

Commonwealth of Virginia/State Board of Health

Sewage Handling & Disposal Regulations



Virginia Department of Health
109 Governor Street
Richmond, Virginia 23219
November 1982

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Events of Adoption

Promulgated under Section 32.1-12 and 32.1-164 of the Code of Virginia (1950) as amended, and in conformity with the General Administrative Process Act, Title 9, Chapter 1.1:1 for the purpose of carrying out the provisions of Title 32.1, Chapter 6, Article 1, entitled "Sewage Disposal".

These are new regulations which supercede *Rules and Regulations of the Board of Health, Commonwealth of Virginia Governing the Disposal of Sewage*, adopted by the Board of Health on July 13, 1962 effective October 1, 1962; revised June 13, 1963, effective September 1, 1963; revised June 2, 1971, effective July 1, 1971 and amended September 22, 1980 effective November 17, 1980.

November 21, 1980— Preliminary approval by the State Board of Health.

April 13, 1981 — Public Hearing, Richmond, Virginia

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October 5, 1981 — Deferral of effective date by General Assembly Committees until March 13, 1982, the closing date of the 1982 General Assembly.

March 16, 1982 — Emergency Regulation deferring effective date until November 1, 1982.

March 17, 1982 — Board of Health gives preliminary approval to modification to Sections 1.06 and 3.03.

June 2, 1982 — Public hearing on modification to Sections 1.06 and 3.03.

June 8, 1982 — Board of Health adopts modifications.

November 1, 1982 — Effective Date

Copies may be obtained from local, district, and regional offices of the State Department of Health or the Bureau of Wastewater Engineering, State Department of Health, James Madison Building, Room 927, 109 Governor Street, Richmond, Virginia 23219.

Preface

The purpose of this Preface is to provide the reader with a brief overview of the book and to explain the organization of the book. The book is divided into two main parts: the first part contains the theory and the second part contains the applications. The theory part is divided into three sections: the first section contains the basic theory, the second section contains the advanced theory, and the third section contains the applications. The applications part is divided into two sections: the first section contains the applications of the theory and the second section contains the applications of the advanced theory. The book is written for students and researchers in the field of mathematics and physics. It is intended to be a reference work for students and researchers who are interested in the theory and applications of the subject. The book is written in a clear and concise style, and it contains many examples and exercises. The book is written in English and it is published by the American Mathematical Society.

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Preface

Purpose

The purpose of this Preface is to provide to the reader a readily accessible condensed explanation of the Regulations. Included in step form are the procedures for obtaining septic tank permits, sewage handling permits and experimental permits, as well as the procedure necessary to appeal decisions made by the Department. All references to section numbers pertain to sections in the *Sewage Handling and Disposal Regulations* unless otherwise noted.

Policy

It is the intent of the Department to aid and assist the public in the installation of on-site sewage disposal systems, where possible, by utilizing the best information, techniques and soil evaluations for the most suitable system that the site and soil conditions permit.

As better equipment, methods, systems, etc. for sewage treatment and disposal become available, or if portions of the Regulations are deemed to be unsuitable, the Regulations will be modified as necessary.

Written suggestions concerning these Regulations are invited.

PROCEDURES

Procedure I

Steps To Install An On-Site Sewage Disposal System For A Single Family Dwelling

(Type I and IV Systems See Sec. 3.13 a and d)

Step	Procedure	Remarks
1	Obtain an application for a permit to install the system.	Applications are available at all local health departments (Sec. 3.13.01).
2	Complete the application and attach a sketch of the site (sketch of the property and surroundings including dimensions, existing sewage and water systems etc. influencing the location of the proposed sewage system and water supply system if applicable).	The local sanitarian can assist in preparation of the application or providing advice regarding requirements for the sketch/plat (Sec. 3.16.01; 4.02 and Appendix II).
3	Submit the application and sketch/plat to the local health department in the county/city in which system is to be installed.	If the application is for a Type IV system for new construction, a variance issued by the local building official is required.
4	Make an appointment with the sanitarian to visit the property. (The property lines and the area proposed for the sewage disposal system and building site should be indicated by stakes.)	It is recommended that you be present when sanitarian evaluates the site and soil (Sec. 4.01;02).
5	The sanitarian will evaluate the site and soil to include reserve area where required.	The sanitarian may require additional information such as percolation tests before the system can be designed. (Sec. 4.05.03b). If pumping or siphon is involved go to step 6, Table II.
6	If the soil and site are satisfactory the sanitarian will design a system and a construction permit will be issued.	If you are denied a permit turn to Procedure VII for instructions.
7	Upon presenting the sewage disposal system construction permit to the building official your building permit will be issued and you may proceed to construct the sewage disposal system.	Required by Section 32.1-165 Code of Virginia.
8	The local health department must inspect and approve the sewage disposal system before it is covered and before an operation permit is issued and the system placed in service. If an individual water supply is constructed in conjunction with the sewage system it too must be inspected and approved before the operation permit is issued.	Before you release your contractor(s) from his obligation to install the system properly, insist on receiving the local health department's written approval including the contractor's completion statement (Sec. 3.20; 3.21.02);
9	In the event the system fails to operate satisfactorily contact your local health department where assistance can be obtained. (Sec. 3.23)	Sewage disposal systems require maintenance and a septic tank will usually need cleaning every 3-5 years.

Procedure II

Steps To Install A Sewage Disposal System For:

- a. Single Family Dwellings Requiring Pumps or Siphons
- b. Multiple Dwellings or Dwelling Units
- c. Commercial Establishments or,
- d. Other Establishments

(Type II Systems Sec. 3.13 b)

Step	Procedure	Remarks
1	Obtain an application for a permit to install the system.	Applications are available at all health departments (Sec. 3.13.01).
2	Complete the application and attach a sketch of the site (sketch of the property and surroundings including dimensions, existing sewage and water systems etc. influencing the location of the proposed sewage system and water supply system if applicable).	The local sanitarian can assist in preparation of the application or providing advice regarding requirements for the sketch/plat (Sec. 3.16.01; 4.02 and Appendix II).
3	Submit the application and sketch/plat to the local health department in the county/city in which system is to be installed.	
4	Make an appointment with the sanitarian to visit the property. (The property lines and the area proposed for the sewage disposal system and building site should be indicated by stakes.)	It is recommended that you be present when sanitarian evaluates the site and soil (Sec. 4.01;02).
5	The sanitarian will evaluate the site and soil and recommend the type system(s) best suited to the site.	The sanitarian may discuss with you a number of alternatives. If you are denied a permit turn to Procedure VII for instructions.
6	If site and soil conditions are satisfactory the sanitarian may design the system or, if the system is complex, require you to submit informal or formal plans/specifications.	The sanitarian may require you to obtain the services of a licensed Professional Engineer (Sec. 3.14).
7	The sanitarian will schedule a conference to discuss any plans/specifications or other matters.	(Sec. 3.13.02)
8a	If there is no requirement for engineering plans and specifications and all other requirements are satisfied, the construction permit will be issued.	If multiple units are to be served by the system, the permit may only be issued to one owner; the owner must guarantee the system will be maintained (Sec. 3.13.05).
8b	If engineer's services are required, and following approval of the plans/specifications (informal or formal) and such other items required in the regulations, the construction permit will be issued referencing the plans/specifications.	Until the plans and specifications are approved the permit will be withheld (Sec. 3.13.03 and 04; 3.15 and 3.16.02).
9	Upon presenting the sewage disposal construction permit to the building official your building permit will be issued and you may proceed to construct the sewage disposal system.	Required by Section 32.1-165 Code of Virginia.

10 The sewage disposal system must be inspected and approved by the local health department before it is covered and before an operation permit can be issued. If an individual water supply is to be constructed in conjunction with the sewage system it too must be inspected and approved before the operation permit is issued.

Before you release your contractor(s) from his obligation to install the system properly, insist on receiving the local health department's written approval including the contractor's completion statement (Sec. 3.20; 3.21.02); where formal plans were required, you should also obtain the engineers completion statement (Sec. 3.21.01;02 and 3.22).

11 In the event the system fails to operate satisfactorily contact your local health department where assistance can be obtained (Sec. 3.23)

Sewage disposal systems require maintenance and a septic tank will usually need cleaning every 3-5 years.

Procedure III

Steps To Install A Sewage Disposal System Other Than a Septic Tank and Drainfield

(TYPE III SYSTEMS)

Step	Procedure	Remarks
1	Obtain an application for a permit to install the system.	Applications are available at all local health departments (Sec. 3.13.01).
2	Complete the application and attach a sketch of the site (sketch of the property and surroundings including dimensions, existing sewage and water systems etc. influencing the location of the proposed sewage system and water supply system if applicable).	Local sanitarian can assist in preparing the application or providing advice regarding requirements for the sketch/plat (Sec. 3.16.01; 4.02 and Appendix II).
3	Submit the application and sketch/plat to local health department in the county/city in which system is to be installed.	
4	Make an appointment with the sanitarian to visit the property. (The property lines and the area proposed for the sewage disposal system and building site should be indicated by stakes.)	It is recommended that you be present when sanitarian evaluates the site and soil (Sec. 4.01;02).
5	A preliminary conference should then be scheduled to discuss proposal.	See §3.13.02 applicant and/or engineer should be prepared to discuss the application and supporting documentation.
6	Formal plans and specifications will be required with design criteria to support application. (4 sets required).	See §3.13.03 Must be prepared by a licensed Professional Engineer (§3.14).
7	Upon review and approval of the plans and specifications, a construction permit with 1 copy of stamped plans will be sent to the applicant and 1 copy of each will be sent to the owner's engineer. (Permit will reference plans and specifications.)	(See §3.16) If you are denied a permit turn to Procedure VII for instructions.
8	Upon presentation of the sewage disposal system construction permit to the building official your building permit will be issued and you may proceed to construct the sewage disposal system.	Required by Section 32.1-165 Code of Virginia.
9	The local health department must inspect and approve the sewage disposal system before it is placed in operation or any part covered. If an individual water supply is to be constructed in conjunction with the sewage system it must also be inspected and approved before the operation permit is issued.	Before you release your contractor(s) from his obligation to install the system properly, insist on receiving the local health department's written approval including the completion statements by the contractor and the engineer. (§3.20; 3.21.01; 3.21.02 and 3.22).
10	In the event the system fails to operate satisfactorily contact your local health department where assistance can be obtained (Sec. 3.23).	Type III sewage disposal systems will require certain types of maintenance. Be sure you have all directions for such maintenance (including a maintenance contract if required).

