

**REPORT OF THE  
JOINT SUBCOMMITTEE STUDYING**

**The Laws of the Commonwealth  
Related to Sewage Handling  
as these Laws Interact  
With the Board of Health's  
Sewage Handling and  
Disposal Regulations**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



**Senate Document No. 27**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
1987**

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Report of the  
Joint Subcommittee Studying the  
Sewage Handling and Disposal Laws and Regulations  
To  
The Governor and the General Assembly of Virginia  
Richmond, Virginia  
January, 1987

To: The Honorable Gerald L. Baliles, Governor of Virginia,  
and  
The General Assembly of Virginia

I. HISTORY OF THE STUDY

The first report of the Joint Subcommittee was published as Senate Document 25 in March, 1986. In the 1986 report, the Committee recommended:

1. That local governments and private businesses be provided incentives for constructing approved disposal sites through access to the funding mechanism of the Virginia Resources Authority.

2. That land spreading of lime-stabilized septage and the allow injection of unstabilized septage be prohibited after a five-year period.

3. That the validity period for septic tank permits be extended to fifty-four months.

4. That adequate funds be assured for research in the development of alternative sewage disposal systems.

5. That sanitarians be provided statutory immunity from personal liability for actions except those resulting from gross negligence or intentionally tortious behavior.

6. That the Review Board be provided compensation for reasonable expenses and per diem.

7. That an appropriation of \$25,000 be approved in order to adequately fund the activities of the Review Board.

8. That the Review Board's statute be amended to require eight meetings per year, that appeals be filed thirty days prior to a meeting in order to be included on the docket, that a written decision be rendered within fifteen days of the hearing and that the Board be authorized to remand applications to the Department of Health with recommendations for reconsideration.

9. That the study be continued.

Senate Bill 336 (Chapter 331 of the 1986 Acts of Assembly), sponsored by Senator Madison E. Marye, implemented all of the recommendations except for the two calling for appropriations and the continuation of the study. This bill contained the following provisions: a) The Virginia Resources Authority Act was revised to specify that facilities for receiving and stabilizing septage (e.g., anaerobic lagoons) and soil drainage management facilities may be funded through this mechanism by local governments; b) The land spreading of lime-stabilized and unstabilized septage was authorized for five years (after 1991, these practices will be prohibited); c) The validity of septic tank permits was extended from thirty-six to fifty-four months; d) Sanitarians were provided statutory protection from personal liability in conformance with an Attorney General's Opinion obtained by Senator Marye; e) Compensation was authorized for the Sewage Handling and Disposal Appeals Review Board; and f) The Review Board's statutes were amended to require eight meetings per year, that appeals be filed thirty days prior to meetings, that written decisions be rendered within fifteen days of a hearing and to provide authorization for the Review Board to remand denied applications to the Department of Health with recommendations. Senate Joint Resolution No. 82, also patroned by Senator Marye, was approved, thereby implementing the recommendation for the continuation of this study.

The budget amendments for the funding of the research in alternative onsite systems and the expenses of the Review Board were not approved. However, the language mandating the allocation of \$25,000 for the Review Board was included in the appropriations act. At this time, the Department of Health is using discretionary monies to fund the expenses of the Review Board pursuant to this language.

Senate Joint Resolution 82, authorizing the continuation of this study, directed the Joint Subcommittee to consider the efficacy of regulating soil scientists, the credentialing of sanitarians, and the assessment of the operation of the Sewage Handling and Disposal Review Board in its first year and to evaluate the progress of research in alternative onsite sewage disposal systems and any other issues related to sewage handling and disposal.

## II. WORK OF THE JOINT SUBCOMMITTEE

During the 1986 interim, the Joint Subcommittee conducted five meetings, one of which was a public hearing focused on the regulation of soil scientists and the credentialing of sanitarians. The Joint Subcommittee also heard from a number of public officials and private citizens at each of its other meetings. Among the topics reviewed by the Joint Subcommittee were the activities in response to the findings and recommendations of its 1986 report of the Department of Health, the work of the Sewage Handling Disposal Appeal Review Board in its first year, the progress of the research in alternative onsite sewage systems, the status of the amendments to the Virginia Resources Authority Act, the progress of the State Water Control Board in promulgating "general permit" regulations for the National Pollution Discharge Elimination Standards permit for alternative onsite sewage systems, the regulation of soil scientists, the credentialing of sanitarians, and land spreading of septage.

Although the Joint Subcommittee was careful to address all of the issues enumerated in its continuing resolution as well as other concerns which arose during its study, a substantial part of the Joint Subcommittee's work in this second year of its tenure was focused on whether soil scientists should be regulated and, if so, what kind of regulation would be appropriate.

### III. FINDINGS AND RECOMMENDATIONS OF THE JOINT SUBCOMMITTEE

#### Statutory Basis for Regulation of Occupations and Professions in Virginia

Virginia has two departments which govern the regulation of professionals - the Department of Commerce and the Department of Health Regulatory Boards. Each department has a chief executive with the title of director and each subsumes various regulatory boards. The Department of Commerce and its regulatory boards are governed by the Board of Commerce, a strong regulatory body in its own right. The Department of Health Regulatory Boards and its health regulatory boards have an umbrella group known as the Council of Health Regulatory Boards.

