VIRGINIA:

BEFORE THE STATE HEALTH DEPARTMENT
SEWAGE HANDLING AND DISPOSAL
APPEAL REVIEW BOARD

IN RE: MR. DEAN PENCE

Mr. Pence appeals the Health Department's denial of his application for an onsite sewage disposal permit for a three bedroom house on property he and his wife own at Tax Map 069A-66A-2, South of Edinburg in Shenandoah County.

The property is a long, narrow parcel, variously described as six or eight acres, running between Interstate 81 on the east and Va. Route 686 on the west. Department Exhibit 15 gives a reasonable, but not to scale, portrait of the lot.

The complicated history of this proceeding is set out in the Health Department's proposed findings of fact. The salient events are:

- In 1992, the Department issued a permit for a site at the southern end of the parcel. While that application was in process, Mr. Pence applied for another site, near the middle of the parcel.

- The Department denied the application, and denied an amended application. The two locations are shown as "Site 1" and "Site 2" on Exhibit 15. Mr. Pence then informally amended again, after the informal hearing and while the matter was pending before this Board, to seek approval of a third site, somewhat south and west of Site 1.

- Mr. Pence's expert, Mr. Swecker, conducted four percolation tests at the third site. These tests appear to indicate an acceptable rate.

- The Department's expert, Mr. Cobb, conducted a soils evaluation at four backhoe pits, adjacent to Mr. Swecker's test holes. Mr. Cobb concluded that the site does not meet the requirements of the Sewage Handling and Disposal Regulations (the "Regulations") in four respects other than percolation rate.

- The matter then came to this Board on appeal for hearing as to the third site, without a formal denial by the Department.

Mr. Pence appeals only as to the third site, where he offers two theories.

First, he suggests that the percolation data show that the soils are suitable. Second, he requests a conditional permit to allow him to use the proposed drainfield, with a requirement that, in the event the system does not perform properly, he construct a new drainfield in the site approved earlier.

Suitability of the Proposed Site

Mr. Cobb finds the third site inadequate in four respects: Presence of fill, location in the landscape, presence of structure, and wetness features in the soil indicating a seasonal water table. He concludes that these soils are a "basket case" for treating sewage.

Mr. Pence points out that the fill is shallow in most places, and the Regulations only prohibit placing the drainfield "in fill," not beneath it. Regulations § 3.3.D. Yet the fill is 18" deep at Mr. Cobb's hole No. 1, the same as the required trench depth. *Compare* Department Exhibit 18 with Regulations § 4.30.C.1. Mr. Cobb points out that the prohibition on installation in fill would require deeper trenches, which would move the drainfield farther into the unsuitable soils below and into the water table.

Mr. Pence's witnesses all deny that the surface features establish a drainage way "subject to intermittent flooding." Regulations § 3.3.C. Mr. Cobb replies that the intent of the Regulations is to avoid subsurface "flooding," and that the surface and soils features all are consonant with a finger of drainage way extending from the small valley to the south into the western side of the third site.

Mr. Cobb testifies to the presence of a fragipan and other restrictive horizons in the soils, and well as soil conditions indicating a seasonally perched water table or periodic groundwater saturation. Regulations § 4.30.A.2 requires a twelve inch separation between the bottom of the trench (eighteen inches minimum, § 4.30.C.1; more where fill is present, § 3.3.D) and restrictive horizons; for soils of the permeability shown by Mr. Swecker's measurements, § 4.30.A.3 also requires a twelve inch separation between the trench bottom and any seasonal water table.

Mr. Pence does not directly contradict Mr. Cobb's testimony regarding impervious strata and a water table, both substantially shallower than thirty inches. He suggests instead that Mr. Cobb is "wrong" about fill and the drainage way, and that this taints his other testimony. Mr. Pence further suggests that the percolation test results, taken during very wet weather, establish that the soils are, in fact, suitable.

In light of Mr. Cobb's obvious expertise and the corroborating evidence

(including the photographs of the backhoe pits, and the percolation data that confirm Mr. Cobb's estimate of percolation rate on Site 1), and the absence of any physical evidence to the contrary, the Board readily concludes that this site fails to meet the requirements of the regulations as to depth to water table and to impervious strata. *See* Table 4.4 of the Regulations.

The percolation data indicate that the soils at the depth of the test are not so impermeable as to make treatment of sewage impossible. Yet, impermeability of soils was not one of the reasons for rejecting this site. These percolation rates do not impair the conclusion, otherwise compelled by Mr. Cobb's data, that soil restrictions and other features will cause ponding and a seasonal water table.

Mr. Pence's argument reflects a popular misconception that if a soil "percs," it must be suitable for sewage disposal. Even thirty inches of good, permeable soil are not sufficient if the minimum depth to water table is too shallow to allow proper treatment of the effluent. Stated simply, "[w]here a seasonal water table is present, a satisfactory percolation rate does not make the soils satisfactory." *In Re Paul C. Fravel* (February 27, 1989). Moreover, in the present case, the percolation data only go down to twenty-four inches, and provide no information about the permeability of the next, crucial six inches of soil.

Mr. Pence further suggests that Mr. Cobb's conclusions are merely "educated guesses," based on judgment rather than objective measurements such as percolation rates. Mr. Cobb's expert judgments, based on data such as soil colors and textures, are no more guesses than the decisions of a master vintner, evaluating a wine from aroma and taste. Or course, a soil scientist can reach an incorrect conclusion based on his observations, just as a vintner, a doctor, or a judge might, but this is not to say that soil science, oenology, medicine, and law are founded on guesswork.

