

**Minutes of the Carlisle Board of Health
May 26, 2015**

Minutes

Bills

Administrative Reports

Benfield Farms Development – Alan Lehotsky (Carlisle Housing Authority)

- water and septic issues
 - Board of Health complaint log
 - Board of Health Inspection Results (Rob Frado)

DISCUSSION ITEMS

- Manure and Swine Regulations – Final Draft
- Long Ridge Road - comments for Town Advisory Group
 - DEP letter 5/14/15 on Public Water Supply Determination
 - Nobis Engineering Phase 2 Technical Review 5/20/15
 - Forwarded email 5/21/15 from Scott Horsley (abutter's consultant)
 - Local Health Waivers Being Requested
- Great Brook Farm Septic System – Certificate of Compliance Issued
- MHOA – intern grant application
- Executive Session Discussion

NEW BUSINESS

The meeting was called to order by the Chairman at 7:00 pm at town hall. Present were Board members Bill Risso (Chairman), Lee Storrs, Catherine Galligan, Todd Thorsen, and Donna Margolies. Also present Linda Fantasia, Health Agent and Alex Brewster (Carlisle Mosquito).

MINUTES – tabled to next meeting.

BILLS – Mileage for the Administrative Assistant and staff payrolls. **It was moved (Galligan) and seconded (Margolies) to approve the invoices as presented for payment. Motion passed 5-0-0.**

ADMINISTRATIVE REPORTS – May 12, 2015

Lyme Disease Subcommittee – Dr. Natalia Evgenov resigned for personal reasons. Jeanne Genezcko is interested in becoming a member.

MEMA Workshop will involve planning for a large-scale evacuation, mass care and sheltering activities. Galligan, Fantasia, Risso and Margolies will the workshop in Lowell on June 2nd.

Health Medical Care Coalition (HMCC) – Dept. of Public Health (DPH) is reposting the Request for Proposals for a 4A4B host agency since there were no applicants. Agencies located outside the regions may apply. DPH is arranging for a transition contract for current fiscal agents.

The Board reviewed the status of Ongoing Projects.

Carlisle Board of Health Minutes

Meeting Date: May 26, 2015

Approved: June 9, 2015

DISCUSSION ITEMS

Noise Committee – Galligan, who is a member, reported that the Committee would like to concentrate on roosters and hoe rams. These have been problematic noise complaints in the past. The town would like an enforceable regulation. One question raised was whether roosters are exempt under farming practices. Galligan is concerned that the Committee has the perception that nuisances are under the purview of the Board of Health, which generally they are not. The Board of Health has authority under MGL C. 111 Sections 122 and 143, but they are limited to activities that may be injurious or dangerous to the public health. There is no evidence that the noise nuisances in question (rooster and hoe rams) are injurious to public health. Thorsen said that health risks are usually physical in nature. Noise above 85 dB ambient level have been shown to cause hearing loss but there is no data showing the same cause and effect when noise is a nuisance. Perception can have a lot to do with rating noise a nuisance. The duration, time of day and tone can affect how the noise is perceived. Carlisle has a Bylaw regulating barking dogs but this was probably the result of empirical data rather than science. There is a separate committee that is dealing with dog behavior in town. Galligan will keep the Board informed of the Committee's progress.

Manure and Swine Regulations – Final Draft.

The setback distance between adjacent dwellings was changed from 80' to 100'. Manure stockpiles must still be 40' from the property line. It was agreed that there needs to be a Permit process for the Swine Regulation. This could be filled out when the pigs arrive. The form will be available online along with the other documents. The Board suggested some revised formatting for the Application for the Keeping of Animals in Carlisle which will also have the Manure Management Plan-Self Certification Checklist on the back. The Board would like to keep the application/licensing process simple and straightforward and as close to the current one as possible. There will be no additional fee for submitting a Swine Permit application. Galligan agreed to work on a draft permit. All four documents – Manure Management Regulations, Keeping of Swine Regulations, Manure Management-Self Certification Checklist and Swine Permit Application - will be reviewed at the next meeting.

Benfield Farms Development – four Benfield Farms tenants, town resident Alan Carpenito and Carlisle Housing Authority (CHA) Chairman Alan Lehotsky were present.

The tenants said that rather than stating individual complaints, they were acting on behalf of all of the tenants in order to address a number of concerns with the site. These concerns included septic odors, rubbish removal, landscaping and maintenance, water quality and complaint resolution procedures. The Board noted that it has authority over any septic or sanitary issues, but it would be more appropriate for the tenants to address the other kinds of concerns to Peabody Co., the property manager, NOAH, the lease holder or the Carlisle Housing Authority. Alan Lehotsky, Chairman of the Housing Authority agreed and invited them to any CHA meeting.

