

**Minutes of the Carlisle Board of Health  
February 27, 2007  
Approved March 20, 2007**

Present: Board Members Martha Bedrosian (Chairman), Michael Holland, Bill Risso, Leslie Cahill; Absent Jeffrey Brem; also present: Linda Fantasia (Agent); Rob Frado (Technical Consulting Group)

The meeting was called to order at 7:30 p.m. at the town hall.

**MINUTES** – It was moved (Bedrosian), seconded (Risso) and unanimously voted to approve the minutes as revised of 1/2/07, 1/16/07, 1/30/07. Minutes for 2/13 will be reviewed at the next meeting.

**DISCUSSION ITEMS**

Internet Policy – Fantasia informed the Board that the new policy applies to elected and appointed officials although only town employees are required to sign the policy.

Mold Complaint – has been resolved. The landlord replaced the affected wallboard, sanitized the area and repainted the surfaces. The tenant would like the Board to certify the remediation work. The Board agreed that if the tenant has any questions as to whether the problem has been addressed, he should hire a professional to do an assessment.

Garbage Grinder Labeling – Fantasia provided the Board with sample tags and wording. There was general discussion on whether there it is necessary to tag the plumbing lines that a garbage grinder cannot be installed. Either the Building Department or the Board of Health would need to attach the tag. Another option would be a deed restriction. There was no final decision.

Generator Information – Fantasia provided the Board with estimates. The generator would be purchased with MRC funds to run the pump in the well at the school. The Corey Building is the town's designated emergency dispensing site. There is no generator at the school, although there is one for the waste water treatment plan. The Building Inspector recommends a portable Honda. Costs range from \$1300 to \$5000 depending on accessories. An additional \$1000 would be needed to wire the panel. Fantasia said there is an LEPC meeting Friday. She will bring the suggestion to the committee.

Administrative Hours – Fantasia will prepare a draft memo and forward it to Bedrosian and Laurel Ostrom of the Personnel Board. The next PB meeting is 3/15/07.

Licensing and Permitting Fees – next meeting.

**PH 81 Craige Circle – replacement of a failed septic system. Local Waivers requested: 15.211 Distances – septic tank, pump chamber and SAS less than 100' to wetlands. Title 5: 15.405 Local Upgrade Approvals - Cellar wall to SAS less than 20'.**

Present for the hearing was Ben Ewing, SMI, Dan Rourke for the applicant, and Marcella Shepard, abutter. Green cards were returned.

Ewing said the proposed design was intended to replace a failed SAS. The design incorporates the Cultec Field Chambers which is an alternative technology and will reduce the overall height of the system. Both the front and rear yards were tested. Groundwater is extremely high in the back, so the system is being located in front of the house. The SAS, Tank and Pump Chamber will be 56, 31', and 26' respectively from wetlands. Under local regulations the required distance is 100'. The SAS will be 14' from the cellar wall (20' required). This is a local upgrade approval under Title 5. The original design submitted was for five bedrooms. The house actually has nine rooms so a revised design is being submitted. The distances to

wetlands have increased slightly with the revised plan which also addresses some minor technical issues. The applicant would like the Board to approve the waivers conditional upon a satisfactory review of the revised plan.

Shepard wanted to know how far the system would be from her well which is in her front yard and directly across the street. Ewing measured 105' between the two. The proposed system will result in a 3' mound. Drainage will be away from the house. There were no further questions.

It was moved (Bedrosian), seconded (Holland) and unanimously voted to close the public hearing.

It was moved (Cahill), seconded (Holland) and unanimously voted to approve the following waivers for 81 Craigie Circle: Carlisle Supplementary Sewage Disposal Regulations 15.211 Distances: SAS, Tank, Pump Chamber 56, 31, 26 feet from wetlands, (100 feet required) and Title 5 Local Upgrade Approval – distance to cellar wall 14 feet, (20feet required), conditional upon a satisfactory engineering review of the revised plan submitted 2/27/07 and Conservation Commission approval.

#### **CHESTNUT ESTATES – Definitive Subdivision Plan and Conservation Cluster.**

Present for the public meeting was Atty. Martha Howe, applicant Richard Howe, and engineer Peter Howe. Also present was David Freedman, Planning Board Chairman.

Atty Howe said the Planning Board is looking for a Board of Health recommendation on the two lot Definitive Subdivision. There was some question at the previous meeting on whether there was sufficient testing to make a determination on the Conservation Cluster. Howe said that the Planning Board only needs comments on the Subdivision plan, although they are reviewing both plans simultaneously. The applicant does not intend to build the two lot subdivision. A revised plan showing new lot lines for Lot 7 of the Conservation Cluster was submitted at the last meeting. The Board had asked Frado to review this plan and consult with the applicant's engineer on the testing results.