Procedure IV

Steps To Obtain A Conditional Construction Permit

Step	Procedure	Remarks
1	Obtain an application for a permit to install the system.	Applications are available at all local health departments. (Sec. 3.13.01)
2	Complete the application and attach a sketch of the site (sketch of the property and surroundings including dimensions, existing sewage and water systems etc. influencing the location of the proposed sewage system and water supply system if applicable).	The local sanitarian can assist in preparation of the application or providing advice regarding requirements for the sketch/plat (Sec. 3.16.01; 4.02 and Appendix II).
3	Submit the application and sketch/plat to local health department in the county/city in which system is to be installed.	The application shall set forth the special use conditions as well as substantiation of those conditions.
4	Make an appointment with the sanitarian to visit the property. (The property lines and the area proposed for the sewage disposal system and building site should be indicated by stakes.)	It is recommended that you be present when sanitarian evaluates the site and soil (Sec. 4.01;02).
5	The sanitarian will evaluate the site and soil. If there is justification for the conditions proposed in the application the sanitarian will design the system and issue a conditional construction permit and include a letter to you listing all conditions pertaining to the permit.	See Sec. 3.13.06c. You may be required to submit additional data i.e. seasonal water table measurements for a reasonable period to insure adequate safeguards in design. You should be present at site visit.
6	Upon receipt of the permit and letter you must have the permit and letter recorded and indexed in the grantee index of the land records by the Clerk of the Circuit Court having jurisdiction. The conditional permit becomes valid one day after the local health department receives notification from you that the permit has been recorded.	See Sec. 3.13.06f. You must have the permit recorded, and present certification of recordation to the local health department. (If you are denied a permit or do not agree with the conditions imposed in the permit turn to Procedure VII for instructions.)
7	Upon presentation of the sewage disposal system construction permit to the building official, your building permit will be issued and you may proceed with construction of the sewage disposal system.	Required by Section 32.1-165 Code of Virginia.
8	The local health department must inspect and approve the sewage disposal system before it is covered and put into operation. If an individual water supply is constructed in conjunction with the sewage system, it must also be inspected and approved before the operation permit is issued.	Before you release your contractor(s) from his obligation to install the system properly, insist on receiving the local health department's written approval including the contractor's and engineer's (if applicable) completion statement. See Sec. 3.21.01 and 3.22.
9	In the event the system fails to operate satisfactorily contact your local health department where assistance can be obtained. (Sec. 3.23).	Sewage disposal systems require maintenance and a septic tank will usually require cleaning every 3-5 years.

Procedure V

Steps To Obtain A Variance

Step	Procedure	Remarks
1	Send a letter to the Commissioner through the local health department containing citations to the regulations from which a variance is requested. Indicate the nature and duration of the variance requested. Submit any relevant analyses or data to support the request and any other information you feel is relevant.	Write out clearly the portion of the regulations that are problems in this instance. You must show that no undue health problems would be created by the variance. (See Sec. 3.07.03)
2a	The Commissioner will review the request and make a decision within 60 days and send a letter to you with his decision. If a variance is granted the local health department will attach a copy of variance to the permit.	
2b	The Commissioner will review the request and make a decision within 60 days. If he rejects the request a written rejection notice will be sent to you stating reasons for rejection.	Sec. 3.07.05a. You may petition the Commissioner for hearing within 30 calendar days to challenge the rejection pursuant to Sec. 3.08.

Procedure VI

Steps To Obtain A Special Permit For Experimental Systems

Step	Procedure	Remarks
1a	Application should be made through the local health department to the Director, Bureau of Wastewater Engineering, 109 Governor Street, Richmond, Virginia 23219, Phone 804-786-1755 for a site specific proposal.	Because of the variability of circumstances the exact procedure and information will be determined on a case by case basis in accordance with Section 3.25.
1b	Contact may be directly with the Bureau in instances where no site specific proposal is being made.	

Procedure VII

Appealing The Denial of a Sewage Disposal System Permit

(Sec. 3.01, 3.08, 3.08.01, 3.08.02, 3.09, 3.10, 3.10.01 and 3.11)

Step	Procedure	Remarks
1	Write to the Health Director in the jurisdiction where the permit was denied and request an informal hearing. Give the reasons you have for requesting the hearing and cite the section(s) of the regulations involved.	Having been denied a permit you should have in your possession copies of all the Department's records and reports including a report citing those reasons why the Department has denied your permit. If you do not have this information you will be given the information on request.
2	Upon receipt of your request for an informal hearing the Health Director will advise you of the time and place of the hearing.	
3	At the hearing you, your agent, or your attorney, if you choose to have one present, will be offered the opportunity to present evidence (data, witnesses, etc.) to support your claim that under the conditions of your application the system you seek to install will operate satisfactorily at the specific site.	The burden of proof will rest with you since the Department believes it has exhausted its search for an answer to your problem.
4	The Health Director on hearing the testimony and reviewing all evidence presented will make a preliminary finding of fact and advise you accordingly.	
5	In the event you are not satisfied with the decision, you may request a formal hearing by writing to the State Health Commissioner, include the reason(s) for requesting the appeal and cite the section(s) of the regulations involved.	Upon receipt of your appeal request the Commissioner will acquire copies of all related Department records and reports; these will be reviewed to assure proper processing.
6	You will be furnished copies of all related Departmental records and reports and be advised of the time and place for your case to be heard and the basic law(s) under which the Department exercises its authority.	The Commissioner's representative will contact you or your attorney regarding your upcoming appeal.
7	At the hearing you will be offered the opportunity to submit oral and documentary evidence and rebuttal proofs and conduct cross examinations.	You may bring such witness(es) as you believe will help your case.
8	The Commissioner or his appointee will preside over the hearing.	A verbatim record will be made of the hearing.
9	Following the hearing (usually within 60 days) the Commissioner will make a finding of fact, and advise you in writing of his conclusion(s) regarding your case.	
10	In the event you are not satisfied with the decision you may seek judicial review.	

Procedure VIII

Steps To Obtain A Sewage Handling Permit

(Section 3.26)

Step	Procedure	Remarks
1	Obtain and complete an application for a Sewage Handling Permit.	Applications are available at all local health departments (Section 3.26, Appendix III, Pages III-1 through III-4).
2	If a special facility is required, schedule a site visit to the proposed site with the sanitarian.	
3	Schedule a preliminary conference with the local or district health department to discuss the methods and equipment to be utilized in the handling and disposal of sewage.	When a special facility is required (see 3.26.04, 6.03b), you should have your consulting engineer at this conference. The site study and evaluation may be held in connection with this conference.
4	If you decide to proceed with your proposal go to step 6 of Procedure III and follow to completion.	Anaerobic lagoon requirements are contained in Section 16.00. If you propose to land apply stablized septage, a no-discharge certificate will be required from the State Water Control Board.
5	Upon completion of all requirements, including plans and specifications review and approval, site approval, approval of method of final disposal of stablized septage, a construction permit will be issued.	An operation and maintenance manual will be required.
6	The health department must inspect and approve the special facility before an operation permit is issued and the system placed in service.	Before you release your contractor(s) from his obligation to property, install the system, insist on receiving the department's approval, including the contractor(s) and engineer's completion statement(s). (See 3.20, 3.21.01; 02 and 3.22)
7	Schedule an appointment with the sanitarian to discuss methods and equipment to be utilized in the handling and disposal of sewage.	
8	Schedule an appointment with the sanitarian to inspect the equipment to be utilized.	This procedure may be accomplished during step 7 if desired. (See 3.26.03, 15.00)
9	Upon approval of the application, disposal site(s) and equipment, a permit is issued by the local health department.	Section 3.26, 6.12.03, 6.03a, 15.00.

GENERAL SUMMARY OF REGULATIONS

Arrangement of the regulations

The new regulations are arranged in five major parts. The first four parts are subdivided into 18 sections. The fifth part is the appendix and contains copies of excerpts from Title 32.1, Code of Virginia and all forms and applications related to on-site sewage handling and disposal.

Part A

Part A entitled **General Framework for the Regulations** contains Sections 1.00 *General Authority* and 2.00 *Definitions*. Significant subsections are 1.05 which establishes a Sewage Handling and Disposal Advisory Committee and 1.06 which is the Grandfather Clause.

Part B

Part B entitled **Procedural Regulations** contains Section 3.00 *Procedures*. Section 3.00 contains all administrative procedures associated with issuance or denial of permits, and administration of the regulations.

Part C

Part C entitled **General Criteria and Methods for Sewage Handling and Disposal** contains Sections 4.00 through 7.00 which are entitled *Evaluation Criteria for Subsurface Soil Absorption Systems*, *Pump and Haul of Sewage*, *Sewage Handling and Installation of Residential Sewage Disposal Systems in Political Subdivisions Having Soil Drainage Management Contracts* *With The State Health Department* respectively. Deviation from the criteria and procedures contained in Parts A, B and C require a variance issued by the State Health Commissioner.

Part D

Part D entitled **Design and Construction Criteria** contains Sections 8.00 through 18.00 which are entitled *General Requirements*, *Building Sewers*, *Pre-Treatment Systems*, *Conveyance Systems*, *Subsurface Soil Absorption Systems*, *Privies*, *Storage Facilities Criteria For Pump & Haul of Sewage*, *Vehicle Specifications for Sewage Handling*, *Anaerobic Lagooning of Septage*, *Sewage Dump Stations* and *Non-Public Drinking Water Supply Systems Utilized in Conjunction With On-Site Sewage Disposal* respectively. Part D contains all the detailed design and construction criteria. Minor deviations (exceptions) from the provisions of this part of the regulations may be authorized at the local level; however, a major deviation is subject to variance authorized by the Commissioner. **Part E** is the **Appendix**.

Part E

Requirements for Systems (Sec. 1.07)
Building Permit (Code of Va. §32.1-165)

All places for human occupancy are required to have available, safe, adequate and proper sewage treatment and disposal. Therefore, before a building permit can be issued by the local building official, assurances must be given that an acceptable means of sewage treatment and disposal are available for the site.