At this time, the following professions are regulated by the Department of Commerce and its regulatory boards: architects, engineers, surveyors and certified landscape architects; audiologists and speech pathologists; barbers; certified public accountants; cosmetologists; contractors; librarians; opticians; hearing aid dealers and fitters; pilots; water and wastewater works operators; real estate brokers, salesmen and rental location agents; nursing home administrators; geologists; and auctioneers. In addition, certain types of businesses are regulated by the Department of Commerce, i.e., commercial driver training schools, private security services businesses and employment agencies.

The Department of Health Regulatory Boards has little direct regulatory authority. The boards within the Department regulate various professionals who treat or directly serve consumers, such as doctors, nurses, dentists, pharmacists, optometrists, etc. Therefore, it appeared logical to propose that the Department of Commerce would be the appropriate agency to regulate soil scientists.

Section 54-1.17 states the legislative policy vis-a-vis regulation of professionals:

*The Virginia General Assembly finds that the right of every person to engage in any lawful profession, trade or occupation of his choice is clearly protected by both the Constitution of the United States and the Constitution of the Commonwealth of Virginia. The Commonwealth cannot abridge such rights except as a reasonable exercise of its police powers when it is clearly found that such abridgment is necessary for the preservation of the health, safety and welfare of the public.*

This section also sets forth the following criteria for determining whether an occupation or profession should be regulated:

*1. Their unregulated practice can harm or endanger the health, safety and welfare of the public and when the potential for such harm is recognizable and not remote or dependent upon tenuous argument.*

*2. Their practice has inherent within it qualities peculiar to it that distinguish it from ordinary work and labor.*

*3. Their practice requires specialized skill or training and the public needs, and will benefit by, assurances of initial and continuing professional and occupational ability.*

*4. The public is not effectively protected by other means.*

The essence of this section is that the risk of harm must be real and not anecdotal, the scope of practice must be amenable to definition, the services performed must require expertise, and the public must be unprotected without the regulatory activity.

Section 54-1.18 defines the various levels of regulation allowable within the Department of Commerce. Registration, which is the least intrusive method of regulating, is defined as *a method of regulation whereby any practitioner of a profession or occupation maybe required to submit information concerning the location, nature and operation of his practice.*

Certification, which is the next level of regulation, is defined as *the process whereby the Department or any regulatory board on behalf of the Commonwealth issues a certificate to any person certifying that he has minimum skills properly to engage in his profession or occupation and that it knows of no character defect that would make him a bad practitioner of the same.*

Licensing, which is the most stringent level of regulation, is defined as *a method of regulation whereby the practice of the profession or occupation licensed is unlawful without the issuance of a license.*

In § 54-1.25, the Board of Commerce is charged with evaluating *constantly each profession and occupation in the Commonwealth not regulated by other provisions of this title within the criteria established in this chapter for consideration of whether or not each such profession or occupation should be regulated and, if so, the degree of regulation that should be imposed. Whenever it determines that the public interest requires that a profession or occupation which is not then regulated by law should be regulated, the Board shall recommend to the General Assembly next convened for approval a regulatory system accompanied by comprehensive rules and regulations necessary to conduct the degree of regulation required.*

Section 54-1.26 describes the "degrees of regulation" allowed and requires these degrees to be recommended by the Board in the following order: 1. statutory changes, i.e., amendments to present law relating to criminal or civil penalties for certain actions; 2. strengthening of any existing inspection procedures and injunction procedures; 3. registration; 4. certification; and 5. licensure.



This statute indicates that licensure is to be used only when *adequate regulation cannot be achieved by other means*.

This section continues by establishing a ten-step procedure for determining the need for regulation which includes establishing that there is a hazard to the public health, safety or welfare from the unregulated activity; soliciting the views of the public; researching the number of other states having a similar regulatory scheme; collecting data on the demand for the service for which there is no substitute; determining the ethical status of the group; determining whether the public can identify a competent practitioner; determining whether the trade association provides adequate protection for the public; determining whether general law is adequate; and determining whether the services performed can have a detrimental effect on others.

As the Committee proceeded with its study, each of the steps require by § 54-1.26 were completed to the extent possible.

### Regulation of Soil Scientists

During the two years of its study, the Joint Subcommittee heard considerable testimony concerning the financial burden and emotional stress to developers and individual citizens caused by improper analyses of soils. The potential for public harm caused by inappropriate or inept work performed by private soil consultants as well as the potential for public benefits from quality work performed by soil scientists were brought to the attention of the Joint Subcommittee. Expert testimony on the potentially detrimental health effects of human or animal contact with raw sewage was also received. The Joint Subcommittee also became concerned about the potential impact of malfunctioning onsite sewage systems on the environment, particularly as related to the contamination of the shellfish areas in the tidewater area and ground water throughout the Commonwealth.

