

Acton Board of Health

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March 12, 2012

TOWN CLERK, ACTON

Members Present: Mark Conoby-Chairman, William R. Taylor, Joanne Bissetta,
Michael Kreuze and William McInnis

Staff Present: Doug Halley-Director of Acton Board of Health
Weiyuan Sun-Administration

Other Present: Tom Ryder, Stan Szczurko, Jay Billings and
Reid Blute

Location: Acton Library, Acton, MA 01720

The meeting was called to order at 7:36 p.m.

Minutes

On a motion made by Mr. Kreuze, seconded by McInnis, the Board unanimously voted to approve the Board of Health minutes dated February 27, 2012 as amended.

Pulte Home – Quail Ridge – Variance Request Continued

The developers of Quail Ridge, Mr. Blute and Mr. Billings presented and answered questions in detail from the last Board meeting of February 27th. The Board reviewed the plans, materials and the recommendations from Mr. Halley. The Health Department recommends granting the variance requests from Article 19 for a wastewater treatment system with the following conditions:

1. The applicant shall provide proposed Rules and Regulations for Wastewater Discharge for review and approval by the Health Department. The Health Department approved Rules and Regulations shall be incorporated into any lease or agreement pertaining to every unit.
2. The applicant shall be required to provide an annual financial report regarding the maintenance and operation of the wastewater treatment facility to the Board of Health.
3. The applicant shall be required to provide a security deposit that would be a source of funding for any immediate or short term repair of the treatment plant or the collection system.
4. The applicant shall provide a proposed Agreement for Daily Management Services from an appropriately licensed Wastewater Plant Operator.
5. The applicant shall provide a proposed Operation and Maintenance Manual detailing all aspects of the treatment facility and collection system.
6. The wastewater facility building may require a hazardous materials permit if there is storage of more than 25 pounds or 25 gallons of hazardous materials

or waste at the site. This requirement shall also be applied to any location on site which stores hazardous materials or waste.

7. The applicant shall provide back-up power for the operation of the wastewater system through all phases of the project.
8. The applicant/owner of the property shall annually provide documentation through the on-site monitoring wells that a 4' setback from estimated seasonal high groundwater is being provided at both wastewater discharge systems.

Phase I Conditions

The wastewater treatment process shall consist of primary treatment through the use of the existing and additional septic tanks. Construction of Phase I - Senior Housing Units shall be limited to a maximum design flow of 5,000 GPD until the final construction of the wastewater treatment facility.

1. Effluent tee filters shall be added to the septic tanks to provide a greater degree of removing Total suspended solids from the wastewater;
2. The 2,000 gallon septic tank at the Family Center and the 1,500 gallon septic tank at the Maintenance Facility shall remain as part of the primary treatment design;
3. The existing 17,000 Gallon Dosing Tank shall be converted to a Septic tank; wastewater from the proposed residential units shall discharge to this tank for primary treatment and mix with flow from the Family Center and the Maintenance Building's sanitary flow. Effluent from this tank shall flow by gravity into a proposed 5,000 gallon septic tank for additional primary treatment.
4. A 5,000 gallon Final Pump Chamber #1 shall be installed utilizing the existing pump arrangements to dose the existing leach trench system (located at the current Driving Range).

Final Construction of Treatment Process (Phase I B) Conditions

The wastewater treatment process shall consist of primary treatment through use of the existing and additional septic tanks from (phase I) followed by a flow equalization tank and then to a Smith and Loveless Titan Membrane Bioreactor system (MBR). The MBR shall provide tertiary treatment and consist of an aerobic and anoxic biological treatment process and membrane filtration system. Flow shall be re-circulated from the aeration section back to the anoxic section to promote denitrification while utilizing the influent waste as a carbon source minimizing need for outside carbon supply.

Effluent from treated wastewater

Parameter	Concentration
BOD	Less than 10 mg/l
TSS	Less than 10 mg/l
Total Nitrogen	Less than 10 mg/l
Fecal Coliform	ND

5. Effluent flow from the septic tanks shall be re-plumbed to discharge to a 20,000 gallon equalization tank system; effluent will be time dosed wastewater to a 9,600 gallon equalization compartment of the proposed Membrane Bioreactor unit.
6. Flow shall be pumped from the equalization compartment into a 13,300 gallon anoxic compartment and mix with returned wastewater from the aeration tank.
7. Overflow of the anoxic chamber shall discharge into a 12,600 gallon aeration compartment that includes flat plate membranes (0.08 micron). A return pump shall recycle wastewater from the aeration compartment back into the anoxic tank to mix with the influent wastewater. Effluent from the Aeration Compartment shall filter through the membrane on demand by gravity and discharges through a distribution box and into a 10,000 gallon Clearwater pump chamber or a 5,000 gallon final pump chambers for final disposal into the ground. Effluent directed to the 10,000 gallon Clearwater tank shall be dosed by demand to a final pump chamber #2 for drip dispersal near the existing parking lot.
8. The new leach fields shall be constructed adjacent to the existing parking lot to accommodate up to 27,500 GPD of flow. The existing leach trench soil absorption system at the driving range shall remain in place. The existing system design flow shall be for 7,500 GPD (SAS at the driving range).
9. The pumps for each pump chamber shall alternately discharge effluent to either the soil absorption system at the driving range or the soil absorption system adjacent to the parking lot for final disposal.
10. No hazardous or explosive chemicals shall be incorporated into the treatment system; Calcium Carbonate, Citric acid, Sodium Hypochlorite or Hydrogen peroxide, and Micro-c shall be stored in drums within the wastewater treatment building in compliance with the Town of Acton's Hazardous Waste Bylaw.
11. The Treatment system shall be located in an enclosed building. Odor shall be controlled through operational process and activated carbon filters on the building's ventilation system.
12. A telemetry system for the treatment process shall be provided. The system shall have a dial out process which shall alert the operator.

On a motion made by Mr. McInnis, and seconded by Mr. Taylor, the Board unanimously voted to grant the variances from Article 19 to the Quail Ridge Pulte Home.

Nursing Service Update

The Acton Public Health Nursing Service (APHNS) continues to maintain a focus on efficient care and providing superior service to residents. However, the APHNS has been significantly challenged by declined revenues, expenses, Medicare referrals, patient referrals, and home visits. Mr. Halley indicated that the APHNS financial difficulties will be addressed of Town Meeting. Currently, the future and transition of APHNS is unknown. It was mentioned; if APHNS closed, it would ultimately cost more to contract with a new health agency.

Acton 20-20-Informational Session

The Board asked that the Health Department reschedule this agenda item to the next Board meeting as they want ample time to discuss.

Adjournment

On a motion made by Mr. Kreuze and seconded by Mr. McInnis, the Board unanimously voted to adjourn the meeting at 8:52 p.m.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'W. Sun', written over a horizontal line.

Weiyuan Sun, Administrator
Acton Board of Health

A handwritten signature in black ink, appearing to read 'M. Conoby', written over a horizontal line.

Mark Conoby, Chairman
Acton Board of Health