Sewage Disposal Construction Permit Application (§3.13)
Filing the Application (§3.13)
Processing of the Application (§3.13 and/or 3.14, 3.15)
Discharging treated Sewage: State Water Control Board Permit (§1.03)

When an on-site sewage treatment and disposal facility is to be considered, an applicant must complete a permit application request for the facility. The application forms are available at all local health departments. The application form must be completed and filed by the applicant with the local health department in the jurisdiction where the construction is to take place. Processing will include evaluating the information submitted on the application and examining the site to determine if the soil on the property can be safely used to dispose of the wastewater that will be generated. In the event the application is for a sewage treatment plant with a discharge to state waters, the applicant will be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Control Board authorizing the discharge.

Issuing Sewage Disposal Construction Permits (§3.12; 3.13; 3.14 & 3.16)

If the site is acceptable and depending on the complexity of the system required, one of the following will occur; (1) the sanitarian may design the system and issue the construction permit (2) the applicant may be requested to submit additional information before the sanitarian can complete the design or (3) the applicant may be required to obtain the services of a licensed engineer to design the system. A permit, if issued, will be issued only to a single owner.

Individual drinking water supply systems requiring approval (§18.00)

Newly constructed nonpublic drinking water supply systems utilized in conjunction with on-site sewage disposal systems permitted under these regulations will not require a separate permit. However, they will be required to be constructed and approved by the local health department as outlined in the regulations before they can be placed in service.

**Type water supplies
requiring approval**
(§18.02; 18.03; 18.04)

Types of nonpublic water supplies that will require approval include wells, cisterns, and springs.

Conditional Permit
(§3.13.06)

Where the soil and site conditions meet the criteria established in the regulations conditional permits may be issued if the applicant can show that there will be reduced water flow, limitations on the number of persons to be served, intermittent or seasonal use of the facility, or temporary use of the system not to exceed one year. Conditional permits are required to be recorded and indexed in the grantee index in the land records of the Clerk of the Circuit Court.

**Exceptions to design
criteria** (§3.16.03)

Exceptions to the design criteria in Part D may be considered if the imposed condition(s) is not justified by the health consideration(s) upon which criteria are based and when repairing a failing system.

**Permits for
Experimental Systems**
(§3.25)

Application for a permit for experimental systems must be made through the local health department to the Bureau of Wastewater Engineering. After a thorough review of the method, process and/or equipment to be tested, the Bureau may recommend to the Commissioner that he issue an experimental permit.

**Variances to
Regulations** (§3.07)

A variance is a waiver to a specific regulation and can only be granted by the Commissioner. To be considered, the applicant must submit to the Commissioner, through the local health department, information to support his request for the variance. The variance request should cite that section of the regulation from which the variance is sought, its nature and duration, any analytical or test data supporting the variance request, an explanation of why the public health would be better served or not adversely impacted by the variance and any other information the applicant wishes to submit or that the department may require.

**Denial of Construction
Permits** (§3.17)

In the event a construction permit is denied, the applicant will receive a written explanation of the basis for denial of the permit.

**Voidance of
Construction Permits**
(§3.18.01)

Permits will be voided if the conditions change from those shown on the application or construction permit or if 12 months elapse from the time of issuance and no substantial construction has commenced.

**Revalidation of
Construction Permits**
(§3.18.01)

The local health department will revalidate a construction permit issued in accordance with these regulations if the application and site conditions remain unchanged.

**"Grandfathering" of
existing outdated
Permits** (§1.06)

Subdivision approvals granted in accordance with local ordinances *will not* be reevaluated as a result of these Regulations.

Evaluation of individual lots within an "approved" subdivision will be based upon the 1971 Regulations. However, since the 1971 Regulations do not address soils with percolation rates greater than 60 minutes per inch these Regulations will be used in their entirety for soils with percolation rates greater than 60 minutes per inch but less than or equal to 120 minutes per inch except that the reserve area requirement will be waived unless it was a preexisting local requirement.

Notice of Denial of a construction permit for a lot in an "approved" subdivision will be sent by registered mail return receipt requested to both the lot owner and the owner of record of the subdivision.

Previously issued permits will be honored if the permit has been properly issued and soil and site conditions are satisfactory. The Permit will not be reissued utilizing the criteria in these Regulations unless the Permit was not properly issued in accordance with the 1971 Regulations.

**Permit & Bonding
required to pump &
haul sewage** (§3.29)

Special permits are required to pump and haul sewage and/or construct a storage facility associated with the pumping and hauling of sewage. Bonding may be required as a prerequisite to issuance of a permit. Under certain circumstances the Department may consider permitting pumping and hauling of sewage as a

temporary means for disposing of sewage. (Facilities at marinas and other places where boats are moored are exempt from this section of the regulations since they are covered by other regulations governing sewage.)

Filing application for temporary pump & haul (§3.30)

Contract with sewage handling contractor required (§3.30; 3.30.04)

Concurrence of local political subdivision (§3.09)

Denial of pump and haul permit (§3.09)

Permit required for sewage handling (§3.12.02; 3.26)

Inspecting sewage handling equipment (§3.26.03)

Applicant who is non-owner of treatment works

Permit issuance for handling sewage (§3.27)

Permit constraints (§3.28)

Permit revoked or denied (§3.09; 3.28)

Inspection and approval of systems prior to use (§3.20)

Requirement for Construction Completion Statement from contractor and/or engineer (§3.21)

Issuance of Operation Permits (§3.22)

Systems installed but not approved (§3.20)

As with other requests for sewage disposal, the owner must file an application with the local health department where the proposal will be evaluated. In addition to the application, the owner must secure and maintain a contract with a sewage handling contractor having a valid Sewage Handling Permit. This must be filed and evaluated with the application. Also, before a permit can be issued, the concurrence of the local political subdivision representative will be required.

In the event a permit is denied, the local health department is obligated to give the applicant in writing the reasons for denying the permit. The same review process as previously addressed may be used by the applicant in seeking relief from a denial.

To acquire a Sewage Handling Permit, an individual will be required to demonstrate that he has an approved disposal site. Any person who removes or contracts to remove sewage from a holding facility (septic tank, vault privy etc.) must have a Sewage Handling Permit issued by the Commissioner. An application must be filed with the local or district health department in the area in which the handler will operate. No permit is required for the handling of sewage from a holding tank on a vehicle or vessel by the owner of such vehicle or vessel or the removal of screenings, sludges, grit, etc. from a sewage treatment plant by owner or employees of such treatment facilities since these are covered by separate regulations. When the application is filed, the Department's agent will arrange to inspect the equipment and approve of the disposal site(s). In the event the applicant is not the owner of the sewage system or treatment works then the applicant must append a statement to the application from the owner of the approved sewage system or treatment works stating that the applicant may discharge septage and/or sewage into the facility. The statement must contain the quantity per day of sewage that is permitted to be discharged as well as the point of discharge. Each disposal site shall be considered separately. When a permit is issued, it will be for a period not to exceed twelve months and may be revoked in the event a potential or real health hazard associated with the sewage handling operation occurs or should the conditions change from those shown on the application.

In the event a permit is revoked or denied, the local health department will give the owner in writing the reasons for the revocation or denial. The owner may seek relief from the revocation or denial by following the procedures used by the Department in reviewing a reapplication or processing an appeal.

Before any part of the system is put to use, it is necessary that the local health department inspect each part of the system to insure that it has been installed according to the construction permit and regulations.

Upon completion or modification of the system a signed statement from the system's contractor that the system is installed according to the construction permit and in compliance with Part D of the Regulations is required. In the event formal plans and specifications were required setting forth the design of the system, the department will require that the designing engineer submit a signed statement that the system is installed according to the approved plans and specifications.

If the system is constructed as specified by the permit and/or by the plans and specifications and upon receipt of completion(s) statement, the inspecting agent will prepare an operation permit. Upon receipt of the operation permit the owner may proceed to use the system. In the event the system is not approved, the agent will advise the applicant, or his agent, of those reasons why the installation was not approved and give written recommendations as to what must be done to acquire approval. Once the corrections are made and verified by inspection, the operation permit will be issued.

**Compliance with the
Administrative
Process Act (§3.10)**

Any applicant for a permit or any person whose permit has been revoked may seek relief from the denial of the permit or the revocation of the permit by appealing the local department's decision. The appeal procedure is in conformity with the Administrative Process Act, the first step of which consists of an informal hearing at the district health department in the locality where the permit/revocation took place. In the event of nonresolution, a formal hearing can be requested. The formal hearing shall be held by the Commissioner or his appointee. Judicial review may be requested of the Commissioner's decision.

**Subdivision plat
review**

Where local ordinances require the local health department to review subdivision plats for individual sewage disposal systems, the local health department shall require the subdivider to show as a minimum the location of the proposed on-site sewage disposal system and the reserve absorption area, if required; the location of the water supply system on each lot, if applicable and the specific soil information for each lot, as necessary (3.24).

Furthermore, the local health department may require such additional information as streets, utility line locations, contour interval, grading, etc., to assist them with their decision to approve or disapprove the subdivision plat.

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Part A

General Framework For Regulations

1.00 General Provisions

1.01 Authority for Regulations—Title 32.1, Chapter 6, of the Code of Virginia (1950), as amended, (See Appendix I) provides that the State Board of Health has the duty to protect the public health and to insure that all sewage is disposed of in a safe and sanitary manner. In order to discharge that duty, the Board is empowered to supervise and regulate the disposal of sewage within the state.

1.02 Purpose of Regulations—These regulations have been promulgated by the State Board of Health to:

- a. insure that all sewage is handled and disposed of in a safe and sanitary manner;
- b. guide the State Health Commissioner in his determination of whether a permit for handling or disposing of sewage should be issued or denied; and
- c. guide the owner in the requirements necessary to secure a permit for handling and disposing of sewage.

1.03 Relationship to Virginia Joint Sewerage Regulations—These Regulations are supplemental to the current Virginia Sewerage Regulations which were adopted jointly by the State Board of Health and the State Water Control Board pursuant to Section 62.1-44.19(8) of the Code of Virginia (1950), as amended. These Regulations address the handling and disposal of sewage not regulated by a Virginia National Pollutant Discharge Elimination System (NPDES) Permit.

1.04 Administration of Regulations—These Regulations are administered by the following:

1.04.01 State Board of Health—The State Board of Health, hereinafter referred to as Board, has the responsibility to promulgate, amend, and repeal regulations necessary to ensure the safe and sanitary handling and disposal of sewage.