The tenants expressed frustration over getting their complaints addressed. They no longer have confidence in NOAH or Peabody Properties to listen to their complaints. Some tenants are reluctant to speak out about the living conditions. Lehotsky said anything that is not under the purview of the Board of Health can always be taken to the Housing Authority which also has enforcement powers. In the last thirteen months CHA has received only one complaint. The tenants explained that they had tried to attend a CHA meeting but could not find the meeting location. Residents do not speak up because some are frail and elderly while others fear some sort of retaliation having to do with the leases, particularly those living in subsidized housing. On more than one occasion, a NOAH representative has suggested that they are lucky to be living at Benfield Farms. They have registered complaints with the Housing Coordinator, Elizabeth Barnett who brings them to Toby Kramer of NOAH or the Housing Authority. The tenants are not satisfied with this process and would like to have more direct participation. It has been difficult for them to understand the ongoing septic and well issues. What they read in the newspaper is often different from what they experience. Risso suggested reading the approved minutes to find out what the Board of Health is doing about the problems. The minutes and agendas are online.

The tenants provided the Board with a copy of a Benfield Field Farms Updates and News dated April 14th. While the memo appears to address some of the septic and well issues they believe it is more of a boiler plate response lifted from various documents. It is not very helpful in addressing their complaints.

Lehotsky assured the residents that under Mass. Law there can be no retaliation for complaints and if so chosen, confidentiality must be maintained.

The Board then updated the group on the problems with the FAST pre-treatment system. Risso admitted that the system is not working as it should. The Board is concerned about issuing future permits for the FAST system. The Board of Health chairman inferred there was a bacteria kill back in October and a new start-up was required. The bacterial growth, which is the primary pre-treatment mechanism, was not sufficiently established before the cold weather arrived in January. Test results, while still in compliance with DEP's criteria, continue to show abnormal results for some constituents. If the system is not functioning properly it could be the cause of some of the septic odors. The Board has not had any problems with FAST systems installed in single family residences. For larger developments, there are other alternative technologies that could be used. The Board has contacted DEP with its concerns about the FAST system. A malfunctioning system could be a liability for the town in the future even if it is meeting the compliance thresholds.

Risso said he would like to know what is in the effluent that is being sent out to the leaching field. To date the compliance wells have not shown any problems and it is unlikely that the leaching field, which is a Perc-Rite system, is experiencing any problems because of the limited flows so far. However, if the FAST system is not working properly it would be helpful to know the level of nitrogen in mg/L being sent to the field and whether this is better than a conventional treatment system. Although the Perc-Rite is also a treatment system, its functioning is dependent upon the quality of the effluent being introduced. The two treatment systems are designed to work together, not independently.

The Board has scheduled a general meeting on June 23rd to hear from the vendors, operators and design engineers in order to decide whether the problems are system or operator issues or some irregularities that were not considered. The public is invited to attend. The Board noted that DEP may be undergoing a change in personnel due to early retirements. This is another reason the Board does not want to continue with a wait and see approach.

Alan Carpenito said he had smelled the strong septic odor on more than one occasion. The Board agreed that others have made the same claim. Fantasia had prepared a log of complaints back to the summer. The Board said that the normal processing for the FAST system will have an earthy odor. If there is a sulfur smell, then the system is not working. Carpenito complained that the town invested \$425,000 for the infrastructure and it is not working. The Board noted that the Public Water Supply is working properly. There was a problem with the water softening system but it was corrected. There is still some sodium in the drinking water but probably within acceptable limits. The Board would like to know what the sodium level was when the well was installed. The problems are mainly sodium in the pre-treatment wastewater influent. It would be helpful to have more data on when the odors occur and how frequently. Tenants could call the Board of Health office and leave a message.

Carpenito asked if the malfunctioning pre-treatment could cause the leaching field to fail. The Board thought this was unlikely. The problem is not with Total Suspended Solids which would clog the field, but with the transformation of nitrite into nitrate. The degradation process is not proceeding to completion. The Board noted that it had eleven complaints within one year.

As for the storage of trash in the parking lot adjacent to the full dumpster, the tenants informed the Board that it was picked up at 4 am on 5/25/15 (Memorial Day) which seemed to be a strange time. Only the bags outside were removed. The dumpster has not been emptied for three weeks. There is also occasionally a sewage odor from the drains in the trash rooms. Someone attempted to seal off the first floor drain with masking tape. The Board agreed there should be water in the traps to keep sewage odors from backing up into the building. It is also important to empty the dumpster on a regular basis or keep it closed. It is an attraction to animals.

Carpenito asked if there was a meter to track odors from the FAST system. The Board said this is not something they could do. A person will often detect an odor before a meter, particularly if it is hydrogen sulfide. People are very sensitive to this. The odor is not the root problem, reminded Galligan, but a symptom of a malfunctioning system. It is the system that needs to be addressed.

The Board acknowledged the significance of residents from four separate units attending the Board meeting to express their concerns. The Board is very aware of the ongoing problems and has been working to get them solved. The Board has not issued a Certificate of Compliance for the system because of the problems. NOAH has addressed some of the problems identified such as missing bolts on manhole covers and leaking gaskets. NOAH should work with the management company to make sure the same problems such as a snow plow breaking the bolts does not happen again. Other sites have successfully used a plastic blade on the plow to minimize damage. These are the types of things that need attention in order to avoid future problems. The Board agreed to notify NOAH to advise the management company and make it a requirement of the Operations Manual. Risso had some ideas about retrofitting the tee in the pump house to eliminate odors. These will be discussed at the June 23rd meeting.

