

18 July 2005

To: Chatham County Planning Board
Re: Request by Sandy Pond Enterprises LLC
For a B-1 Conditional Use Permit
Fr: M. Travis and Margaret T. Blake
9668 Hwy 15-501
Chapel Hill, NC 27517
Adjacent Landowners

My family and I are strongly opposed to the granting of the conditional use permit as proposed by Sandy Pond Enterprises LLC. While the rezoning of the parcel from R-40 to B-1 may be appropriate, allowing a veterinary hospital and boarding kennel is out of harmony with the adjacent property uses and will have a dramatic detrimental effect on our property's value and deprive us of the ordinary use of our property.

In addition, the application contains inaccurate, incomplete, and misleading information. The following information is provided to the Planning Board; we request the Board closely review this information when considering Sandy Pond's application.

The information is provided by myself, M. Travis Blake, as adjacent landowner. I am President and Principal Investigator of Blake & Associates, Inc.'s environmental clients. Although I have a vested interest in this case, the Board is reminded of my qualifications. I have presented over 135 cases for rezoning and wastewater permitting in North Carolina, many here in Chatham County. I am an Environmental Engineer (MSPH), a fully accredited member of the American Industrial Hygiene Association, a developer, a licensed NC General Contractor, and a NC Landscape Contractor. I am recognized by the NC Department of Health, NC Department of Water Quality, and the US Army Corps of Engineers as an authority on conventional, zero discharge and artificial wetland onsite wastewater treatment systems.

Areas of Concern and Information for Consideration by the Board

1. The zoning regulations of Chatham County and most other counties and municipalities do not allow boarding kennels in B-1 and residential districts because these facilities have a history and potential for being a nuisance to adjacent businesses and property owners. This is the primary reason a Conditional Use Permit is required for the placement of a facility as proposed by Sandy Pond Enterprises, so the application can be scrutinized as to whether or not the proposed facility is compatible with surrounding uses. Similar facilities have been routinely allowed in agriculture districts and in B-1 and industrial settings, but only where the facility is planned for by using increased setbacks and modified construction practices for the purposes of attenuating attenuate sound, visual, and odor problems and additionally ensuring adequate security similar to adjacent usages.
2. The statement of need and demographic information provided in a zoning application depends on projections, assumptions and the quality of research. The following, which

are are presenting, is based on information from the US Census Bureau, Chatham County Yellow Pages, and business interviews. The conclusions of Sandy Pond are questionable.

- a. The information on existing practices and their potential for growth is inaccurate.
 - b. The applicant's demographics DO NOT include mention of the following veterinarians serving the area within the five-mile radius:
 1. Dr. Adriano Betton, Mobile Small Animal Veterinarian.
 2. Dr. Elaine Gregg, Horsefeathers Mobile Veterinary Service (65% small animal).
 3. Village Veterinary Hospital, Mt. Carmel Church Rd. (across from Governor's Club); one veterinarian practice scheduled to open August 2005.
3. The statement that the facility will not have a detrimental impact on surrounding property owners is also challenged. (Finding #3)
- a. The proposed facility will require a security alarm system to protect the storing of controlled substances and the escape of animals. Besides the real possibility of actual intrusions and escapes, there are always false alarms. The silent and exterior alarm system would be an additional nuisance to current adjoining property owners and increase the patrol and manpower needed to police this facility.
 - i. Alarm systems for these facilities are not the usual residential systems. They are usually controlled by sophisticated motion- and noise-detectors which are prone to false alarms and are designed to be extremely loud to scare away vandals and thieves.
 - ii. We are concerned that this facility will necessitate an objectionable amount of security lighting as exists in and is required for similar facilities. Again, we object to this additional taking of our ordinary use of our property.
 - iii. The subject property is located in the path of traditional deer crossing of 15-510. At least for some unknown period of time the deer will be setting off the exterior light motion detectors.
 - iv. These facilities are best located in areas containing businesses with similar security concerns, not in the middle of a quiet rural area.
 - v. From information gathered, there seems to be no 100% escape-proof cages. This is additional source of the activation of middle-of-the night alarms from these facilities.
 - vi. The presence of this facility may also increase the risk of criminal activity in the immediate area affecting the health, safety and welfare of the immediate community.
 - b. Given the size of the proposed facility (a proposed employment of 16 people and facilities of almost 10,000 SF), the vehicular traffic at the intersection of Vickers Road and 15-501 will have a definite effect on the residents of Vickers Road and MacGregor Woods, and -- until any improvement by Briar Chapel of Hubert Herndon Road takes place -- the residents of Herndon Woods will also be affected.