1.04.02 State Health Commissioner—The State Health Commissioner, hereinafter referred to as Commissioner, is the chief executive officer of the State Department of Health. The Commissioner has the authority to act, within the scope of regulations promulgated by the Board, and for the Board when it is not in session. The Commissioner may delegate his powers under these Regulations with the exception of his power to issue variances under Section 32.1-12 of the Code and Section 3.07 of these Regulations, and his power to issue orders under Section 32.1-26 of the Code and Section 3.05.02 of these Regulations. The Commissioner has final authority to adjudicate contested decisions of subordinates delegated powers under this section prior to appeal of such decisions to the Circuit Court.

1.04.03 Bureau of Wastewater Engineering—The Bureau of Wastewater Engineering, hereinafter referred to as Bureau, of the State Department of Health, hereinafter referred to as Department, is designated as the primary agent of the Commissioner for the purpose of administering these Regulations.

1.04.04 District or Local Health Departments—The district or local health departments are responsible for implementing and enforcing the operational activities as required by these Regulations.

1.05 Sewage Handling and Disposal Advisory Committee—The Commissioner shall appoint a Sewage Handling and Disposal Advisory Committee consisting of sixteen (16) appointed members and three ex officio members. The Commissioner shall appoint to the Sewage Handling and Disposal Advisory Committee one individual each from the following: a member of the Virginia Society of Professional Engineers; a member of the Consulting Engineers Council of Virginia; a member of the Virginia Association of Professional Soil Scientists; a member of the Home Builders Association of Virginia; a member of the Virginia Association of Counties; a member of the Virginia Municipal League; a member of the Virginia Association of Realtors; a member of the Virginia Section American Institute of Professional Geologists; a member of the Virginia Association of Contractors, Inc; a member of the Virginia Well Drillers Association; a member of the Virginia Water Pollution Control Association; a

faculty member of a Virginia state university or college whose principal field of teaching is soil science; a member of the Virginia Environmental Health Association; a member of the Virginia Association of Surveyors and two citizens at large. Ex officio members shall consist of the Director, Bureau of Wastewater Engineering; who shall act as Chairman; Director, Division of Water Programs and the Director, Bureau of Applied Technology, State Water Control Board or their designees.

Initial terms of members shall be as follows: a member of the Virginia Society of Professional Engineers—1 year; a member of the Consulting Engineers Council of Virginia—1 year; a member of the Virginia Association of Professional Soil Scientists—1 year; a member of the Home Builders Association of Virginia—1 year; a member of Virginia Association of Counties—1 year; a member of the Virginia Municipal League—1 year; a member of the Virginia Section American Institute of Professional Geologists—1 year; a member of the Virginia Association of Realtors—2 years; a member of the Virginia Well Drillers Association—2 years; a member of the Virginia Water Pollution Control Association—2 years; a member of the Virginia Association of Contractors, Inc.—2 years; a member of the faculty of a Virginia State university or college—2 years; a member of the Virginia Environmental Health Association—2 years; a member of the Virginia Association of Surveyors—2 years; each citizen at large—2 years. Appointed members shall serve at the discretion of the Commissioner with subsequent terms being two years in duration. The Sewage Handling and Disposal Advisory Committee shall make recommendations to the Commissioner regarding sewage handling and disposal policies, procedures and programs of the Department. The Committee shall meet at least annually.

1.06 - Grandfather Clause—Subdivision plat approvals made in accordance with local subdivision ordinances by the local health department prior to the effective date of these Regulations shall be valid and conclusive regarding the general suitability of soils for installation of septic tanks. When application is made for a permit to install a sewage disposal system on any lot within the subdivision, and the Commissioner determines, based upon soils studies performed by him that the lot cannot satisfy the requirements of the Regulations of the Board of Health, Commonwealth of Virginia Governing the Disposal of Sewage, effective July 1, 1971, he may serve notice of that determination in the same manner as civil process is served upon the person in whose name the subdivision is recorded and upon the owner of record of the lot. Any such person may demand a hearing on the Commissioner's determination under the Administrative Process Act by filing a request therefor within thirty days after service of notice on him, or he may exercise any other right or remedy he may have within the time prescribed by law, and in any such administrative hearing or proceeding, the Commissioner shall have the burden of proof that the soils are not suitable. A sewage disposal system permit shall be required prior to installation of any sewage disposal system.

Sewage disposal system permits granted prior to the effective date of these Regulations shall be valid if site and soil conditions would not preclude the successful operation of the system.

1.07 Sewerage Systems and/or Treatment Works Required

- a. the discharge of untreated sewage onto the land or into the waters of the Commonwealth is prohibited;
- b. no owner, person, or occupant shall discharge treated or untreated sewage onto the land, into the soil or into the waters of the Commonwealth without a valid permit from the Commissioner or, as appropriate, a certificate issued by the State Water Control Board in accordance with Title 62.1, Chapter 3.1, Code of Virginia as amended;
- c. all buildings, residences, and structures designed for human occupancy, employment or habitation and other places where humans congregate shall be served by an approved sewerage system and/or treatment works. An approved sewerage system or treatment works is a system for which a certificate to operate has been issued jointly by the Department and State Water Control Board or a system which has been issued a separate permit by the Commissioner.

1.08 Severability—If any provision of these Regulations or the application thereof to any person, owner or circumstance is held to be invalid, such invalidity shall not affect other provisions or application of any other part of these Regulations which can be given effect without the invalid provisions of application, and to this end the provisions of these Regulations and the various applications thereof are declared to be severable.

1.09 Right of Entry—The Commissioner or his designee shall have the right to enter any property to insure compliance with these Regulations in accordance with the provisions of Section 32.1-25 Code of Virginia (1950) as amended.

2.00 Definitions

2.01 General—The definitions contained herein will be observed unless specified otherwise in the text of these Regulations.

2.02 Definitions

- a. **Agent**—means a legally authorized representative of the owner.
- b. **Alluvial Soil**—means a soil developing from recently deposited alluvium and exhibiting essentially no horizon development or modification of the recently deposited materials.
- c. **Alluvium**—means mineral materials, either weathered or unweathered, that are transported by flowing water and deposited or redeposited in a flood-plain or marine terrace.
- d. **Aquifer**—means water-bearing portion of a geologic formation that transmits water.
- e. **Colluvial Soil**—means a soil developing from recently deposited colluvium and exhibiting essentially no horizon development or modification of the recently deposited materials.
- f. **Colluvium**—means an accumulation of soil material, or a mixture of stone fragments and soil material, deposited at the base of slopes or in depressional areas, primarily by gravity.
- g. **Commissioner**—means the State Health Commissioner or his subordinate who has been delegated powers in accordance with section 1.04.02 of these Regulations.
- h. **District Health Department**—means a consolidation of local health departments as authorized in Title 32.1 section 32.1-31c as amended. (See Appendix I)
- i. **Existing Construction** (With failing sewage disposal systems)—means an existing structure where the sewage disposal system serving the structure has failed or is currently in violation of state law or regulations and requires correction.
- j. **Gray Color**—means chroma-2 or less on the Munsell Color Chart.
- k. **Local Health Department**—means a branch of the State Health Department established in each city and county in accordance with Title 32.1 Section 32.1-30 as amended (See Appendix I).
- l. **New Construction**—means construction of a building for which a building permit is required.
- m. **Owner**—means the Commonwealth or any of its political subdivisions, including sanitary districts, sanitation district commissions and authorities, any individual, any group of individuals acting individually or as a group, or any public or private institution, corporation, company, partnership, firm or association which owns or proposes to own a sewerage system or treatment works.
- n. **Person**—means an individual, corporation, partnership, association or any other legal entity.
- o. **Pump and Haul**—means an unusual circumstance wherein sewage is permitted to be transported by vehicle to a point of disposal. The term pump and haul includes all facilities and appurtenances necessary to collect and store the sewage for handling by a contractor having a valid sewage handling permit.
- p. **Septage**—means material accumulated in a pretreatment system (see Section 10.01) or privy.
- q. **Sewage**—means water carried and nonwater carried human excrement, kitchen, laundry, shower, bath or lavatory wastes together with such underground, surface, storm and other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.
- r. **Sewage Disposal System**—means a sewerage system or treatment works designed not to result in a point source discharge.

s. **Sewage Handling**—means the vehicular conveyance of sewage (See Transportation 32.1-163.5 in Appendix I).

t. **Sewerage System**—means pipe lines or conduits, pumping stations and force mains and all other construction, devices and appliances appurtenant thereto, used for the collection and conveyance of sewage to a treatment works or point of ultimate disposal.

u. **Shrink-Swell Soils**—means soils with horizons that contain montmorillonite and other clays that excessively shrink upon drying and swell upon wetting.

v. **Sink Hole**—means a depression in the topography without a surface outlet for drainage from the low point. Sink holes are common in areas containing limestone and generally result from the collapse of solution cavities.

w. **Soil Horizon**—means a layer of soil or soil material approximately parallel to the land surface and differing from adjacent genetically related layers in physical, chemical, and biological properties or characteristics such as color, structure, texture, consistency, kinds and numbers of organisms present, degree of acidity or alkalinity, etc.

x. **Subdivision**—means multiple building lots derived from a parcel(s) of land.

y. **Subsurface Soil Absorption**—means a process which utilizes the soil to treat and dispose of effluent from a treatment works. (Also see Subsurface Drainfields Appendix I, Section 32.1-163.4)

z. **Treatment Works**—means any device or system used in the storage, treatment, disposal, or reclamation of sewage and industrial wastes, including but not limited to pumping, power and other equipment and appurtenances, septic tanks and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for ultimate disposal of residues or effluent resulting from such treatment.

Part B
Procedural Regulations

3.00 Procedures

3.01 Compliance with General Administrative Process Act—The provisions of the Virginia Administrative Process Act, Title 9, Chapter 1.1:1 of the Code of Virginia (1950), as amended, shall govern the promulgation and administration of these Regulations and shall be applicable to the appeal of any case decision based upon these Regulations.

3.02 Powers and Procedures of Regulations not Exclusive—The Commissioner may enforce these Regulations through any means lawfully available.

3.03 Effective Date of Regulations—The effective date of these Regulations is November 1, 1982, except as noted in 3.03. a and b below.

a. The effective date for those parts of sections or the sections of the Regulations pertaining to the requirements for a sewage handling permit is January 1, 1983.

b. The effective date for those parts of sections, or the sections of the Regulations pertaining to the requirements for an approved disposal site for the handling and treatment of septage is January 1, 1984.