On August 26, 1986, the Subcommittee held a public hearing on the licensure of soil scientists and the credentialing of sanitarians. During this meeting, the Committee heard from seventeen people, most of whom were proponents of regulation of soil scientists. Some of the reasons for advocating the regulation of this group were:

a. Licensing would assure the professional real estate developer and the private citizen who requires the services of a soil consultant of obtaining a qualified individual and, therefore, more consistently accurate work.

b. Licensing would allow the Department of Health to accept the work of the professional soil consultant for issuing permits with only a paper review of the application and spot checking of the evaluation.

c. Regulation of soil scientists would allow private land developers and citizens to assess the competence of individuals before hiring them and perhaps prevent or reduce the difficulties created by incompetent soil consultants who charge substantial sums for work that

does not meet the requirements of the regulations (e.g., when soil consultants provide evaluations that are not acceptable to the sanitarians).

d. Presently, any "Tom, Dick or Harry" may hang out his shingle and practice soil science. This allows the public to be defrauded by inexperienced and incompetent individuals.

e. If the Health Department sanitarians could accept the evaluations of regulated soil scientists, the backlogs of permits could be eliminated.

f. Regulation of soil scientists would reduce the volume of improper and incomplete soil descriptions and other evaluations.

g. Personal experience with the work of soil scientists and an understanding of the value of their work when performed well.

h. A "... little more cost is cheaper than a pollution disaster and...soil science is sophisticated enough to require those offering themselves as practitioners in the profession to be expected to have training and experience enough... to pass a state standard."

i. Soil evaluation is a complex skill requiring experience and knowledge.

j. The professional status of soil scientists closely parallels that of geologists who are regulated.

k. Regulation is needed to prevent situations in which the public is harmed by unprofessional or unethical practitioners.

l. Less than half of the consultants doing soil work at this time in Virginia are soil scientists; thirty-five percent have minimal education and field experience and twenty percent have little, if any, training or experience in soil or site evaluation.

Although there were no opponents of regulation of soil scientists, Mr. David Hathcock, Director of the Department of Commerce, stated that he agreed with the philosophy in the Code of Virginia which he characterized as promoting the minimal regulation necessary to protect the health and safety of the public. Ms. Judy Griswold, Director of Governmental Affairs with the Virginia Home Builders Association, noted that the building industry would like to be able to continue to use other professionals as well as soil scientists.

In addition to this testimony, the Joint Subcommittee heard from Dr. C.M.G. Buttery, Commissioner of Health. He proposed a degree of privatization of permitting of septic systems when the plans, etc. were prepared by licensed professionals. The concept behind this proposal was to reduce the backlogs of applications for onsite sewage system permits which occur annually during the building season by allowing the sanitarians to review and spot-check those applications prepared by regulated professionals rather than requiring the sanitarians to complete a first hand evaluation of the sites. However, it was noted that since most of the private evaluations for septic systems are performed in

Virginia by soil consultants, many of whom apparently have little education and experience, this proposal would be difficult to implement without initiating regulation of soil scientists.

On the issue of privatization, the Joint Subcommittee received conflicting testimony. A number of individuals supported the regulation of soil scientists solely on the grounds that the unregulated practice of this profession has created a situation in which the public can be deceived and harmed. However, some individuals supported the regulation of soil scientists primarily as a means of identifying professionals whose soil evaluations could be accepted by the Department of Health in lieu of firsthand evaluations by the Department's sanitarians. Still other individuals stated grave concerns about privatization because the soil scientist would be placed in the difficult, dual roles of evaluator and regulator. It was felt that effective regulation can only be carried out by objective third parties such as the Department of Health and that any relinquishing of control by the Department might have disastrous effects.

The Joint Subcommittee determined that the services of soil scientists include diverse feasibility studies for engineers, developers, and private home owners related to site selection for spray irrigation, roads, drainfields and septic tanks, and erosion and sediment control, etc. Members of the profession engage in a wide variety of activities, such as mapping of soils, research and consulting for the private sector. Much evidence was presented that backhoe operators, septic tank installers, realtors, geologists, biologists, land surveyors and others, whether qualified or not, are presently advertising themselves as providing the services of professional soil scientists. Many examples of errors, such as locating a drainfield in an area of fill dirt, which were committed by individuals who are performing soil evaluations in Virginia were provided to the Joint Subcommittee.

Following careful consideration of the testimony and evidence presented to it, the Joint Subcommittee determined that regulation of soil scientists would be in the best interest of the citizens of the Commonwealth to protect their health and safety because the unethical or inept performance of soil analysis can cause adverse financial, environmental and health effects, no less intrusive, effective mechanism for regulating this profession is presently available, and the ordinary citizen has no criteria by which to identify the qualified soil scientist. For these reasons, the Joint Subcommittee recommends:

1. THAT A SYSTEM OF VOLUNTARY CERTIFICATION BE ESTABLISHED WITHIN THE DEPARTMENT OF COMMERCE IN ORDER TO IDENTIFY A CORE OF QUALIFIED PROFESSIONALS WHO ARE VERSED IN THE SKILLS NECESSARY TO EVALUATE SITES FOR ONSITE SEWAGE SYSTEMS.

#### Credentialing of Sanitarians

The State Department of Health in Virginia employs sanitarians who are responsible for the permitting of onsite sewage systems, the inspection of restaurants, the investigation of general environmental

complaints (such as complaints related to solid waste, housing, vector control, rabies, etc.), the inspection of migrant labor camps, the inspection of service station bathrooms, the inspection of camp grounds, hotels and motels, and the inspection of day care centers and schools and other public gathering places. The sanitarians are also required to perform other duties as necessary pursuant to local ordinances (e.g., inspections of grocery store delicatessens).