The Board decided to ask the operator of each system (well, FAST, PercRite) to provide a spreadsheet summary of testing schedule and results. This will give the Board a global view of how the systems (septic and well) are functioning and where there may be gaps. The Board agreed that enough time has lapsed for the systems to be operating correctly. The Board agreed to send a letter to NOAH requiring the raw water results, finished water results, and testing of effluent post treatment but prior to the leaching field. If the information is not provided the Board may decide to initiate a tight tank system until it is confident that the treatment of the wastewater is being done successfully. The Board requires the information two weeks prior to June 23rd in order to review and obtain any missing information. The Board asked for a list of attendees (representing each of the systems) and handouts prior to the meeting.

The tenants said they were very grateful to the Board for allowing them to speak their concerns. The Board said that they are always willing to hear about concerns that fall under the Board's purview. Residents should not hesitate to bring forward their complaints to any town body. The Board will do its best to keep tenants better informed on what it is doing to resolve the problems.

100 Long Ridge Road – Waivers

The Board received copies of the DEP letter on the Public Water Supply Determination, Nobis Engineering Phase II Technical Review, and memo from Witten & Horsley on nitrogen loading.

Lifetime Green Homes (LGH), the applicant, is asserting that DEP's Nitrogen Aggregation Guidelines do not apply since the project meets the 440 gpd/acre nitrogen equivalency and no credit land is required. LGH also disagrees with some of the modelling assumptions used by James Vernon of Nobis Engineering, the town's consultant. Nobis had been asked to redo the nitrogen loading calculations using the DEP rather than site specific model. Both reports showed an exceedance of the 10mg/L of nitrogen within the project. The latest report showed concentrations of 16.6mg/L and 11.8 mg/L southeast from the proposed septic disposal areas. DEP has a 10 mg/L maximum under its Groundwater Rule and the drinking water standard is 10 mg/L. Vernon's report explained that the data used for the calculations is far from complete but provides an estimate using the limited monitoring wells available. He also noted that these results are in the overburden since the model does not provide a method for calculating nitrate in bedrock. The Board had also received a written response from the DEP Drinking Water Program stating that the project as currently designed would be classified as a Public Water Supply but there is the possibility of having only private wells depending on legal ownership and control which will be provided in the condominium documents. This is the same statement given verbally to the Board last fall.

Risso said the Zoning Board is looking for comments from the Board as to whether it should grant the local waivers being requested by LGH.

Galligan said that in her engineering experience when many complex systems and their individual performance characteristics come together, the more likely the overall system is to fail because of unpredicted or unknowable interactions between systems. LGH is requesting a number of waivers from the protections that the Board has built in for large systems. This might work in certain situations but LGH has "shoe-horned in" two septic systems, and used every bit of land area to support the remaining infrastructure. There is no way to guarantee that these systems will function perfectly overtime. Furthermore the systems will be supporting over 100 people. If any system fails, it

will not be easy to fix and even routine maintenance will cause a significant impact to the population. She was not in favor granting the waivers.

Risso agreed with the exception of the waiver from the well setback to a property line. He might consider this depending on the specifics of the situation.

Margolies was also concerned about the density of the project since there is no room to make corrections if needed.

Storrs also felt that making any alterations to the septic system would be extremely difficult given the size of the parcel and number of housing units proposed. Wetlands might also be an issue.

Thorsen felt the Board could not comment because of incomplete data. There is no way for the Board to make any judgment on the percent of risk involved in granting the waivers because of the lack of information. He was not in favor of granting waivers.

Galligan spoke about the “chaos theory” which predicts that even small assumptions may have major impacts. LGH is not like the Benfield Development which had a lot more land area available to remediate downstream problems.

Storrs said the Nobis report clearly raised some areas of concern for the present project and the potential for nitrogen exceedances. Risso said this is why the Board set a 5 mg/L of nitrogen at the property boundary for large developments.

Risso said that since the system is greater than 2000 gpd, the additional safety mechanisms of a 150’ setback to a well and 165 gpd is important. The regulations should not be waived.

Great Brook Farms Septic Replacement – DEP issued a Certificate of Compliance for the system which will serve the ice cream stand and apartment building.

Mass Health Officer Association (MHOA) is offering a limited number of grants for summer interns. The Board agreed that its current intern, Stephanie Moore, should apply. The work will support the Lyme Disease Subcommittee and its work.

Executive Session – Risso advised the Board that it cannot go into Executive Session to discuss the character of a person unless it was a town employee. In such cases there are hearing requirements and due process to be followed. The Board agreed to look into other ways of dealing with a problem site in town. Risso suggested that Board members familiarize themselves with the procedures for calling an Executive Session.

There was no further business. Meeting voted to adjourn at 9:20 p.m.

Respectfully submitted,

Linda M. Fantasia
Recorder