3.04 Emergency Order or Rule—If an emergency exists the Commissioner may issue an emergency order or rule as is necessary for preservation of public health, safety, and welfare. The emergency order or rule shall state the reasons and precise factual basis upon which the emergency rule or order is issued. The emergency order or rule shall state the time period for which it is effective.

3.05 Enforcement Regulations—All sewage handling and disposal facilities shall be constructed and operated in compliance with the requirements as set forth in these Regulations.

3.05.01 Notice—Subject to the exceptions indicated below whenever the Commissioner, the Bureau or the district or local health department has reason to believe a violation of any of these Regulations has occurred or is occurring, the alleged violator shall be notified. Such notice shall be made in writing, shall be delivered personally or sent by certified mail, shall cite the regulation or regulations that are allegedly being violated, shall state the facts which form the basis for believing the violation has occurred or is occurring, shall include a request for specific action by the recipient by a specified time and shall state the penalties associated with such violation (See Appendix I). When the Commissioner deems it necessary he may initiate criminal prosecution or seek civil relief through mandamus or injunctive relief prior to giving notice.

3.05.02 Orders—Pursuant to the authority granted in Section 32.1-26 of the Code of Virginia (1950) as amended, the Commissioner may issue orders to require any owner to comply with the provisions of these Regulations. The order shall be signed by the Commissioner and may require:

- a. the immediate cessation and/or correction of the violation;
- b. the acquisition or use of additional land, equipment, supplier or personnel to insure that the violation does not recur;
- c. the submission of a plan to prevent future violations to the Bureau for review and approval;
- d. the submission of an application for a variance; and
- e. any other corrective action deemed necessary for proper compliance with the Regulations.

3.05.03 Hearing Before the Issuance of an Order—Before the issuance of an order described in Section 3.05.02, a hearing must be held, with at least 30 days notice to the affected owner of the time, place and purpose thereof, for the purpose of adjudicating the alleged violation or violations of these Regulations. The procedures at the hearing shall be in accordance with Subsection 3.08.02 of the Regulations and with Section 9-6.14:10 through 9-6.14:12 of Title 9, Chapter 1.1:1 of the Code of Virginia (1950), as amended.

3.05.04 Order—When Effective—All orders shall become effective not less than 15 days after mailing a copy thereof by certified mail to the last known address of the owner violating these Regulations. Violation of an order is a misdemeanor. See Section 32.1-27 Code of Virginia (1950), as amended (Appendix I).

3.05.05 Compliance with Effective Orders—The Commissioner may enforce all orders. Should any owner fail to comply with any order, the Commissioner may:

- a. apply to an appropriate court for an injunction or other legal process to prevent or stop any practice in violation of the order;
- b. seek mandamus against any owner that is a municipal corporation;
- c. request the Attorney General to bring an action for civil penalty;
- d. request the Commonwealth Attorney to bring a criminal action.

3.05.06 Not Exclusive Means of Enforcement—Nothing contained in Section 3.05 shall be interpreted to require the Commissioner to issue an order prior to seeking enforcement of any regulations or statute through an injunction, mandamus or criminal prosecution.

3.06 Suspension of Regulations During Disasters—If in the case of a man-made or natural disaster, the Commissioner finds that certain regulations cannot be complied with and that the public health is better served by not fully complying with these Regulations, he may authorize the Bureau to suspend the application of the Regulations for specifically affected localities and institute a provisional regulatory plan until the disaster is abated.

3.07 Variances—Only the Commissioner may grant a variance (see Section 32.1-12 Code of Virginia (1950), as amended and Section 1.04.02 of these Regulations) to these Regulations, however, minor deviations to the criteria contained in Part D may be granted in accordance with Section 3.16.03. The Commissioner shall follow the appropriate procedures set forth in this subsection in granting a variance.

3.07.01 Definition of a variance—A variance is a conditioned waiver of a specific regulation which is granted to a specific owner relating to a specific situation or facility and may be for a specified time period.

3.07.02 Requirements for a variance—The Commissioner may grant a variance if a thorough investigation reveals that the hardship imposed (may be economic) by these regulations outweighs the benefits that may be received by the public and that the granting of such a variance does not subject the public to unreasonable health risks.

3.07.03 Application for a variance—Any owner who seeks a variance shall apply in writing for a variance. The application shall be sent to the appropriate district or local health department for review and forwarding to the Bureau and the Commissioner. The application shall include:

- a. a citation to the regulation from which a variance is requested;
- b. the nature and duration of the variance requested;
- c. any relevant analytical results including results of relevant tests conducted pursuant to the requirements of these Regulations;
- d. a statement of reasons why the public health and welfare would be better served if the variance were granted;
- e. suggested conditions that might be imposed on the granting of a variance that would limit the detrimental impact on the public health and welfare;
- f. other information, if any, believed pertinent by the applicant; and
- g. such other information as the local health department or Bureau may require.

3.07.04 Evaluation of a Variance Application

- a. The Commissioner shall act on any variance request submitted pursuant to subsection 3.07.03 within sixty calendar (60) days of receipt of request.

b. In the Commissioner's evaluation of a variance application the Commissioner shall consider the following factors:

1. the effect that such a variance would have on the operation of the sewage handling or disposal facility;
2. the cost and other economic considerations imposed by this requirement;
3. the effect that such a variance would have on protection of the public health; and
4. such other factors as the Commissioner may deem appropriate.

3.07.05 Disposition of a Variance Request

a. The Commissioner may reject any application for a variance by sending a rejection notice to the applicant. The rejection notice shall be in writing and shall state reasons for the rejection. The applicant may petition for a hearing, within 30 calendar days, to challenge the rejection pursuant to Section 3.08.

b. If the Commissioner proposes to grant a variance request submitted pursuant to subsection 3.07.03 the applicant shall be notified in writing of this decision. Such notice shall identify the variance, sewage handling or disposal facility covered, and shall specify the period of time for which the variance will be effective. The effective date of a variance shall be fifteen (15) calendar days following its issuance.

c. No owner may challenge the terms set forth in the variance after 30 calendar days have elapsed from the date of issuance.

3.07.06 Posting of variances—All variances granted to any sewage handling or disposal facility are nontransferable. Each variance shall be attached to the permit to which it is granted. Each variance is revoked when the permit to which it is attached is revoked.

3.08 Hearing types—Hearings before the Board, Commissioner or the Commissioner's designees shall include any of the following forms depending on the nature of the controversy and the interests of the parties involved.

3.08.01 Informal Hearings—An informal hearing is a meeting with the district or local health department. The district or local health department may consider all evidence presented at the meeting which is relevant to the issue and controversy. Presentation of evidence, however, is entirely voluntary. The district or local health department shall have no subpoena power. No verbatim record need be taken at the informal hearing but the local or district health department shall make preliminary findings of fact and it shall submit a copy of those preliminary findings with its recommendation to the Commissioner and the Bureau for their review upon their request.

3.08.02 Adjudicatory Hearing—The adjudicatory hearing is a formal, public adjudicatory proceeding before the Commissioner or his designee and held in conformance with section 9-6.14:12 of the Code of Virginia. An adjudicatory hearing includes the following features:

a. **Notice**—Notice which states the time and place and the issues involved in the prospective hearing shall be sent to the owner who is the subject of the hearing. Notice shall be sent at least fifteen (15) calendar days before the hearing is to take place.

b. **Record**—A record of the hearing may be recorded by a court reporter. A copy of the transcript of the hearing, if transcribed, will be provided within a reasonable time to any person upon written request and payment of the cost.

c. **Evidence**—All interested parties may attend the hearing and submit oral and documentary evidence and rebuttal proofs, expert or otherwise, that is material and relevant to the issues in controversy. The admissibility of evidence shall be determined in accordance with Section 9-6.14:12 of Chapter 1.1:1, Title 9, Code of Virginia (1950), as amended.

d. **Counsel**—All parties may be accompanied by and represented by counsel and are entitled to conduct such cross-examination as may elicit a full and fair disclosure of the facts.

e. **Subpoena**—Pursuant to Section 9-6.14:13 of the Code, the Commissioner may issue subpoenas on behalf of himself or any person or owner for the attendance of witnesses and the production of books, papers or maps. Failure to appear or to testify or to produce documents without adequate excuse shall be reported by the Commissioner to the Circuit Court of the City of Richmond for an appropriate enforcement action.

f. **Judgment and Final Order**—At the closure of the presentation of the evidence the Commissioner will enter judgment on the issue in controversy. The judgment shall be reduced to writing and will contain the explicit findings of fact upon which his decision is based. Certified copies of the order of judgment shall be delivered to the owner affected by it. Notice of a final judgment will be served upon the parties and become a part of the record. Service may be by personal service or certified mail return receipt requested.

3.09 Request for Hearing—The Commissioner or any person or owner injured by alleged violation of these Regulations may request a hearing of one of the types listed above by sending the request in writing to the district or local health department. The request for hearing shall cite the reason(s) for the hearing request and shall cite the section(s) of these Regulations involved.

3.10 Hearing as a Matter of Right—Any person or owner whose rights, duties, or privileges have been, or may be affected by any decision of the Board or its subordinates in the administration of these Regulations shall have a right to both informal and adjudicatory hearings. The Commissioner may require participation in an informal hearing before granting the request for a full adjudicatory hearing.

3.10.01 Exception—No person other than an owner shall have the right to an adjudicatory hearing to challenge the issuance of either a Construction Permit or Operation Permit unless the person can demonstrate at an informal hearing that the minimum standards contained in these Regulations have not been applied and that he will be injured in some manner by the issuance of the permit.

3.11 Appeal—Pursuant to the Administrative Process Act Section 9-6.14:1 et seq, an aggrieved owner may appeal a final decision of the Commissioner to an appropriate circuit court.

3.12 Permits—General—No person or owner shall construct, operate, expand, or modify a sewage disposal or handling system without a written permit from the Commissioner.

3.12.01 Sewage Disposal Permits—No person or owner shall cause or allow the construction, expansion or modification of a sewage disposal system without a written construction permit from the Commissioner which authorizes the construction or modifications. Furthermore, no person or owner shall cause or permit any sewage disposal system constructed after the effective date of these Regulations to be operated without a written operation permit issued by the Commissioner which authorizes the operation of the sewage disposal system, and/or nonpublic drinking water system (see section 3.22). Conditions may be imposed on the issuance of any permit and no sewage disposal system shall be constructed, modified or operated in violation of these conditions.