In 1983, the Governor's Regulatory Reform Advisory Board recommended that the registration of sanitarians by the Department of Commerce be eliminated. House Bill 25 of 1984 implemented this recommendation by repealing Chapter 23.1 of Title 54 (§ 54-859.1 et seq.), thereby eliminating the State Board of Sanitarian Examiners. The rationale for this recommendation was that most of the sanitarians were employed by government which could carefully screen their qualifications and that registration was not required for their employment. Further, very few sanitarians chose to become registered and no disciplinary actions were taken by the regulatory board, facts which would indicate that there was little need to protect the public from inept or unscrupulous practitioners.

During the hearings for House Bill 25, the Virginia Environmental Health Association revealed some problems related to the training and education of sanitarians. Because of this testimony, Delegate Axselle requested the Governor to establish a task force to examine these issues. The Task Force on the Environmental Health Sanitarian was established and issued a report on July 31, 1985.

The Task Force on the Environmental Health Sanitarian recommended that *"To insure adequate protection of public health, the Commonwealth should promote the achievement of the highest level of competency among its sanitarians by encouraging voluntary registration for all sanitarians and by requiring registration for individuals before advancement to or transfer within supervisory classifications. Such registration should be obtained through a state-approved, private, non-governmental credentialing organization."*

It should be understood that the term "registration" as used by the Task Force indicates the passing of a validated national test such as is currently available from the Professional Examination Service (i.e., the test used by the National Environmental Health Association) and is analogous to certification rather than registration as defined in state statute.

The Joint Subcommittee heard substantial testimony at the public hearing and other meetings that the recommendation of the Task Force should be implemented. The reasons for supporting this recommendation were:

a. Requiring supervisory sanitarian personnel to be registered would assure more consistency in the quality of such personnel who have substantial responsibilities for overseeing activities directly impacting the health and safety of Virginians.

b. Encouraging or requiring Health Department sanitarians to be registered would save the state money by reducing the cost of training sanitarians.

c. Encouraging or requiring Health Department sanitarians to be registered would ensure adequate protection of the public by promoting minimum standards of sanitarian competency.

d. Sanitarians must be well prepared to respond to the wide spectrum of environmental and health issues which they encounter.

e. Sanitarians are the only environmental practitioners available to provide advice to the public in every area of the state and must be well qualified in order to maintain the public confidence.

The primary reason given to the Subcommittee for the inability to implement the Task Force's recommendation was that the Department of Personnel and Training maintains that proficiency testing may discriminate against minorities and women. For this reason, the Joint Subcommittee directed staff to research the use of ability tests in employment. Two important testing cases were reviewed and summarized for the members (Griggs v. Duke Power Co., 401 U.S. 424, 91 S. Ct. 849, 28 L. Ed. 2d 158 (1971); Washington V. Davis, 426 U.S. 229, 96 S. Ct. 2040, 48 L. Ed. 2d 597 (1976)). Title VII of the Civil Rights Act of 1964 relating to Equal Employment Opportunities allows a "professionally developed ability test" when the purpose of such test is not discriminatory (see 42 USCS §2000e-2(h)). This provision has been interpreted to allow "job-related tests" or tests which are a "reasonable measure of job performance." In other words, the test should predict the individual's ability to perform satisfactorily. The guidelines of the Equal Employment Opportunity Commission which focus on "job-relatedness" are apparently given substantial weight by courts in cases involving Title VII of the Civil Rights Act. If the results substantiate the validity of the test, a study of the relationship between the test and job performance ability prior to instituting a test requirement would appear to provide credibility for a testing requirement and a safeguard against charges of discrimination.

In its concluding paragraph in Griggs, the Court said, *Nothing in the Act precludes the use of testing or measuring procedures; obviously they are useful. What Congress has forbidden is giving these devices and mechanisms controlling force unless they are demonstrably a reasonable measure of job performance.... What Congress has commanded is that any tests used must measure the person for the job and not the person in the abstract.*

The Joint Subcommittee felt that it would be unwise to mandate the immediate implementation of the Task Force recommendation because of the Title VII issues. However, over the last two years, the Subcommittee has come to realize the significance of the role that sanitarians play in protecting the health of the people and the environment in Virginia and to believe that effective training is essential to the efficient conduct of this role. The Joint Subcommittee agrees with the Task Force that sanitarians play a major role in protecting the public health, that the role of sanitarians has expanded to include many topics and that the

sanitarian's role has become more complex in the areas of food protection, sanitation and toxic substances. Therefore, the Joint Subcommittee believes that the Task Force recommendation that all sanitarians be encouraged to demonstrate their qualifications through the obtaining a satisfactory score on the professional test and becoming registered and that registration be required for promotion to supervisory levels is appropriate and should be implemented. For these reasons, the Joint Subcommittee recommends:

2. THAT THE DEPARTMENT OF PERSONNEL AND TRAINING AND THE DEPARTMENT OF HEALTH COOPERATE IN DEVELOPING A PLAN FOR THE IMPLEMENTATION OF THE RECOMMENDATION OF THE TASK FORCE ON CREDENTIALING OF SANITARIANS RELATED TO REGISTRATION OF SANITARIANS.