Frado told the Board that in general the soils are suitable for siting septic systems for the cluster. Additional testing will be needed to design individual systems. Freedman said the Planning Board is only interested in whether there is sufficient information for the Definitive Subdivision Plan. The Board understands that additional testing may be necessary. The 45-day comment period has already passed, but the hearing is still open before the Planning Board. Risso said there was a problem with some of the tests pits being too shallow. Whether this is actually bedrock will need to be verified for individual septic designs. The Board would not have a problem approving the two lot subdivision plan. Holland preferred considering both plans now since the data will not change and as long as everyone agrees that additional testing will be necessary in order for the Board to approve disposal system construction permits. Atty Howe had no problem with this.

It was moved (Holland), seconded (Cahill) and unanimously voted to advise the Planning Board that the Board of Health finds that there are suitable soils for siting soil absorptions systems as shown on plans entitled "Definitive Subdivision Plan for Chestnut Estates, 400 Rutland Street, prepared by Fay Spofford & Thorndike, dated November 2006" and "Conservation Cluster, Chestnut Estates, 400 Rutland Street, prepared by Fay, Spofford & Thorndike, revised 2/12/07" and that construction of the soil absorption systems must comply with Title 5 and local regulations.

#### **DISCUSSION ITEMS (continued)**

Microsoft Access Training – a course is being offered to town employees. The Board agreed that if deAlderete wants to attend, the hours will be counted as her work week compensation.

Personal Time Off (PTO) – the proposal is to give part time employees less than 20 hrs/wk prorated time off up to seven work days/year. Comments are due to the town administrator by 3/9/07. The time off would be covered from the existing budget. The cost for BOH is approximately \$469. This would be a reduction in

work time rather than additional expense. Time cannot accrue past one year. The purpose is to help offset loss of pay for holidays and/or sick days. It would be at the approval of the department head. Employees working less than 20 hrs/wk receive no prorated benefit under the current policies.

Ferns Country Store – an unannounced inspection was conducted 2/27/07 by Gabi White (CHD), Fantasia and Risso. There were no critical violations. Refrigeration units were working properly. Non-critical issues to be addressed include regular cleaning, posted schedules and employee training. It was evident that floors, counters, and equipment were not being cleaned on a regular basis. There was significant build up of dirt and debris. A re-inspection is scheduled for 3/5/07. Larry Bearfield was present and agreed to give the facility a thorough cleaning and set up a schedule. He will also provide the Board with a copy of his employee training manual. Fantasia showed the Board a cleaning schedule developed for the Daisy's Market. A copy will be forwarded to Ferns. The important thing is to have the person in charge checking that the tasks are being done. The Board agreed that if the cleaning problems are not resolved by the next inspection, they would ask Bearfield to the 3/20/07 meeting.

**COVENTRY WOODS** – the Board was asked by the ZBA to comment on a proposed scope of work for a hydrologic study of septic system "C". Present in the audience were David Freedman (Planning Board) and abutters Michael Epstein, Ken Hoffman, Heidi Kummer, and Alex and Joan Parker and Scott Horsley of Horsley and Witten

Freedman explained that special counsel Dan Hill on his own initiative developed the scope of work in attempt to re-open discussion with the developer, Mark O'Hagan. On 1/29/07, O'Hagan's attorney declared the ZBA hearing closed and stated that his client would seek a decision from the Housing Appeals Court (HAC) following the 40-day waiting period. (3/10 or 3/12). Epstein said that the proposed scope of work was edited by Scott Horsley, his engineering consultant. Both versions were available to the Board.

Freedman said that there is general agreement on the first three points, but disagreement on Section III B which deals with nitrogen limits at the property boundary and whether this should be 10 mg/L or 5 mg/L, and Section IV which deals with virus and pathogen transport. The Board noted that its memorandum to ZBA dated 1/27/07 recommended modeling for Drinking Water Standards at the property line. The Board also recommended that total fecal coliform and viruses should be "0". The abutters are seeking a 5 mg/L limit for nitrogen in order to safeguard nearby private wells.

Holland said he supports further consideration of the impacts of septic system C. This is a very large system, close to the property line. Title 5 presumes that full compliance results in no harm but since the development is a comprehensive B permit with considerable density it would be prudent for the Board to look more closely at potential impacts across the property line. If the disposal system were a waste water treatment system, there would be a 5mg/L nitrogen in a Zone II and 10 mg/L outside the Zone II. Given the size and proximity of SAS "C", it is appropriate to evaluate nitrogen at the property line. Holland is inclined to see if 5 mg/L can be achieved. This might involve additional treatment prior to the disposal bed similar to the DEP guidelines in order to achieve 5 mg/L. The proposed "Hantush" methodology is a two dimensional model. If this design were before the Board of health, Holland would want to see a three dimensional model. The Hantush method is suitable for flat grades. The siting of SAS "C" involves a steep gradient. Holland recommends that the Board reaffirm its position previously stated on 1/26/07 and that it take no position on the proposed scope of work which was prepared for political rather than engineering reasons.