3.12.02 Sewage Handling Permits—Any person who removes or contracts to remove and transport by vehicle the contents of any septic tank, sewage treatment plant, privy, holding tank, portable toilet, or any sewage septage or sewage sludges from any other device shall be deemed an owner and shall have a written sewage handling permit issued by the Commissioner.

Exception—No such permit is required for the handling of sewage from (1) a holding tank on a vehicle or vessel by the owner of such vehicle or vessel or (2) the removal of screenings, sludges, grit, etc. from a sewage treatment plant by the owner or employees of such sewage treatment facilities.

3.13 Procedures for Obtaining a Construction Permit for a Sewage Disposal System

Construction permits are issued by the Commissioner but all requests for a sewage disposal construction permit shall be directed initially to the district or local health department.

a. **Type I**—A Type I sewage disposal system is an individual sewage disposal system incorporating a septic tank and subsurface soil absorption (septic tank-subsurface drainfield) serving a single residence. The submission of an application is all that is normally necessary to initiate the procedure for obtaining a permit under this subsection. If after a site investigation, it is determined that pumping, enhanced flow distribution (See Section 12.04.01) or low pressure distribution (See Section 12.05) is necessary, the system shall be considered a Type II system.

b. **Type II**—A Type II sewage disposal system is a sewage disposal system incorporating a septic tank and subsurface soil absorption system which serves a commercial or other establishment, more than a single family dwelling unit, or where pumping, enhanced flow distribution (See Section 12.04.01) or low pressure distribution (See Section 12.05) is necessary. The procedure for obtaining a permit includes the following steps:

1. the submission of an application;
2. a preliminary conference as necessary; and
3. the submission of informal plans, specifications, design criteria, and other data, as may be required by the district or local health department. Depending on the size and complexity of the system, the submission of formal plans and specifications may be required.

c. **Type III**—Type III sewage disposal system is a sewage disposal system other than a septic tank subsurface soil absorption system or a privy. The procedure for obtaining a permit under this subsection includes the following steps:

1. the submission of an application;
2. a preliminary conference; and
3. the submission of formal plans, specifications and design criteria. Other supporting data may be required on a case by case basis.

d. **Type IV—Privies**—The submission of an application is all that is normally necessary to initiate the procedure for obtaining a permit under this section.

3.13.01 Application—All applications for any type sewage disposal system shall be made on a standard state application form provided by the district or local health department. A copy of this application form can be found in Appendix II.

3.13.02 Preliminary Conference—A preliminary conference with the district or local health department will be held for Type II and Type III systems. At such conference the owner and/or his agent shall be prepared to set forth the sewage disposal problems and the proposed solution in such a manner to support his conclusions and recommendations.

3.13.03 Formal Plans

a. All formal plans for sewage disposal systems shall bear a suitable title showing the name of the owner and shall show the scale in feet, a graphical scale, the north point, date, and the name of the licensed professional engineer by or under whom prepared. The cover sheet and each plan sheet shall bear the same general title identifying the overall sewage disposal project and each shall be numbered. Appropriate subtitles should be included on the individual sheets.

The plans shall be clear and legible. They shall be drawn to a scale which will permit all necessary information to be plainly shown. The size of the plans should be no larger than 30 inches by 48 inches. Datum used should be indicated. Location, when made, shall be shown on the plans. Logs of test borings shall be given either on plans or in the specifications.

Detailed plans shall consist of plan views, elevations, sections, and supplementary views which together with the specifications and general layouts provide the working information for the contract and construction of the work, including dimensions and relative elevations of structures, the location and outline form of equipment, the location and size of piping, water levels, ground elevations, and erosion control abatement facilities.

b. **Geographical and Other Features**—Topography, elevations (contour lines), existing or proposed streets and all bodies of water, ditches, buildings, springs, cisterns and wells within 100 feet horizontally of the proposed sewage disposal system site and/or well, and all property lines shall be clearly shown.

c. **General Layout**—The general layout shall show the following:

1. test borings, groundwater elevation (if observed), and soil profiles;
2. size and location of sewage disposal systems;
3. schematic flow diagram showing the flow through the various disposal system units;
4. piping; and
5. hydraulic profile showing the flow of sewage.

d. **Detailed Plans**—Detailed plans shall show the following:

1. location, dimensions and elevations of existing or proposed system facilities;
2. pertinent data concerning the rated capacity of pumps, blowers, motors, and other mechanical devices. All or part of such data may be included in the specifications by suitable reference on the plans;
3. average and maximum hydraulic flow in profile; and
4. adequate description of any features not otherwise covered by the specifications.

3.13.04 Formal Specifications—Complete technical specifications for the construction of the sewage disposal system and all appurtenances shall accompany the plans. The specifications accompanying construction drawings shall include, but not be limited to all construction information not shown on the drawings, which is necessary to inform the builder in detail of the design requirements as to the quality of material, workmanship and fabrication of the project, type, size, strength, operating characteristics, and rating of equipment; allowable infiltration, machinery, valves, piping, and jointing of pipe, electrical apparatus, wiring and meters; operating tools and construction materials; special filter materials such as stone, sand, gravel or slag; miscellaneous appurtenances; chemicals when used; instructions for testing materials and equipment as necessary to meet design standards and operating test for the complete works and component units.

3.13.05 Special Requirements for Certain Sewage Disposal Systems—A Construction Permit for a single sewage disposal system proposed to serve a dwelling unit with multiple living units, multiple dwelling units or multiple lots with dwelling units shall be issued only to a single owner. The owner shall provide legal documentation to insure operation and the maintenance of the system for the expected life of the living units or dwellings.

3.13.06 Construction Permit with Conditions

a. **Definition:** Conditional construction permit means a permit authorizing the installation of a septic tank subsurface soil absorption system which does not fully conform to the criteria in Part D of these Regulations pertaining to septic tank size, subsurface soil absorption system size and certain groundwater table conditions as indicated by soil evaluation, but which, under the conditions to which the permit is subject, can be reasonably expected to function without danger to public health.

b. The purpose of this section is to allow for the issuance of conditional construction permits. Procedures for obtaining a conditional construction permit are the same as those contained in section 3.13a,b,c and d.

c. Conditional construction permits may be issued for any one or more of the following use conditions when satisfactory substantiation is provided by the applicant:

1. reduced water flow based on permanent water saving plumbing devices;
2. limitations on the number of persons occupying the dwelling or using the facility served by the proposed septic tank system;
3. intermittent or seasonal use of the dwelling or facility served by the septic tank system; and
4. temporary use of the septic tank system for a specified time period not to exceed one year. Such permits may be renewable when the Commissioner determines there is good cause for renewal.

d. **Criteria**

1. the septic tank and/or drainfield size may be reduced based on the use conditions contained in c 1, 2, 3 or 4 above.

2. in areas with seasonal fluctuating water table(s), where the seasonally high water table would cause failure if the system were to be used continuously, septic tank systems may be installed when the period of use of the septic tank system coincides with the period when the groundwater table, as indicated by free water, is at its lowest level. Acceptable separation distances to free standing groundwater shall be as follows:

**Separation Distance from Trench Bottom
to Free Standing Water**

Percolation Rate Minutes/Inch	Distance From Trench Bottom Inches
5	2
17	3
46	12
90	18
120	20

3. because of the increased risk of failure, a conditional permit shall not be issued in an area with a seasonally fluctuating water table if the proposed absorption area is within 200 feet of a shellfish growing area, recreational waters or a public water supply impoundment.

e. The district or local health department shall affix to the conditional construction permit a clear and concise statement relating the conditions and circumstances which formed the basis for issuing the conditional permit as well as the owner's obligations under the permit.

f. The holder of any conditional construction permit shall have the permit recorded and indexed in the grantee index under the holder's name in the land records of the Clerk of the Circuit Court having jurisdiction over the site of the septic tank system. District or local health departments shall be provided with certification that the conditional septic tank system permit has been recorded in the land records of the Circuit Court. The conditional permit shall become effective one day after the district or local health department receives notification of recordation. The district or local health department shall advise the local building official that conditional septic tank system permits are not valid without certification that the permits have been properly recorded as required and shall forthwith notify the local building official when the conditional permit becomes effective. Final approval of the construction of the septic tank subsurface soil absorption system shall not be given until or unless the system is constructed in accordance with the conditions of the permit. The Operation Permit shall be issued in accordance with subsection 3.22.

g. As per 32.1-164.1 of the Code of Virginia, the holder of the permit and any subsequent holders of the permit shall be bound by the conditions stated in the permit unless the holder or subsequent holder obtains an additional permit for modification or alteration of the septic tank system to meet any new use conditions.

3.14 Requirements for the Submission of Formal Plans, Specifications and Other Data

3.14.01 In accordance with the provisions of the Code of Virginia, Title 54, Chapter 3, Section 54-17.1 through 54-41 inclusive, all formal drawings, specifications, reports, and other documents submitted for approval shall be prepared by or under the supervision of a licensed professional engineer. The front cover of each set of drawings, of each copy of data and each copy of the specifications submitted shall bear the original imprint of the seal and signature of the licensed professional engineer by or under whom prepared. In addition each drawing submitted shall bear an imprint or a legible facsimile of such seal.

3.14.02 If revisions to the formal plans, specifications or documents are necessitated, a letter will be sent to the engineer outlining the revisions and requesting submission of the revised documents within thirty (30) calendar days.

3.15 Approval of Formal Plans-Final, complete and detailed plans and specifications submitted in accordance with the provisions of Section 3.13, 3.14 will be reviewed by the district or local health department and Bureau as soon as practicable upon receipt. Such plans will be approved if they demonstrate compliance with the design criteria set forth in Part D of these Regulations, and if the sewage disposal system will be able to function properly. A set of approved plans will be stamped by the Bureau and returned to the owner.

3.16 Issuance of the Construction Permit

3.16.01 A construction permit shall be issued by the Commissioner after approval of the application submitted under Section 3.13a and 3.13d and fulfilling the requirement contained in Section 8.05.05b if applicable. (See Appendix II for form)

3.16.02 A construction permit shall be issued by the Commissioner after approval of the application and plans and specifications submitted under Sections 3.13b, 3.13c and fulfilling the requirement contained in Section 8.05.05b if applicable. (See Appendix II for form)

3.16.03 Exception

a. if compliance with the design criteria of Part D imposes economic or other conditions that are not justified by the health considerations upon which the criteria are based, a construction permit may be issued for the disposal system design which substantially complies with the criteria set forth in Part D;

b. when issuing a construction permit for repair of an existing failing sewage disposal system for an occupied structure with indoor plumbing the criteria contained in Part D shall be complied with to the greatest extent possible. However, it is not necessary to substantially comply with all of the requirements in Part D with the exception of the set back distances for shellfish waters or drinking water wells unless the system is already closer in which case the corrected system shall not be closer than the existing system. All corrections must be of such a nature that they can reasonably be expected to reduce the risks to public health caused by the malfunctioning systems.

