugent stated that the first question that comes to mind is that looking at the proposed position of the bed, you are on top of basin flood 4 that failed, yet basin flood 2 to the east which at least filled and drained at least 4", it seems that they could have moved it.

Mr. Ingram stated that basin flood 4 was showing positive movement, as were basin floods 1 and 2, but was abandoned because the test was begun on the 3rd day, they had started another test, but didn't have a witness for the 2nd day, however, the movement was consistent with the other basin floods in the area, and they were trying to position it close to soil log 6, which appeared to be a fractured hole. One thing noted was that the water from the holes was moving away, because it was encountered in different soil logs that were opened up. One of the main reasons that they didn't have complete drains was that the fractures were relatively horizontal, and there seemed to be a lot of movement initially in the basin floods, but as the water level dropped there wasn't much downward movement, more lateral, so it became harder for the logs to completely drain. They had attempted to get a witness for the 4th day, but it would have been a moot point because basin flood 4 hadn't fully drained, was not looking to have a full 12" drain. Their general impression from all the soil logs in that pen area where the soil conditions were consistent, they were getting similar drops.

Ms. Butula asked for the height of the mound.

Mr. Ingram stated that ground water was at 24", which is just at the limit, the mound is 3' on the high side and approximately 7' on the low side due to the drop in grade at the back. The location of the mound is such that it is far to the rear of the property.

Ms. Butula asked Mr. Vaccarella if he thought this system could be improved upon by utilizing an alternate system, a different technology ?

Mr. Vaccarella stated that you possibly could, in that respect you would still have to do some type of testing in that upper horizon, there is no guarantee with that.

Mr. Vaccarella asked Mr. Ingram if he had considered a peat system ?

Mr. Ingram stated that they had explored that, they have had Eco-Pur peat systems before this board before, so they are familiar with the technology. The soil conditions are not improved by a peat system if the permeability isn't there. They believed that the over sizing of the bed would allow for adequate treatment and disposal of the water, even though they did not have a passing test. A basin flood test requires 12" of

rop in a 24 hour period, roughly 0.5"/hour.

Mr. Vaccarella asked Mr. Ingram what he believed the reading would be in the final permeability ?

Mr. Ingram stated he believed somewhere in the 0.2"/hour range. The first empty only took 3 hours, he felt a contributing factor to the second fill was that the rock had a lot of siltation in it, it was mainly a rock layer, but more soil particles than are usually encountered. After the first drain, a lot of it fell to the bottom and slowed the water. An important factor during construction will be to remove all of the siltation possible, and keep the upper limits of the soil above the rock from silting in. It won't be done during a wet period, the winter season would be the best time to construct it.

There was some discussion of the soil types in this area.

Ms. Rohrbach asked if this property would continue its current use as an equestrian farm ?

Mr. Ingram stated yes.

Ms. Simon stated there is a proposed 1,000 gallon tank, does the owner plan any expansion to the 2 bedroom home?

Mr. Ingram stated no, they had been contemplating expansion, that is why they tried so many holes, but since that was not achieved, the homeowner is content to remain at 2 bedrooms.

Chair Nugent asked if there was any concern of this area's continued usage as pasture ?

Mr. Ingram stated that the homeowner intends to no longer use this fenced area as pasture, there are multiple pastures out there.

Mr. Vaccarella stated that the area could be kept completely fenced off, with the required vegetative cover on the mound.

Ms. Butula asked if there were any buildings with water in connection with the care of the animals ?

Mr. Ingram stated no, the existing buildings do not have running water. The only water facilities are in the home itself. Nothing else will be discharged into the proposed system, other than from the home itself.

Chair Nugent asked where the existing system is located?

Mr. Ingram stated on the plan, to the south and east of the pump tank is a single lateral line, one trench about 2' wide.

There was some discussion of the location of the proposed system, the soil to the east seemed to be more permeable.

Mr. Ingram stated that the improvement seemed to be more to the north, but the height of the mound would increase the further east they went. Soil log #9 was the last one, and they were getting mottling higher and higher although there was no groundwater in the holes to the north and east.

Chair Nugent summarized that the concerns were groundwater concerns and mound height concerns.

Chair Nugent stated that the bed size is at 1.61, it is over designed by an additional 25%, so effectively it is 2.0?

Mr. Ingram stated yes, somewhere in that region. The township standard is 1.61, roughly 530 sq. ft., and they are at 735 sq. ft., plus the select fill collar.

Mr. Ingram stated that he felt this is the best location, that the system will work, there is movement in this area, and that the over designed system will compensate for the lack of permeability.

Mr. Vaccarella stated that in addition, the pressure dosing gives a resting period between dosing.

Mr. Ingram testified that the neighboring wells and septic all met the specified distance requirements.