- i. The facility will probably serve over 100 clients per day. Details should be provided by the applicant verifying that this translates to 100 cars more or less per day.
 - c. The Board should be aware that there are at least two early-morning and afternoon school buses that use Vickers Road and Hubert Herndon Road to pick up and drop off school children. Veterinary facilities typically open early to allow drop-off of pets for treatment and grooming; clients will be returning for pick-up of pets during the same time as the buses return to drop off children. The congestion at these locations and these times especially without traffic controls may be an undesirable risk to these children.
 - d. The landscape plan as drawn would require the removal of very large trees on the property line with our property and replace them with small shrubs; this is entirely unnecessary. In addition, the existing vegetative barrier is in what may be a 50' stream setback. Regardless, if the facility is approved in any form we would request a 50' setback from the property line and that the wetland and vegetation in this area be protected.
4. The facility as proposed will create a noise nuisance. The applicant proposes what seems to be a number of unattended play areas. This will be an objectionable source of daytime noise and if the animals are left out for any reason, this activity will create additional problems at night.
- a. The architectural specifications are not provided, only what can be done or may be done during construction. Other communities with noise nuisances from dog kennels have taken an approach that if dogs can be heard outside the building at 20' and 50' measured with decibel meters by a police officer (permitted levels vary) the facility is a nuisance.
 - b. If the facility is permitted as proposed there is the potential for multiple complaints that must be addressed by local law enforcement personnel that surely have better things to do than to answer noise complaints.
 - c. The topography of this site is in what can best be described as a "hollow." If noise is a problem, it will primarily affect our residence, but at certain levels will affect anyone living in the hollow, which includes residents of Herndon Woods and portions of Briar Chapel.
 - d. The landscape plan as specified will allow more noise and visual objections from our property than the existing vegetation, not less.
 - i. Plants have little effect on noise attenuation.
5. Veterinary hospitals, clinics, and dog kennels use a number of controlled substances, chemicals, and biological products. In addition, they generate a number of biological hazards that if allowed to enter the watershed area will contaminate streams and water supplies.
- a. The applicant has provided a summary of how some of these substances will be handled. The plumbing plans for many veterinary clinics I have reviewed show a floor drain in a number of the rooms. This drain is designed to lead to the wastewater treatment system, but may easily be directed to discharge with the building drainage system either by design or error.

- i. The applicant has indicated they plan to have “pet water playtime in a kiddie pool.” Where will this water go?
 - b. Some counties and municipalities have required an approved facility to agree not to perform x-rays or use any other radioactive medical procedures to avoid environmental release of radioactive materials. There is a distinction made in the attached letter from NC Department of Environmental Health between facilities with x-rays and without. There are additional requirements for facilities with x-rays, but the regulations do not address the use of other radioactive agents used in a veterinary practice, such as the treatment of hypothyroid cats with radioactive drugs.
 - c. Much of the lower area is a wetland. As such an area it is also an aquifer recharge area. The soil report did not characterize this area, but it is possible there is a chance for aquifer contamination from chemical, radioactive and biological discharges from the facility.
6. Although the area on the subject property from 15-501 to the existing pond is not on the USGS maps as being a wetland, much of this lower area is indeed a wetland as defined by the USGS; it is also flow retention area and aquifer recharge area. The soil report clearly states that a stream may form once the pond is breached. The investigator for the applicant was therefore aware of the wetland type conditions below the pond on the subject property. The 50 foot setback alluded to by the soil scientist will have to continue along the property line requiring a 50 foot setback from this stream. (See attached Document B Mark-up.)
- a. Applicant states that the drainage plan will control 1/2” of runoff. Without time to properly study the drainage I can only use observation and experience to predict the runoff potential. I estimate that the storm water plan will need to accommodate 6” to 12” of runoff not 1/2”. In addition, only a minor obstruction of the culvert under 15-501 will cause the water in the lower elevations to rise 18” or more. During severe winter storms this area can be under 3 or more feet of water. There is no acknowledgement of this factor; we suspect because the applicant did not allow time for a competent hydrological flow study which needs to be done before considering the site for construction.
7. The wastewater calculations are inaccurate. The attached letter from the NC Department of Environmental Health outlines the design criteria for dog kennels and veterinary clinics. Based on the information provided by the applicant the true wastewater design load for Phase A is 1,595 GPD (Phase B will require an additional 860 to 900 GPD), not the 600-800 GPD stated in the application as the capacity needed and the treatment capacity of the available soil. The soil report’s stated available capacity has a number of notations by the soil scientist that the capacity may not be available for various reasons (e.g. “pond may need to be breached (drained),” “treatment area has not been verified”).
- a. Once the application to Chatham County is rejected for lack of suitable soil, the applicant plans to submit a wastewater design to the NC Department of Water Quality (NCDWQ) to permit a drip wastewater treatment system.
 - b. The submission to the NCDWQ will also ask for a reduction in flow based on other similar facilities. The attached design criteria are based on the fact that