3.17 Denial of A Construction Permit

3.17.01 If it is determined that the proposed design is inadequate or that soil, geological or other conditions are such to preclude safe and proper operation of a proposed sewage disposal system or that the installation of the system would create an actual or potential health hazard or nuisance, the permit shall be denied and the owner shall be notified in writing of the basis for the denial. The notification shall also state that the owner has the right to appeal the denial.

3.17.02 Construction Permits may be denied for new construction to be served by a public water supply system which has reached its permitted capacity.

3.18 Voidance and Revalidation of Construction Permits With and Without Conditions

3.18.01 Null and Void—All construction permits are null and void when (a) conditions are changed from those shown on the application, (b) conditions are changed from those shown on the Construction Permit.

3.18.02 Revalidation—Construction permits shall be revalidated if more than twelve months have elapsed since issuance of the construction permit and construction has not commenced. The district or local health department shall revalidate the permit if the permit had been previously issued in accordance with these Regulations and the site conditions are the same as shown on the application and Construction Permit.

3.19 Revisions of Approved Plans—Any deviation from approved plans and specifications affecting capacity, hydraulic conditions, operating units or the functioning of the sewage disposal system must be approved by the Bureau before such changes are made. Revised plans and specifications shall be submitted in time to permit the review and approval of such plans and specifications before any construction work which will be affected by the changes is begun.

3.20 Inspection and Correction—No part of any installation shall be covered with earth or used until inspected, corrections made if necessary, and approved, by the district or local health department or unless expressly authorized by the district or local health department. Any part of an installation which has been covered prior to approval shall be uncovered, upon the direction of the district or local health department.

3.21 Statements Required Upon Completion of Construction

3.21.01 Statement From A Licensed Professional Engineer On A Project Where The Submission Of Formal Plans And Specifications Are Required—Upon completion of the construction or modifications of such sewage disposal system, the owner shall submit to the district or local health department a statement signed by a licensed professional engineer stating that the construction work was completed substantially in accordance with approved plans and specifications revised only in accordance with the provisions of Section 3.19. This statement shall be based upon inspections of the sewage disposal system during and after construction or modifications that are adequate to insure the accuracy of the statement. (See Appendix XIII)

3.21.02 Statement From The Sewage Disposal System Contractor—Upon completion of the construction or modification of a sewage disposal system, the owner shall submit to the district or local health department a statement signed by the contractor that the construction work was completed in accordance with the construction permit, and when appropriate the plans and specifications approved for the project and substantially in accordance with part D of these Regulations (See Appendix XIII).

3.22 Issuance of the Operation Permit—Upon satisfactory completion of the requirements of Sections 3.20 and 3.21 the Commissioner shall issue an Operation Permit. A copy of the Operation Permit form can be found in Appendix II. The issuance of an operation permit does not denote or imply any guarantee by the Department that the sewage disposal system will function for any specified period of time. It shall be the responsibility of the owner or any subsequent owner to maintain, repair or replace any sewage disposal system that ceases to operate as defined in the operation permit and in Section 3.23.

3.22.01 Exception—When a nonpublic drinking water system described in Section 18.00 is utilized in conjunction with an on-site sewage disposal system, the Operation Permit for the sewage disposal system shall not be issued until the drinking water system has been completed in accordance with Section 18.00.

3.23 Failure of A Sewage Disposal System—For the purpose of requiring correction of a malfunctioning sewage disposal system the presence of raw or partially treated sewage on the ground's surface or in adjacent ditches or waterways or exposure to insects, animals or humans is prima facie evidence of such system failure and is deemed a violation of these Regulations. Pollution of the groundwater or backup of sewage into plumbing fixtures may also indicate system failure.

3.24 Review of Subdivision Plats For Individual Sewage Disposal Systems When Required By Local Ordinance

3.24.01 The intent of this subsection is to insure that adequate information is supplied to the district or local health department to determine if any or all proposed lots contain a suitable area and reserve area for on-site sewage disposal systems prior to recordation of the subdivision plat. This section shall not be construed to restrict the Department in rendering preliminary opinions in accordance with local ordinances prior to recordation. The information requested herein is supplemental to the information which may be required by local subdivision ordinances.

3.24.02 A subdivision plat or a subsection of a subdivision plat submitted to the district or local health department for review of on-site sewage disposal systems shall show as a minimum the location of the proposed on-site sewage systems and the reserve absorption areas if required by section 8.06 for the on-site sewage disposal systems and the location of the water supply system on each lot, if applicable. Each plat or subsection of a subdivision plat shall be accompanied by specific soil information for each lot (absorption area and reserve area) in accordance with Section 4.00. If not provided by the local subdivision ordinance, the district or local health department may require the plat to show streets, utilities, storm drainage, water supplies, easements, lot lines and original topographic contour lines by detail survey or other information as required. For suggested contour interval and scale see Appendix XII.

3.24.03 No Department employee shall sign or indicate approval for on-site sewage disposal systems on a subdivision plat or subsection of a subdivision plat for recordation until a sewage disposal site(s), including reserve area when required in accordance with section 8.06, has been identified, approved or disapproved and recorded on each lot of the subdivision plat on file with the district or local health department. The plat on file with the district or local health department shall be reconciled with the plat to be recorded. The recorded plat shall reference the plat on file with the Department. The signature of a Department employee on a recorded subdivision plat or subsection of a subdivision plat does not imply or connote that any lot(s) identified as approved shall be issued a sewage disposal construction permit unless all conditions and circumstances, such as but not limited to landscaping, contained in the original approval exist at the time of application for a sewage disposal construction permit.

3.24.04 Before building construction begins on a lot within the subdivision a valid individual sewage disposal construction permit shall be issued for that lot in accordance with Section 3.16.

3.25 Special Permits for Experimental Methods, Processes and Equipment

3.25.01 New Construction—Sewage treatment and disposal methods, processes, and equipment which (a) are not covered by criteria in Part D and which (b) in principle and/or application are new or unconventional are subject to a special permitting procedure in lieu of that set forth in Section 3.13. All applications for such processes, methods, and equipment shall be made to the Bureau through the district or local health department.

a. Submission of Data on Experimental Methods, Processes, and Equipment.

The policy of the Bureau is to encourage the development of any new methods, processes, and equipment which appear to have application for the treatment and disposal of sewage, however, new developments shall have been thoroughly tested in a full scale or representative pilot system utilizing this process and equipment. Results of this testing must be submitted to the Bureau. The testing required on new developments will generally follow these guidelines:

1. all procedures used in validating the process shall be conducted under the supervision of a licensed professional engineer experienced in the field of sanitary engineering, or by a testing firm acceptable to the Bureau;
2. the tests shall be performed under maximum design conditions and over extended periods of time in the geographical area of the proposed installation;

3. the data shall be from a continuous operation of a full scale or pilot installation treating or conveying the type of sewage to be handled;

4. flow measuring equipment shall be provided and total flow shall be recorded daily;

5. the minimum sampling and analysis program will be established by the Bureau in accordance with the process under investigation; and

6. all analyses will be made in accordance with the current edition of *Standard Methods for Examination of Water and Wastewater* or analytical methods approved by the Bureau.

b. Detailed plans must be submitted showing how in case of noncompliance, the method, equipment or process will be converted to or replaced with a proven system. In order to assure that funds are available to convert or replace the experimental method, equipment or process with a proven system, bonding or other assurances shall be provided. A proven system shall be a Type I, II or III system, a point source discharge system or connection to an existing approved sewerage system or treatment works. The application for the experimental system shall be accompanied by one of the following: an application for a National Pollution Discharge Elimination System (NPDES) permit, certification from the owner of the existing sewerage system or treatment works that connection is available or a valid Construction Permit for a Type I, II, or III system.

c. **Issuance of a Construction Permit**—After review of the plans and testing data by the Bureau and approval of a proven system (See 3.25.01b), the Commissioner shall issue a Construction Permit in accordance with the procedures of such in 3.13, if reasonably satisfied that the method, process, or equipment will provide satisfactory sewage disposal.

d. **Issuance of an Experimental Operation Permit**—Upon completion of construction or modification, a permit to operate for a definite period of time will be issued for the operation of the provisionally approved methods, processes and equipment. The number of experimental systems of similar design characteristics to be installed for an evaluation period shall be determined by the Bureau and where soil dependent systems are utilized the number shall be limited to not more than four (4) for each physiographic province (See Appendix XI). The provisional permit to operate shall require that (1) the evaluation period shall be a minimum of 18 months and no longer than 36 months and (2) the holder of the Experimental Operation Permit shall submit reports on operation during the evaluation period as required by the Bureau.

e. **Issuance of an Operation Permit**—The Commissioner shall issue an Operation permit upon expiration of the experimental permit if, on the basis of testing during that period, the Bureau finds that the experimental method, processes or equipment provides satisfactory sewage disposal. If these conditions are not met, then the Commissioner shall issue an order which will require the owner to alter the sewage disposal system in a manner that will enable the conditions to be met.

3.25.02 Existing Construction—Sewage treatment and disposal methods, processes and equipment which (a) are not covered by the criteria in Part D and which (b) in principle and/or application are new or unconventional may be utilized where a conventional sewage disposal system serving an occupied dwelling has failed and it is not possible to provide an alternate sewage disposal system having a discharge to state waters. The procedures for obtaining a permit for such systems shall generally follow those set forth in Section 3.25.01 with the following exceptions:

a. the detailed plans required need not show how in case of nonacceptance, the sewage disposal system will be converted to or replaced with a proven process nor are bonds or assurances required;

b. more than four permits for soil dependent experimental systems of similar design characteristics may be issued per physiographic province; and

c. if the disposal system fails to work satisfactorily on a year round basis, further correction to the system may be required.