Assessment of the Operations of the Sewage Handling and Disposal Review Board in its First Year

The Committee heard testimony concerning the number of hearings to date, the kinds of cases and the decisions of the Board. Although the case load of the Review Board has been less than was originally expected, the number of cases appears to be increasing, partly because the fee for appeals was established at the affordable sum of \$135. By June, 1986, the Review Board had heard four cases involving eight lots. The Board upheld the Health Department decisions in two cases and overruled it in two cases.

The reason for fewer cases than expected could be that developers and builders have been very busy this year or that some people have decided to observe the activities of the Review Board before deciding to file appeals. There are rumors that many appeals will be filed in the near future. However, the limitation placed on the number of meetings per year should prevent an overwhelming burden on this citizen board. The budget amendment proposed by the Committee last year to provide the Department with an additional \$25,000 for the Review Board's expenses failed. The Department is presently using its discretionary funds for this purpose pursuant to language in the appropriations act. Although this language and the addition of the Review Board to the compensation statute eliminate the problem of providing expense money to the members, the failure to provide the Board with separate appropriations still concerns the Board. Some Board members have expressed a desire to be more independent of the Department in order to avoid any appearance of conflict of interests.

During 1986, the Joint Subcommittee reviewed the statutes of the Review Board and concluded that the expertise of the sixth member of the Review Board ("one member who is engaged in private soils analysis work") was unclear (see § 32.1-166.1 of the Code of Virginia). The Joint Subcommittee concluded that the intent of the General Assembly was to designate an individual with expertise in the area of soils analysis for onsite sewage systems because the Review Board's charge is to review denials of onsite sewage permits. However, since there are many categories of individuals engaging in "private soils analysis work" who may not have any expertise in onsite sewage, the Joint Subcommittee felt that this ambiguity should be resolved.

For the reasons stated above, the Joint Subcommittee recommended:

3. THAT APPROPRIATIONS OF \$25,000 BE PROVIDED TO THE DEPARTMENT OF HEALTH AND DESIGNATED TO COVER THE EXPENSES OF THE REVIEW BOARD IN ORDER TO ELIMINATE ANY APPEARANCE OF A CONFLICT OF INTERESTS; AND

4. THAT § 32.1-166.1 BE AMENDED TO CLARIFY THE EXPERTISE OF THE SIXTH MEMBER OF THE REVIEW BOARD BY INSERTING "RELATED TO THE INSTALLATION OF ONSITE SEWAGE SYSTEMS" AFTER THE WORDS "PRIVATE SOILS ANALYSIS WORK."

#### Research in Alternative Onsite Sewage Disposal Systems

The Joint Subcommittee has heard testimony indicating that the development of alternatives to the traditional septic system is crucial to the health and economic well-being of Virginians. In some areas of the state, much of the land with soils appropriate for traditional systems has already been developed. Therefore, some of the problems that were described may have resulted from the need to use marginal soils for building. In addition, there are regions in Virginia with specific problems related to the traditional onsite sewage system such as shallowness to bedrock, high seasonal water tables and surface run-off problems, fragipans and ground water contamination. For many of these situations, alternative systems may be the only satisfactory solution. The Joint Subcommittee believes that alternative systems must be affordable as well as effective if they are to be acceptable to the builders and citizens of Virginia and people must be informed of the soil conditions for which various alternative systems are appropriate. Individual home owners and developers will not be willing to install expensive innovations in lieu of the traditional septic tank and drainfield system. In addition, a lot of educating is going to have to take place to convince people to use the alternative systems. Local governments must be part of this process. Many of the alternative systems will have to be managed by local authorities. Local governments are going to be challenged in the next few years to shoulder more responsibility for the management of onsite sewage systems and the disposal of septage. In spite of the many obstacles that must be overcome, the Joint Subcommittee has come to believe that the development of efficient, affordable alternative systems is the answer to many of Virginia's onsite sewage disposal problems.

Although the Health Department has progressed substantially in encouraging and training sanitarians in the use of alternative systems and has been funding the research at Virginia Polytechnic Institute and State University, increased research appears to be needed in this area. Prior to this year, the research at VPI was funded through the federal Preventive Health and Health Services Block Grant. No funds were allocated for this research in this year's block grant application. Although the Department had submitted a proposal to the Budget Office to be allowed to use carry-over monies to continue funding this research, this request was not granted by the Budget Office. Therefore, if this research is to continue, state general fund appropriations will be necessary.

For these reasons, the Joint Subcommittee recommended:

5. THAT ADEQUATE GENERAL FUND APPROPRIATIONS BE PROVIDED TO THE DEPARTMENT OF HEALTH TO FUND THE RESEARCH IN ALTERNATIVE ONSITE SEWAGE SYSTEMS AT VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY; AND

6. THAT THE DEPARTMENT OF HEALTH AGGRESSIVELY PURSUE THE DISSEMINATION OF INFORMATION ON EFFECTIVE ALTERNATIVE ONSITE SEWAGE SYSTEMS AND THE IMPLEMENTATION OF APPROPRIATE ALTERNATIVE ONSITE SEWAGE SYSTEMS IN THE COMMONWEALTH.