Chair Nugent stated that the HCDH letter dated 11/4/10 recommended that in light of the lack of permeability, a hold harmless clause will be included in the motion for approval.

There was some discussion of the homeowner being aware of this.

Mr. Ingram stated that he would provide the board with a signed letter from the homeowner indicating their knowledge of the system, that it has been explained and they understand the lack of permeability.

Ms. Butula stated that this combination makes it a troubled piece of property, and the board wants to be sure that the health of the homeowners and of the community is protected.

There was some discussion of the location of the well.

Mr. Vaccarella stated that it looks like it is 80'.

Mr. Ingram stated that that was an oversight, there is plenty of room to move it.

Ms. Butula stated that there are some suggestions, the homeowner should sign an indemnity letter in regards to the lack of a passing permeability test and the map needs to be corrected regarding the well location.

Chair Nugent stated that the information as covered in the HCHD letter indicates the boards concerns that they would like the homeowners acknowledgement on.

Mr. Ingram confirmed that a confirmation of the homeowners receipt and understanding of the County letter would be acceptable.

The board agreed that that would be acceptable, that the County is an authority.

Mr. Ingram stated that they would have the homeowner review the November 4, 2010 HCDH letter, sign and have it notarized, and return it to the board. The deed restriction and maintenance agreement have been explained to the new homeowner. Mr. Ingram recapped, the board is requesting revised maps moving the tanks outside the 100' and getting the notarized County letter.

Chair Nugent stated that is correct, just those two items.

Heard @ 9:40 p.m.:

3. Block 75/Lot 17.16 – John Kearney, Amann, Hixson Road.

Escrow fees paid 12/1/10; ck#1874 , \$750.00.

Mr. John Kearney, J. H. Kearney Consulting Engineers, NJ licensed engineer, appeared before the board, presenting a proposed septic system alteration plan for 107 Hixson Road, Block 75/Lot 17.16 for Charles and Celeste Amann. The plan is for the replacement of a malfunctioning system. It is a mounded soil replacement system, the proposed plan is for a new septic tank as well as disposal system. Soil logs and test pits were dug on the property, 7 total, and settled on 2 soil logs at 7', and a very good basin flood. The design meets all the requirements of code, it will be mounded on the highest side, about 4' and a few inches tapering into a slope with no mound on the uphill side. This is a gravity fed system, they are abandoning the existing septic tank.

The malfunction was a backflow of the system into the basement, a camera in the line discovered the delivery line was irregular in grade and terminated into a D-box which was under the driveway. The determination was that there was no way of clearing it, and it was determined to abandon the system.

There was some discussion of the driveway, and the construction entrance and access to the work area.

Ms. Butula asked for details about soil log 2 which is within 2' of the bed, the witness indicated that 10 gallons were put into the hole.

Mr. Kearney stated that was dug to 80", through loose shale material, they realized that was the best material that they had, additional holes were dug, but didn't get to that depth, or were too low on permeability.

There was some discussion of the lack of permeability and the close proximity to the logs that were used for design. Reference was made to the HCDH letter of 11/29/10.

Mr. Vaccarella stated that the permeability was at 4', the basin flood was mounded from that point, and is 4 1/2'.

Mr. Kearney stated that the reason for stopping at 48" was that they wanted to be in that stratum, because of the history of the other logs.

There was some discussion of the Hunterdon County Department of Health review letters.

Mr. Vaccarella stated that all the technical items as stated have been addressed.

Chair Nugent asked about the surrounding wells and septic systems.

Mr. Kearney stated that the proposed septic tank is 100' or more from the well, and adjoining properties are about 3 – 400' or further.

Mr. Kearney stated that there are no wetlands or transition areas within 150' of this property.

Chair Nugent asked if there were any other questions or comments.

There were none.

A **MOTION** for approval was made by Ms. Butula for Block 75/Lot 17.16, 107 Hixson Road, Readington Township, a 4 bedroom residence is on the property. The map is entitled Septic System Design for Celeste and Charles Amann, dated 11/4/10, revision 11/29/10, prepared by John H. Kearney, New Jersey licensed professional engineer. There is a sketch survey by Frank Sisco dated 6/22/97, HCDH reports dated 11/29/10, 11/28/10. This is an alteration with no expansion of an existing system. The proposed system is a gravity flow mounded soil replacement fill enclosed system. For the primary, 10/25/10, soil log 1 @ 76", no mottling, no groundwater, soil log 2 @ 80", no mottling, no groundwater. Experimental water, 10 gallons, no drainage @ 80". Passing basin flood was @ 48". Soil log 5 @ 48", no mottling, no groundwater. Permeability test is basin flood 2 in soil log 5 @ 48", 10/25/10 – 10/6/10, passing. This is a gravity system. The regional zone is 48".