veterinary clinics and dog kennels produce industrial-type waste. Flow rates for a facility on a municipal or community system do not translate to an exotic onsite wastewater system.

- c. According to the application Phase B will require an additional 860 to 900 GPD.
 - d. No information was given as to the number of employees between Phase A and B so all employees were assigned to Phase A in this document.
8. We would hope the Board realizes that the letter with “neighborhood signatures” provided by the applicant, as coming from neighbors is not for this site. None of the people who signed this application are from adjoining properties and there is no indication that they know their names are being used for a different site. As is much of this application it seems to be an effort to re-use existing information from a failed endeavor and adapt it to the current subject property. This would explain a number of errors and omissions.

Conclusion

I received the notification letter on July the 12th 2005 upon returning from vacation, giving me less than a week to respond. It is normal for me to include more supporting citations than have been provided in this document. At the Board’s request, I will provide any supporting information required in a timely manner.

That said, I have consulted past zoning cases I have preformed for similar facilities. Veterinary hospitals/clinics and well-managed dog kennels are very much needed facilities. However, this applicant has failed to take the time to understand the property on which they plan to locate their facility and have made numerous errors and omissions in documenting their request to the Chatham County Planning Board. The subject property is not suited for this facility and there are a number locations nearby that are well suited for such a facility if the applicants are willing to take the financial risk.

If the Board finds that Sandy Pond LLC may locate on the subject property, we ask that all the information in this document be considered so that appropriate conditions are attached concerning the size, use and operation of any approved facility.

Respectfully submitted,

M. Travis Blake

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State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Environmental Health

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary

April 26, 1996



MEMORANDUM

TO: Environmental Health Supervisors

THROUGH: Local Health Directors

FROM: Linda C. Sewall, Director

SUBJECT: Permitting of Certain Facilities Generating Industrial Process Wastewater

The On-Site Wastewater Section has determined, based on wastewater characteristics, that the industrial process wastewater generated by certain facilities is comparable to the wastewater generated by facilities which are considered to generate sewage, including restaurants, meat markets, and beauty shops. These include:

1. Dog Kennels and/or Veterinary Clinics **without X-Ray Facilities**
2. Medical Offices **without X-Ray Facilities**
3. Coin-operated Laundromats **without Dry Cleaning Facilities**

For these facilities, the On-Site Wastewater Section shall consider plans and specifications for subsurface wastewater systems to be approved without further State review if the local health department's authorized agent determines that the following criteria have been met:

1. An application is made and the local health department determines compliance with applicable sewage rules (15A NCAC 18A. 1900 et. seq.).
2. The attached criteria for each of the above facilities describing flow rates and special design and management considerations are adhered to.
3. The requirements for the system design to be prepared by a registered professional engineer, and for State review of plans and specifications shall be in accordance with 15A NCAC 18A.1938(d) and .1938(e), respectively. **This includes the requirement for further State review and approval of plans and specifications for all systems serving a design unit with a design flow greater than 3000 gallons per day. This requirement shall also apply whenever the attached criteria are proposed not to be followed.**

On-Site Wastewater Section

P.O Box 27687, Raleigh, Nodh Carolina 27611-7687 Telephone 919-733-2895 FAX 919-715-3227 An Equal Opportunity Affirmative
Action Employer 50% recycled/ 10% post-consumer paper

It is also recognized that other industries that do not fit within the specific categories listed above may also generate wastewaters with pollutant strengths which are lower than or equal to sewage, and do not require specialized pretreatment equipment. Upon the request of the Local Health Department, the On-Site Wastewater Section will review on a case-by-case basis the proposed wastewater of any such industry and inform the Local Health Department in writing whenever further State review and approval of system plans and specifications is not required.