#### Developments in Sewage Handling and Disposal in Virginia

Senate Document No. 25 (The Report of the Joint Subcommittee Studying the Laws of the Commonwealth Related to Sewage Handling as These Laws Interact with the Board of Health's Sewage Handling and Disposal Regulations, 1986) stated:

*Although the Joint Subcommittee understands that the efficacy of allowing land spreading of unstabilized septage is the subject of great controversy, it has come to believe that the Commonwealth will not be able to sustain this practice indefinitely. This is a large state with a growing population and a changing, viable economy. The Joint Subcommittee believes that it is in the best interest of Virginians to plan for the discontinuation of the practice of land spreading of unstabilized septage. Further, the Joint Subcommittee feels that approved disposal sites can be successful business enterprises and that the owners of such facilities will price the use of these facilities reasonably if there is a market demand. Therefore, the Joint Subcommittee supports incentives for local government and sewage handling contractors to cooperate in establishing adequate facilities for the safe disposal of unstabilized sewage.*

Although the Subcommittee's 1986 Bill contained provisions designed to implement the incentives for local governments and contractors as well as the five-year sunset for land spreading of lime-stabilized and unstabilized septage, very little activity appears to have developed in the building of approved disposal sites. In addition, the Subcommittee heard some testimony relating to problems with the regulations on land spreading. A number of contractors have been granted variances or consent orders. The Joint Subcommittee has come to realize that it is possible that there will be little activity in this area during the five-year period and that an effort to amend the law will be made in 1991. During the course of this study, the Subcommittee has been convinced that the proper disposal of septage must be addressed. It should be understood that onsite sewage systems are not only used for private homes, but also serve shopping centers, nursing homes, hospitals, schools and businesses. Although land spreading of untreated septage has not been proven to have caused significant health or environmental problems, evidence of ground water contamination and other problems may be found in the future. The potential for harm exists because of the presence of live microorganisms (viruses, bacteria and parasites) in unstabilized septage and the possible presence of toxins and heavy metals (preliminary data obtained from a study at VPI indicate that these substances are frequently present).



For these reasons, the Joint Subcommittee wishes to reiterate its goal that local governments, private citizens, developers and pump and haul contractors work together to resolve the difficulties in developing approved disposal sites for onsite sewage. In order to facilitate this goal, the Joint Subcommittee recommended:

7. THAT THE DEPARTMENT OF HEALTH VOLUNTARILY DEVELOP A LONG-RANGE PLAN FOR THE HANDLING OF ONSITE SEWAGE SYSTEMS AND THE DISPOSAL OF ONSITE SEWAGE WHICH WOULD INCLUDE ALL OF THE RELEVANT COMPONENTS OF THE ONSITE SEWAGE HANDLING AND DISPOSAL PROGRAM.

#### IV. CONCLUSION

The Joint Subcommittee recognizes that the pressure to permit onsite sewage systems in areas with marginal soils will intensify for some years, because it is unlikely that central water and sewage systems will be available to the majority of Virginia's people for a long time to come. For this reason, the Joint Subcommittee wishes to stress its belief that the development of appropriate, effective alternative onsite sewage systems will be crucial for the economic wellbeing of Virginia and for the protection of her citizens and environment.

Although the Joint Subcommittee has endorsed the concept of regulating soil scientists and understands the efficacy of the limited use of such private sector expertise in the evaluation of sites for onsite sewage permits, the Joint Subcommittee wishes to emphasize that, in its opinion, the responsibility for protecting the health and welfare of the citizens of the Commonwealth must continue to rest with the Department of Health. It is the Joint Subcommittee's hope that the regulation of soil scientists will benefit the public and the Department of Health by identifying qualified experts from whom assistance may be obtained. The Joint Subcommittee does not believe that the best interest of the citizens of this Commonwealth would be served by the abdication of any of the Department's authority to the private sector because of the serious potential for conflicts of interests which could result in unacceptable practices.

When this study was created, the members of the Subcommittee were convinced that a detailed, thorough study of the problems related to onsite sewage was needed. After two years of intense and, in the opinion of the Joint Subcommittee, productive study, the members of the Subcommittee feel that the time has come to step back and allow the Department of Health to implement the Subcommittee's recommendations for the onsite sewage program. However, the members of the Joint Subcommittee intend to maintain their interest in sewage handling and disposal. Further, the sewage handling and disposal program will, undoubtedly, continue to receive close scrutiny from other members of the General Assembly and the citizens of Virginia.

The Joint Subcommittee wishes to express its thanks to the many citizens and public officials who appeared before it and to the Commissioner and the staff of the Department of Health, particularly Mr. Herbert Oglesby and Mr. Robert Hicks.