The motion was seconded by Ms. Simon, on roll call vote, the following was recorded:

| | | | | | |
|------------|-----|--------------|-----|--------------|-----|
| Ms. Butula | Aye | Ms. Rohrbach | Aye | | |
| Ms. Muir | Aye | Ms. Simon | Aye | Chair Nugent | Aye |

Heard @ 10:05 p.m.:

4. Block 51.02/Lot 1.04 – John Kearney, Hillmann, Springtown Road.

Escrow fees paid 11/30/10; ck#648 , \$750.00.

Mr. John Kearney, J. H. Kearney Consulting Engineers, NJ licensed engineer, appeared before the board, presenting a proposed septic system alteration plan for Block 51.02/Lot 1.04, 4 Springtown Road. This is a septic system alteration, due to the investigation for the future sale of the home. The proposed system is a soil replacement bottom lined for a 3 bedroom existing 50 year old home. Soil log 1 was an exploratory soil log, not used for design, due to elevation and distance from the house. Two additional tests were done closer to the house and are the basis for the design, they were fully conforming and permeability was done on the sample from one.

Chair Nugent asked Mr. Kearney to clarify the information on the well.

Mr. Kearney stated that the well is in front of the house. There is a limited, 20' area where it could be. The proposed septic system will be in the back yard, 100+' from the well. The owner has agreed to raise the well head to grade as part of the proposed project.

Chair Nugent asked if there were any other questions or comments.

There were none.

A **MOTION** for approval was made by Ms. Butula for Block 51.02/Lot 1.04 at 4 Springtown Road, Readington Township. This is a 3 bedroom residence. The map is named Septic System Design for Ann Marie Hillmann, Readington Township, Hunterdon County, New Jersey dated 10/20/10, revision 11/29/10, prepared by John H. Kearney, NJ licensed engineer. Survey was done by Peter J. Crowl, June 1988. HCDH reports dated 11/10/10, 12/2/10. Correspondence from Mr. Kearney dated 11/29/10 states that there are no wetlands or wetland transition areas on this lot or in the vicinity of the disposal bed within 150'. The well lot location is approximate the casement does not extend to grade, however, the note has been added to the plan that the well head will be raised to grade as part of the septic alteration project. The well locations for the adjoining properties have been added and it is noted that none of them are within 100' of the proposed disposal system. This is a soil replacement bottom lined system. The primary testing was done 10/11/10, soil log 2 @146", no mottling, no groundwater; soil log 3 @132", no mottling, no groundwater. Permeability test was a permeability class rating entitled #1, 84" in soil log 2, 10/11/10, with samples A and B and the results that the K=3. The regional zone is 84".

The motion was seconded by Ms. Simon, on roll call vote, the following was recorded:

| | | | | | |
|------------|-----|--------------|-----|--------------|-----|
| Ms. Butula | Aye | Ms. Rohrbach | Aye | | |
| Ms. Muir | Aye | Ms. Simon | Aye | Chair Nugent | Aye |

Heard @ 10:20 p.m.:

5. Block 60/Lot 16.02 – ACT Engineering, Matonis, Paterson Rd.

Escrow fees paid 1/23/08; ck# 8817, \$750.00.

Previously heard/approved 1/16/08.

Mr. Doug Fine, ACT Engineering, NJ licensed engineer. This application is for a previously approved by this board and the HCDH design. Additional testing has been done to relocate the primary disposal area because the design was for a mound directly in front of the property, so the relocation is for esthetics.

Ms. Butula asked if this was for sale.

Mr. Matonis stated that it is for sale.

Chair Nugent asked if there were a difference in the mound height.

Mr. Fine stated the previous design is just below 6' on the low side, and 2.5' on the high side. The proposed system is about the same, a little over 3'.

Mr. Kosinski stated that the regional ground water surface in all the logs was roughly the same.

Mr. Fine stated that they based it off the mottling, performed soil logs 5, 6 and 7, and found similar conditions in all 3. Soil log 1 was 90" to machine refusal, water table was identified via mottling at 38". Soil log 6 total depth was 98", mottling identified at 36", and soil log 7, depth of 97", mottling at 33". They were roughly all in the same ballpark with the mottling for the water table. Some groundwater accumulation in soil logs 5 and 6 at the bottom, not necessarily enough to perform a pitbailing test, so they moved slightly uphill and performed a basin flood in soil log 7, with positive results. They were able to standpipe it and monitor it for 8 weeks which indicated all 8 weeks dry. The groundwater table was based on the highest mottling in soil log 7 @ 33". They designed at the highest elevation which was soil log 7, elevation @ 98.5, and built up from there. Because of the fall off and contours of the property they are significantly above any of the groundwater that was seen in the lower logs, they are designed 4' above the highest water table in the highest elevation. A new primary area was created and the former design is the reserve area, enabling the driveway as proposed now to encroach on what they were previously using as a reserve area, providing adequate primary and reserve.