Note that for other industrial facilities such as vehicle washes, funeral homes, slaughterhouses, photo processors, printers, and any other facility producing wastewater other than sewage not specifically described above, subsurface wastewater system plans and specifications shall be submitted to the On-Site Wastewater Section for review and approval prior to permitting or construction authorization by the local health departments.

Training on these criteria will be provided during the ongoing Advanced Systems Workshops. If you have any questions or comments concerning the approval and permitting of industrial facilities, please contact Joe Pearce by telephone at (919)715-3270, by facsimile correspondence at (919)715-3227, or by Internet E-mail at <joe.pearce@ncmail.net >.

Cc: On-Site Wastewater Section
Sewage Program Mailing List
Consultant's Mailing List

**INDUSTRIAL PROCESS SUBSURFACE WASTEWATER SYSTEM
DESIGN CRITERIA FOR
DOG KENNELS AND/OR VET CLINICS WITHOUT X-RAY FACILITIES***

1. Flow shall be determined as follows:

Dog Kennel Only:

10 gpd per dog or per run, whichever is greater, plus 25 gpd per employee.

Vet Clinic Only:

150 gpd/1000 sq. ft. of clinic area plus 25 gpd per employee.

Vet Clinic and Dog Kennel:

150 gpd/1000 sq. ft. of clinic area plus 25 gpd per employee plus 10 gpd per dog boarded.

2. Screens to catch hair and other solids shall be provided at the floor drains or, if a trench system is used, at the inlet to the collection pipe
3. Rain water must be prevented from entering the wastewater subsurface system.
4. Two state-approved septic tanks, with access openings extended to finished grade shall be installed in series. The capacity of each tank shall be sufficient to handle the total flow and shall be determined in accordance with 15A NCAC 18A. 1952(b).
5. The first septic tank shall receive only process wastewater generated at the dog kennels (no toilet wastewater). The second septic tank shall receive effluent from the first tank, in addition to sewage, if any.
6. The effluent end of the first septic tank shall be fitted with a filter capable of filtering animal hair. The second septic tank shall have an effluent filter or a standard effluent sanitary, tee.
7. Graveless nitrification trench systems [. 1956(3)(a)] shall not be used.
8. Approved chamber trench systems and polystyrene trench systems [15A NCAC 18A .1969 (3)], may be used. The design (equivalent) trench width and equivalency factor shall not exceed the excavated trench width (no reduction in area from comparable conventional trench system shall be permitted).
9. For low pressure pipe systems [. 1957(a)] the long-term acceptance rate shall not exceed the mean rate for the applicable soil group.
10. Operation and Maintenance procedures shall be agreed upon by the owners and made conditions of the operation permit, including:
 - a. The provisions of 15A NCAC 18A. 1961 shall be met.
 - b. Soaps, shampoos, and other cleaning agents shall be biodegradable. Synthetic pesticides and insecticides (e.g. those used in the treatment for ticks) shall not be discharged in the system.

**DESIGN CRITERIA FOR
DOG KENNELS AND/OR VET CLINICS WITHOUT X-RAY FACILITIES*
(CONTINUED)**

- c. A Material Safety Data Sheet of each chemical used at the facility shall be provided to the health department.
- d. Disinfectants shall not be used during washdown. Cages and runs may be disinfected manually without rinsing.
- e. Hoses shall be fitted with pressure spray devices to control flow and minimize water loss.
- f. Solids deposited in the runs shall be raked or otherwise prevented from entering the subsurface system.
- g. The hair filter in the first septic tank shall be cleaned weekly.

***NOTE FOR DOG KENNELS AND/OR VET CLINICS WITH X-RAY FACILITIES:**

- I. Wastewater System Plans and specifications shall be prepared by a professional engineer and approved by the On-Site Wastewater Section.
- II. All criteria for Dog Kennels and/or Vet Clinics without X-Ray facilities shall also be met.
- III. Spent fixer and developer solutions shall be handled off-site by a specialized hazardous waste hauler. No virgin or spent fixer and developer solutions shall be discharged into the subsurface system.
- IV. Rinse bath wastewater only may be discharged after treatment by a silver recovery unit. Silver recovery unit plans and specifications including treatment capacities, and predicted discharge silver concentration must be provided. Maintenance procedures shall include the replacement or replenishment of the silver recovery unit at 50 percent utilization, and the requirement to maintain a contract for unit service. Operational controls required may include periodic sampling of the effluent and of the groundwater for Total Silver concentration.