Respectfully submitted,

Madison E. Marye, Chairman

J. Samuel Glasscock, Vice-Chairman

Robert W. Ackerman

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# APPENDICES

APPENDIX A - ENABLING RESOLUTION  
1986 SESSION

SENATE JOINT RESOLUTION NO. 82

Offered January 21, 1986

*Continuing the Joint Subcommittee studying the laws of the Commonwealth related to sewage handling as these laws interact with the Board of Health's Sewage Handling and Disposal Regulations.*

Patrons—Marye, Michie, and Saslaw; Delegates: Ackerman, Glasscock, and DeBoer

Referred to Committee on Rules

WHEREAS, the Joint Subcommittee studying the laws and regulations related to sewage handling and disposal has held seven meetings and has worked diligently to develop solutions to long standing problems in Virginia; and

WHEREAS, the joint subcommittee has proposed legislation which it believes will resolve some of the problems it encountered; and

WHEREAS, there are still many issues related to sewage handling and disposal which are in need of evaluation and resolution; and

WHEREAS, some of these issues relate to the regulation of soil scientists and the credentialing of sanitarians; and

WHEREAS, the joint subcommittee believes that one of the reasons the Commonwealth has been unable to resolve problems related to sewage handling and disposal in the past is that a piecemeal approach has been taken; and

WHEREAS, the joint subcommittee is committed to a careful and thorough examination of the issues related to sewage handling and disposal in Virginia, now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Joint Subcommittee Studying the Laws of the Commonwealth related to Sewage Handling as these laws interact with the Board of Health's Sewage Handling and Disposal Regulations is hereby continued.

The joint subcommittee shall consist of seven members as follows: two members of the Senate Committee on Education and Health and one member of the Senate at-large to be appointed by the Senate Committee on Privileges and Elections and four members of the House Committee on Health, Welfare and Institutions to be appointed by the Speaker thereof.

In its deliberations, the joint subcommittee shall consider:

1. The need for and feasibility of regulating soil scientists, including an evaluation of levels of regulation such as registration, certification and licensure, categories of professionals to be regulated and qualifications of these professionals;

2. The implementation of credentialing of sanitarians as recommended by the task force which studied this issue in order to detect and alleviate any potential problems;

3. Assessment of the operations of the Sewage Handling and Disposal Review Board in its first year;

4. Reports on the progress of research in alternative onsite sewage disposal systems; and

5. The developments in sewage handling and disposal in Virginia, particularly those resulting from any legislation approved by the General Assembly during the 1986 Session.

The joint subcommittee may also consider such other matters as it deems relevant and appropriate to the efficient and effective regulation of sewage handling and disposal in the Commonwealth.

The Joint Subcommittee shall complete its work in time to submit its recommendations to the 1987 Session of the General Assembly.

All direct and indirect costs of this study are estimated to be \$27,285.

APPENDIX B - LEGISLATION  
IMPLEMENTING RECOMMENDATIONS  
**1987 SESSION**

VIRGINIA ACTS OF ASSEMBLY - CHAPTER 528

*An Act to amend the Code of Virginia by adding in Title 54 a chapter numbered 31, consisting of sections numbered 54-969 through 54-977, relating to the certification of soil scientists.*

[S 473]

Approved MAR 28 1987

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Title 54 a chapter numbered 31, consisting of sections numbered 54-969 through 54-977 as follows:

**CHAPTER 31.**

**SOIL SCIENTISTS.**

§ 54-969. *Definitions.—As used in this chapter, unless the context requires a different meaning:*

*"Board" means the Board for Professional Soil Scientists.*

*"Department" means the Department of Commerce.*

*"Eligible soil scientist" means a person who possesses the qualifications specified in this chapter to become certified.*

*"Practice of soil evaluation" means the evaluation of soil by accepted principles and methods including, but not limited, to observation, investigation, and consultation on measured, observed and inferred soils and their properties; analysis of the effects of these properties on the use and management of various kinds of soil; and preparation of soil descriptions, maps, reports and interpretive drawings.*

*"Soil" means the groups of natural bodies occupying the unconsolidated portion of the earth's surface which are capable of supporting plant life and have properties caused by the combined effects, as modified by topography and time, of climate and living organisms upon parent materials.*

*"Soil evaluation" means plotting soil boundaries, describing and evaluating the kinds of soil and predicting their suitability for and response to various uses.*

*"Soil science" means the science dealing with the physical, chemical, mineralogical, and biological properties of soils as natural bodies.*

*"Soil scientist" means a person having special knowledge of soil science and the methods and principles of soil evaluation as acquired by education and experience in the formation, description and mapping of soils.*

*"Virginia certified professional soil scientist" means a person who possesses the qualifications required for certification by the provisions of this chapter and the regulations of the Board and who has been granted certification by the Board.*

§ 54-970. *Exceptions.—The certification program set forth in this chapter is voluntary and shall not be construed to prohibit:*

1. *The practice of soil evaluation by individuals who are not certified soil scientists as defined in this chapter;*

2. *The work of an employee or a subordinate of a certified soil scientist or an individual who is practicing soil evaluation without being certified; or*

3. *The practice of any profession or occupation which is regulated by another regulatory board within the Department of Commerce.*

§ 54-971. *Unlawful representation as a certified professional soil scientist.—No person shall represent himself as a certified professional soil scientist unless he has been so certified by the Board. Any person practicing or offering to practice soil evaluation within the meaning of this chapter who, through verbal claim, sign, advertisement, or letterhead, represents himself as a certified professional soil scientist without holding such a certificate from the Board shall be guilty of a Class 1 misdemeanor.*

§ 54-972. *Board; membership; quorum; initial appointments; nominations.—Notwithstanding the provisions of § 54-1.27, the Board for Professional Soil Scientists within the Department of Commerce shall be composed of five members appointed by the Governor as follows: four shall be certified professional soil scientists and one shall be a citizen member. Of the professional members, one shall have experience in soil mapping and classification, one shall have experience in soil suitability and land use, one shall have experience in teaching and research in soil science and one shall have experience with environmental protection regulations. The terms of the members shall be four years. For the initial appointments, one shall be for a term of three years, two shall be for a term of*

two years and two shall be for a term of one year.