Chair Nugent asked what the distances are between soil log BF and the reserve area ?

Mr. Fine stated 15' from edge to edge.

Ms. Butula asked what the distance is between the primary area and the transition, wetland area, and was there ever a wetlands evaluation done ?

Mr. Fine stated about 115', the tanks are about 110'. There was a wetlands evaluation done by Bohren and Bohren, the original design shows flagging. Documentation of a wetlands delineation is dated 5/14/07, by Bohren and Bohren.

Chair Nugent confirmed that the proposed system is in excess of 150' from the stream.

Ms. Muir stated that she would like an exact measurement on that.

Mr. Fine stated that if they measured from the wetland, the worst case scenario to the proposed disposal field, it is 170' to the edge of the disposal field.

Mr. Kosinski asked if Prescott Brook had any designation, it is probably only 150' from the brook to the disturbance limit, if there is only a 50' wetland transition area, he wouldn't expect the riparian buffer to be any greater than that.

Mr. Fine stated correct, it would be considered previously disturbed because it is all grass, no trees.

Ms. Butula asked if there was a survey.

Mr. Fine stated that Bohren and Bohren surveyed the property on 6/25/07, Robert Templin, L.S., P.E. There was some discussion of the exact Lot number.

Mr. Matonis confirmed that it is Lot 1.

There was some discussion of this being a pre-existing lot.

It was determined that this lot has been before the Planning Board, and is pre-existing.

There was some discussion of the previous approval on this lot.

Mr. Kosinski stated that he would note that the code requirements haven't changed, so if it has been found to be suitable, it would still be.

Chair Nugent stated that they would indicate the switch in the motion.

Chair Nugent asked if there were any other questions or comments.

There were none.

A **MOTION** for approval was made by Ms. Butula for Block 60/Lot 16.02, which is a vacant lot at 1 Paterson Road, Readington Township. This is a proposed 5 bedroom home. The map is titled Septic System Design for Block 60/Lot 16.02, Readington Township, Hunterdon County, NJ, Paterson Road, Lebanon, mailing address Readington Township, dated 8/26/10, prepared by Douglas E. Fine, NJ licensed professional engineer. This property is owned by John and Linda Matonis. The survey was done by Robert J. Templin, 6/25/07. This is new construction, it is a proposed mounded soil replacement system with an effluent filter. This is a previously approved lot with a previously approved primary and reserve. The previous primary that is now the reserve involves soil log 2, soil log 1 and basin flood 1. The applicant is asking that the primary will now be the reserve and they are submitting data for consideration of a new primary designated area. Testing was done 1/7/10, soil log #6 @ 98" with mottling 36 – 47", 47 – 98", seepage @ 90"; soil log #7 @ 97" with mottling 33 – 48"; permeability test basin flood 7, 1/7/10 @ 82", passing. In season groundwater monitoring, 1/9/10 – 2/27/10, results dry. Regional water is determined by soil log 7 @ 33" mottling. A wetlands delineation was submitted

previously dated 5/14/07 designating state wetlands open water and transition areas. The engineer has testified that the proposed system is located 150' from Prescott Brook. There is a deed restricted, pump system involved with this system. The future owners of this property or house must be made aware of the fact that there is maintenance involved with the effluent filter, and the current owner is responsible for that. The deed must be filed at the Hunterdon County Clerk's office, and a copy returned to the board clerk within 60 days, also requiring the maintenance and reporting, and it is the owners responsibility being given to them tonight be forwarded to the future owners.

The motion was seconded by Ms. Simon, on roll call vote, the following was recorded:

Ms. Butula Aye Ms. Muir Aye Ms. Simon Aye Chair Nugent Aye

Mr. Matonis thanked the board for remaining to hear this application.

The following application was not heard:

6. Block 39/Lot 3 – Thos. L. Yager & Assoc., Nahvi, Route 22East

Escrow fees paid 9/1/10; ck# 4192, \$750.00.

Previously heard 10/20/10. Revisions mailed with 11/17/10 packet.

Chair Nugent stated that board counsel, Mr. Perlowski, will be retiring from the Readington Township Board of Health as of this year. Chair Nugent thanked Mr. Perlowski for his many, many years of service and guidance to this Board, stating that it has been an honor to work together.

Mr. Perlowski stated that it has been a pleasure to represent Readington Township Board of Health. This Board has always adhered to the highest standards possible, and that he is very appreciative of that.

The board members congratulated and offered best wishes to Mr. Perlowski on his retirement.

There were no other matters before the board.

G. ADJOURNMENT

A *MOTION* was made by Ms. Butula to adjourn at 11:01 pm, seconded by Ms. Simon with a vote of Ayes all, Nays, none recorded.

Respectfully submitted:

Lorraine Petzinger
Board of Health Secretary