One way to illuminate any doubts Mr. Pence might harbor about Mr. Cobb's conclusions would be to subject those conclusions to review by another expert. Unaccountably, Mr. Pence's expert neither reported his own observations of the backhoe pits nor evaluated the data Mr. Cobb reported.

Finally, Mr. Pence suggests that the location of the property between two highways would prevent any threat to the public health. That narrow view overlooks the threat to Mr. Pence's son and his family (and the inevitable successors) who would occupy the house, as well as their visitors. It also overlooks the threat to groundwater, which is the source of drinking water for this and countless other lots in Shenandoah County, and the possibility of spread of effluent from a failed system by insects, pets, and children.

Mr. Pence is focused, of course, upon the free and convenient use of his property. This Board must look toward a broader interest. To allow installation of a system in these soils would do more than overlook the best science available to the Board: It would subvert the duty of the Board of Health to "supervise and control the safe and sanitary treatment and disposal of sewage as they affect the public health and welfare." Code § 32.1-164.

Department Exhibit 12 states the Health Commissioner's position regarding the dangers of inappropriate treatment of human excrement. If anything, that exhibit understates the importance of the matter. As Dr. John M. Last stated in the first chapter of his treatise on *Public Health and Human Ecology*,

> The nineteenth century sanitary revolution was probably the most significant step ever taken by an organized society to enhance health. The sanitary disposal of excreta and the provision of pure piped water removed deadly dangers to health of weanling and older children and others in every age who previously died in huge numbers from all forms of gastrointestinal infections.

"In a matter of this overwhelming public importance, the Board could not grant [the appellant's] appeal without embracing a return to the eighteenth century." *In re H.L. Hudgins* (February 9, 1989).

The Board concludes that Mr. Pence's third site fails to meet the requirements of the Regulations. The Board overrules the appeal.

Conditional Permit

In the alternative, Mr. Pence asks the Board for a conditional permit under § 2.13.J of the Regulations.

This Board hears appeals of denials of onsite sewage disposal system permits. Code § 32.1-166.6. There is no record of Mr. Pence seeking a conditional permit from the Department and, thus, no record of the denial of any such permit. The Board lacks the jurisdiction to issue such a permit in the first instance.

Moreover, Mr. Pence actually seems to seek an experimental permit: He requests a permit from year to year to discharge to the proposed drainfield, with a condition requiring that he use the approved site at the south end of the property if the proposed drainfield were to fail.

The most important problem with the third site is the seasonal water table. Section 2.13.J of the Regulations authorizes a conditional permit that authorizes seasonal use of a dwelling "when the period of septic tank use conicides with the period when the groundwater table . . . is at its lowest level."

Mr. Pence's request is not directed at the seasonal water table. Mr. Pence instead seems to seek a permit for a year 'round experimental system, with a fallback system to be used if the experiment fails. *See* Regulations § 2.25.A.2.

In either event, the Board does not issue permits in the first instance; it hears appeals. If Mr. Pence believes that his situation would qualify either for a conditional or an experimental permit, he should seek an initial decision from the Department on an application for that permit.

Remarks by the Board

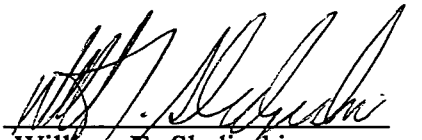
Aside from the merits of this appeal, the Board would make one recommendation pursuant to Code § 32.1-166.9. As the Regulations are written, percolation tests must be performed under the Department's supervision. Regulations § 3.5.C.2.a. Yet, in the present case and otherwise where the Department believes that a site is unsuitable for reasons other than the percolation rate, the Department has refused to provide that supervision. The Department must supervise the test if it is to recognize the percolation data, but it refuses to supervise the test. In light of the general perception that a "perc" test is dispositive, this leaves an impression that the Department is acting unfairly. The Department compounds that perception where, as in the present case, it refuses to supervise the testing and then attacks the percolation data on the ground that it did not supervise the testing.

What the Regulations now make clear to the expert should be made manifest to the World: The percolation test is dispositive only when the soils otherwise are suitable and the only issue is permeability; where the soils are unsuitable for reasons other than permeability, performing a percolation test is a useless expense. The Board recommends that the Board of Health consider amending the Regulations in this respect.

The Board further suggests that the Department prevent any future appeals from arising in the same peculiar posture of the present case. After the Pence matter was on this Board's docket, Mr. Swecker's percolation data on Site 2 led Mr. Pence to obtain further data on the third site. There was no basis for an appeal on the third site because there had been no application for a permit on the third site, much less a denial.

At that point, the Department suggested a continuance, and asked Mr. Cobb to evaluate the third site. The Department then allowed the matter to be brought forward *as an appeal*, without any prior evaluation of the site by the Department itself and without the informal conference required by the Regulations. This procedure had the unfortunate consequence of having the Department's consultant perform the work of an environmental specialist, and of bringing the appeal forward without the review and error correction process of the informal conference. The Board suggests that much of the confusion and, perhaps, some of the appellant's hard feelings could have been eliminated if the Department had refused to shortcut the required procedures.

Mr. Pence may initiate a judicial appeal of this decision by filing a notice of appeal with the Board's Secretary, Ms. Constance Talbert, Office of Environmental Health Services, 1500 East Main Street, Richmond, Virginia 23219, within thirty-three days of the date of mailing of this order to him. Other requirements for perfecting an appeal are set out in Part 2A of the Rules of the Supreme Court of Virginia and in the Administrative Process Act.



William F. Sledjeski,
Chairman

Dated: September 3, 1993.

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