The Board shall annually elect a chairman from its membership. Three members of the Board, two of whom shall be soil scientists, shall constitute a quorum.

The professional soil scientist members initially appointed to the Board shall meet the qualifications provided in § 54-974. The Governor may select the professional soil scientist members from a list of at least three names for each vacancy submitted by the Virginia Association of Professional Soil Scientists. The Governor may notify the Virginia Association of Professional Soil Scientists of any professional vacancy other than by expiration among the professional members of the Board and nominations may be made for the filling of the vacancy.

§ 54-973. Eligibility for certification.—Any person practicing or offering to practice as a soil scientist in this Commonwealth may submit evidence to the Board that such person is qualified to be certified as provided in this chapter. The Board shall certify any applicant who has satisfactorily met the requirements of this chapter and its regulations and shall specify on the certificate the appropriate endorsement.

Any individual who allows his certification to lapse by failing to renew the certificate or failing to meet professional activity requirements stipulated in the regulations may be reinstated by the Board upon submission of satisfactory evidence that he is practicing in a competent manner and payment of the prescribed fee.

§ 54-974. Requirements for application for certification.—The Board may certify any individual as a Virginia certified professional soil scientist who has submitted satisfactory evidence verified by affidavits that the applicant:

1. Is eighteen years of age or more;
2. Is of good moral character; and
3. Has successfully completed such educational and experiential requirements as are required by this chapter and the regulations of the Board.

§ 54-975. Requirements for certification.—In order to be certified as a professional soil scientist, an applicant shall achieve a score acceptable to the Board on an examination in the principles and practice of soil evaluation and satisfy one of the following criteria:

1. Hold a bachelor's degree from an accredited institution of higher education in a soils curriculum which has been approved by the Board and have at least four years of experience in soil evaluation, the quality of which demonstrates to the Board that the applicant is competent to practice as a professional soil scientist; or
2. Hold a bachelor's degree in one of the natural sciences and have at least five years of experience in soil evaluation, the quality of which demonstrates to the Board that the applicant is competent to practice as a professional soil scientist; or
3. Have a record of at least eight years of experience in soil evaluation, the quality of which demonstrates to the Board that the applicant is competent to practice as a soil scientist; or
4. Have at least four years of experience in soil science research or as a teacher of soils curriculum in an accredited institution of higher education which offers an approved four-year program in soils and at least two years of soil evaluation experience, the quality of which demonstrates to the Board that the applicant is competent to practice as a soil scientist.

§ 54-976. Waiver of examination.—The Board may waive the requirement for examination pursuant to § 54-975 upon written application from an individual who holds an unexpired certificate or its equivalent issued by a regulatory body of another state, territory or possession of the United States and is not the subject of any disciplinary proceeding before such regulatory body which could result in the suspension or revocation of his certificate, if such other state, territory or possession recognizes the certificates issued by the Board.

§ 54-977. Unprofessional conduct.—Any professional soil scientist who is certified as provided in this chapter shall be considered guilty of unprofessional conduct and subject to disciplinary action by the Board, if he:

1. Obtains his certification through fraud or deceit;
2. Violates or cooperates with others in violating any provision of this chapter, the Code of Professional Ethics and Conduct or any regulation of the Board;
3. Performs any act likely to deceive, defraud or harm the public;
4. Demonstrates gross negligence, incompetence or misconduct in the practice of soil evaluation; or
5. Is convicted of a felony.

**1987 SESSION**

**VIRGINIA ACTS OF ASSEMBLY - CHAPTER 47**

*An Act to amend and reenact § 32.1-166.1 of the Code of Virginia, relating to the membership of the Sewage Handling and Disposal Appeal Review Board.*

[S 474]

Approved MAR 11 1987

Be it enacted by the General Assembly of Virginia:

1. That § 32.1-166.1 of the Code of Virginia is amended and reenacted as follows:

§ 32.1-166.1. Review Board; members.—There is hereby established, in the Department of Health, the State Health Department Sewage Handling and Disposal Appeal Review Board, consisting of seven members, appointed by the Governor subject to confirmation by the General Assembly. The members shall include one member who is a soil scientist; one member who is a professional engineer in private practice; one member who is a residential builder; one member who is an academic professional engaged in research and teaching in a soils-related discipline; one member who has had experience in the field of enforcement of ~~on-site~~ *onsite* sewage disposal regulations; one member who is engaged in private soils analysis work *related to the installation of onsite sewage systems*; and one member from the public at large who may have experience in the installation of ~~on-site~~ *septic onsite sewage* systems. The members shall serve at the pleasure of the Governor.

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President of the Senate

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Speaker of the House of Delegates

Approved:

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Governor