Risso said the Board should decide whether to ask for 5 or 10 mg/L as the limit allowed at the property line. There is disagreement on which models to use. Holland said the only way to calculate nitrogen is through computer modeling. It will be many years before actual testing can be done. Bedrosian was concerned that by allowing an upper limit of 10 mg/L in a computer model, there could be an event causing 10.1 mg/L which would not meet the standard. Although the applicant argues that there is no accepted standard for viruses and pathogens, there does not need to be one if the requirement is "0". The Board favored following DEP's guidance for a Zone II of 5 mg/L.

Horlsey explained that there have been numerous studies on nitrogen loading and pathogen transport which have a high degree of confidence. Following the 1981 Cape Cod study, many towns adopted a limit of 5 mg/L and this standard was included by DEP in its guidelines in 1990. This limit is also used as a planning standard. Since modeling alone can not guarantee that results will never exceed the threshold, it is in keeping with local interest to use the 5 mg/L standard. (Bedrosian suggested that the Board consider this standard for high density developments when it revised the local regulations.) Parker also noted the uncertainty of modeling and that many of the test pits were not 10' deep due to refusal. The presence of bedrock could also affect groundwater flow results. Freedman verified that the applicant only intends to use the existing test pit data.

The Board agreed to stay with its original recommendations but with the following additional ones: (1) nitrogen limits at the downgradient property line should be 5 mg/L or less; (2) the Hantush methodology is not acceptable and a three-dimensional model should be required; (3) although the Board has not done an exhaustive review of the existing test pit data, from the data available it appears unlikely that it will be sufficient to do modeling.

Freedman then asked if the Board would be willing to comment on the density since that is what is driving the design of the disposal systems. He asked if the Board had a number of units that it feels would be more appropriate to the site and would the Board offer this to the ZBA as an alternative? Board members were unanimous that it was not their intention to redesign the development. Holland said that it is not certain that density is a problem; only that SAS "C" is a problem due to size and proximity to property line. Freedman said that the density also drives the wells and locations. Holland said that if connectivity among the wells is a problem, the developer will have to deal with it. Cahill agreed that it is not the role of the Board of Health to redesign the project. Freedman suggested that advisory boards need to step beyond traditional roles since this is not a traditional development. He thinks it would be appropriate for the Board to suggest alternatives; for example setting a limit to the number of units in order to reduce impacts of the infrastructures. Bedrosian said this does happen in other towns. Holland again stated that his only concern is that he does not have confidence in SAS "C"; it is not clear that it will not work. If the ZBA wants to consider alternatives, they should talk with their consultant.

Epstein asked the Board to consider John Witten's recommendation that the Board reconsider its position on granting the waiver from the 5000 GPD limitation on wastewater flows. It is unrealistic for the Board to make this decision without a pre-permit analysis. Any alteration of this disposal site could be significant to the project. Holland did not see the need to change the decision. Title 5 allows for systems up to 10,000 GPD to be designed. Horsley suggested that local interest as identified in the Board's regulations justifies this action. It is clear that public health – particularly protection of groundwater – is a critical interest. Freedman noted that ZBA is not required to waive local regulations unless the regulation proves uneconomic for the project and does not protect a local interest. Cahill was in favor of rescinding the vote unless the testing is done pre-permit. Epstein said the Board of Health has been presented with new information, additional concerns, and more data. This is sufficient reason for the Board to reconsider its position. Horsley said that it is the burden of the applicant requesting the waiver to prove that the action provides equal protection prior to granting the waiver, not after. The waiver can only be decided based on testing and results. Kummer said it would not be arbitrary for the Board to reconsider. Based on the new information, the Board needs to consider impacts to public health, which has been its intention all along. The Board has asked for this information on a number of occasions, but it has not been submitted by the applicant. The same is true for the Board's request about alternative technology. The applicant delayed looking into it. (Holland left the meeting).

The Board then made the following findings:

- (1) Subsequent to the Board's vote on 12/13/06 on the waivers requested by the applicant, additional information was presented by expert witnesses on 1/16/07 relative to the impacts of SAS "C";
- (2) An email submitted to the ZBA on 2/25/07 from special counsel Andrew Kreiger states that the applicant does not agree to conduct pre-permit modeling

(3) And that the same email advises that applicant does not agree to conduct any additional soil testing which might be necessary for modeling.

Based on the above findings, the three remaining members (Bedrosian, Cahill, Risso) voted as follows:

The Board of Health rescinds the position taken by the Board at its meeting of 12/13/06 agreeing to the waiver of the Board of Health Supplementary Regulations 15.290-15.293, Part 4, subject to the applicant conducting the pre-permit tests required by this Board in its memorandum dated 1/26/07 and as supplemented by a memorandum of this Board dated 3/1/07. Motion was seconded by Risso. Motion carried 3-0

There was no further business discussed. Meeting voted to adjourn at 10:15 p.m.

Respectfully submitted,

Linda Fantasia  
Recorder