3.25.03 Waiver of Issuance of an Experimental Operating Permit—Sewage treatment and disposal methods, processes and equipment which have been tested and have demonstrated operational competence, to the satisfaction of the Bureau, but are not covered by criteria in Part D, shall be waived from the requirements of Sections 3.25.01 and 3.25.02 and shall be subject to the requirements of Section 3.13. If the wastewater to be treated is substantially different in flow and/or characteristic from one which was used during testing, the Bureau shall require an Experimental Operating Permit be issued and further testing conducted until operational competence is demonstrated.

3.25.04 Issuance of Design and Construction Criteria—When sewage treatment and disposal methods, processes and/or equipment have demonstrated operational competence to the satisfaction of the Bureau, design and construction criteria shall be developed in Part D when deemed appropriate. The criteria shall include as a minimum the performance, monitoring and service requirements of the methods, processes and equipment.

3.26 Procedures for Obtaining a Sewage Handling Permit—Sewage handling permits are issued by the Commissioner (See Section 3.12.02). Applications for such permits shall be directed to the district or local health department. The procedure for obtaining sewage handling permits includes the following:

- a. application;
- b. conference;
- c. scheduling of equipment for initial inspection; and
- d. approval of disposal (site(s)).

3.26.01 Application—An application for a sewage handling permit shall be made to the local or district health department on a form provided by the Department (See Appendix III).

3.26.02 Conference—A conference will be held with the district or local department for the purpose of discussing the methods and equipment utilized in the handling of sewage.

3.26.03 Initial Equipment Inspection—The owner shall make arrangements with the district or local health department at a suitable time for inspecting the sewage handling equipment.

3.26.04 Approval of Disposal Site(s)—(a) Approved Sewerage System or Treatment Works—A system for which a certificate to operate has been issued jointly by the Department and State Water Control Board or a system which has been issued a separate permit by the Commissioner. When the applicant is not the owner of the approved sewerage system or treatment works, the applicant shall append a statement from the owner of the approved sewerage system or treatment works to the application stating that the applicant may discharge septage and/or sewage. The statement shall include the quantity per day and point of discharge as indicated on the application to the approved sewerage system or treatment works. (b) If the disposal site is not an approved sewerage system or treatment works, each disposal site shall be considered a special facility (See Section 6.03) and shall be inspected and approved or disapproved on a case by case basis by the district or local health department in accordance with Section 3.13c.

3.27 Issuance of Sewage Handling Permit—The Commissioner shall issue a sewage handling permit upon satisfactory completion of the procedures outlined in Section 3.26 and compliance with the criteria contained in Sections 6.00, 15.00 and 16.00.

3.28 Revocation of Sewage Handling Permits—(a) Each permit shall be for a time period not to exceed 12 months. (b) Each permit may be revoked when conditions are changed from those shown in the application. (c) Each permit may be revoked when there is a potential or real health hazard associated with the sewage handling operation.

3.29 Special Permits for Pump and Haul of Sewage—A special permit for a definite time period issued by the Commissioner is required for pump and haul. (see Section 5.00)

3.29.01 Exception

- a. No such special permit is required for pump and haul associated with pumpout facilities at marinas or other places where boats are moored which are authorized by the *Rules and Regulations Governing Sewerage and Sanitary Facilities at Marinas and Other Places Where Boats are Moored*.
- b. Where pump and haul is a maintenance requirement of an approved sewage disposal system such as pumping septage from a septic tank or periodic pumping of a holding privy, no such separate special permit is required.

3.30 Procedure For Obtaining a Pump and Haul Permit—An owner who seeks a pump and haul permit shall follow the following steps:

- a. application;
- b. conference;
- c. plans, specifications, and other data as may be required;
- d. securing a contract with a sewage handling contractor having a valid Sewage Handling Permit;
- e. submission of a detailed construction schedule for completion of the permanent receiving facilities; and
- f. bonding.

3.30.01 Application—An application shall be made through the district or local health department on a form provided by the Department. Application shall be made on the form described in Appendix IV.

3.30.02 Conference—A conference is necessary with the district or local health department for the purpose of discussing the reasons for pump and haul and the methods and equipment to be utilized in the pump and haul operation.

3.30.03 Plans and Specifications—Plans and Specifications in sufficient detail shall be provided, when required, to show the sewage collection and holding facilities. See Sections 3.13.03 and 3.13.04 for further details relating to plans and specifications.

3.30.04 Contract with a Sewage Handling Contractor—The owner shall secure and maintain a contract with a sewage handling contractor having a valid Sewage Handling Permit. The contract shall be for a period of time sufficient to complete the construction necessary to alleviate the need for pump and haul.

a. **Contract Conditions**—The contract shall contain as a minimum the following conditions:

- 1. duration of contract;
- 2. pumping schedule;
- 3. availability of equipment;
- 4. emergency response capability;
- 5. disposal site, including limitations, utilized by the contractor; and
- 6. the contractor shall maintain and submit records on a weekly basis to the owner and the Department. The records shall indicate the date, time and volume of each load, the disposal site(s) utilized and overflows or spillage.

3.30.05 Submission of Detailed Construction Schedules—A detailed construction schedule shall show as a minimum initial construction date and date of completion. Progress reports shall be submitted monthly.

3.30.06 Bonding—The Commissioner shall require any owner holding or applying for a permit issued pursuant to this section to post a bond with surety approved by the Commissioner for the purpose of insuring continuation of the pump and haul operation for the specified time period contained in the pump and haul permit. Such bond shall be forfeited if the owner ceases to continue the pump and haul operation before the need for pump and haul has been alleviated. The forfeited bond shall be expended as necessary to restore and maintain the pump and haul operation for the permitted time period. Forfeiture of the bond shall not relieve the permit holder of any other legal obligations set forth in these Regulations. No bond shall be required of a governmental entity holding a permit in accordance with section 5.05.

3.31 Issuance of a Construction Permit for Storage Facilities Associated with the Pump and Haul of Sewage—A construction permit shall be issued by the Commissioner after completion of the requirements contained in 3.30 and 14.00 (See Appendix IV).

3.32 Issuance of the Special Pump and Haul Permit—After concurrence of the local political subdivision and upon satisfactory completion of the requirements set forth in Sections 3.30, 3.31, 5.00 and 14.00, and if the Commissioner determines that issuance of the pump and haul permit is in the best interest of public health, a permit shall be issued.

e Handling and

4.00 Evaluation Criteria for Subsurface Soil Absorption Systems

4.01 General

Soil Evaluation for a subsurface soil absorption system shall follow a systematic approach including consideration of physiographic province, topography, available area, degree of slope, and soil profile (thickness of each horizon, color, permeability, and texture). Evaluations shall indicate whether or not the soil is suitable for the installation of a subsurface soil absorption system. The topography, available area, seasonal water table, drinking water supplies, bodies of water, shellfish growing areas, soil horizon, depth, rate of absorption, or combination of any of the above shall be considered in such evaluation. A percolation test may be required as a prerequisite to the issuance of a permit. When the district or local health department questions the estimated percolation rate, the district or local health department may require a percolation test. Percolation tests shall be analyzed as only one of many criteria in determining soil suitability for absorption of treated sewage.

4.02 Site and Structure Identification—A site plan (sketch) showing dimensions of property, proposed and/or existing structure(s), driveways, underground and overhead utilities on the property and adjacent sewage disposal systems, bodies of water, drainage ways, agricultural drain tile, wells, cisterns and springs for a minimum of 200 feet radius of the center of the proposed building or drainfield is necessary in order to evaluate the suitability of a subsurface soil absorption system for that site. In addition, for new construction, the boundary of the lot and building site shall be staked. As a minimum, prior to issuance of the construction permit the perimeter of the soil absorption area site(s) shall be shown on a copy of a surveyed plat of the property as well as staked on the property. When a parcel of land consisting of a single lot is involved on which an on-site sewage disposal system is proposed to be located and is not directly influenced by the off site location of any sewage disposal system, well, body of water, etc., the requirement for the surveyed plat may be waived by the district or local health department.

4.03 Physical Features

4.03.01 Marshes and Swamps—Placement of subsurface soil absorption systems on or in swamps and marshes is prohibited.

4.03.02 Slope—Subsurface soil absorption system shall not be placed on slopes greater than 50 percent unless terraced.

4.03.03 Drainage Ways

a. **Definition**—A drainage way is a concave portion of the landscape in which surface water or rain water run-off gathers intermittently to flow to a lower elevation.

b. **Placement**—Subsurface soil absorption systems shall not be placed at a position in a drainage way subject to intermittent flooding.

4.03.04 Fill Material—Fill material means soil transported and deposited by man as well as soil recently transported and deposited by natural erosion forces. Recent natural soil transportation and deposition is evidenced by one or more of the following:

no or indistinct soil horizons;

depositional stratification;

presence of a buried organic layer; and

position in the landscape.

Placement of subsurface soil absorption systems in fill material is normally prohibited. However, fill material consisting of colluvial soil derived from sandstone (noncarbonaceous) in the mountainous area may be considered on a case by case basis for placement of subsurface soil absorption systems.

4.03.05 Rock, Rock Outcroppings and Impervious Strata

- a. Separation distances to rock and impervious strata are contained in Table 12.1. The rock requirements pertain to continuous solid rock formations and outcroppings associated with the parent material and should not be confused with "stoniness".
- b. Rock is defined as any material that is continuous and cannot be penetrated with a hand auger or hand posthole digger.
- c. Impervious strata is defined as soil or soil materials with an estimated or measured percolation rate in excess of 120 minutes/inch.

4.03.06 Sink Holes—Placement of a subsurface soil absorption system at the low point of a sink hole is prohibited. For set back distance see table 12.1.

4.03.07 Flood Plains—Subsurface soil absorption systems shall not be placed in flood plains subject to annual or more frequent sustained (24 hours) flooding.

4.03.08 Artificial Drainage—Where soils are artificially drained soil coloration may no longer be an accurate indicator of the position of the seasonal water table. Three types of artificial drainage systems which are generally considered follow:

- a. a water table depressor system is a system of buried conduits i.e., agricultural drain tile;
- b. a lateral groundwater movement interceptor is a buried conduit for the purpose of intercepting lateral groundwater movement i.e., a French drain;
- c. open ditches with the bottom elevation of the ditch below the seasonal water table.

4.03.09 Setback Distances—Minimum setback distance between subsurface soil absorption systems and various structures and topographical features may be found in Part D, Table 12.1.

4.04 Soil Profiles and Patterns

4.04.01 General—The purpose of determining the soil profiles and patterns is to identify the soil characteristics that affect installation of a subsurface soil absorption system.

4.04.02 Soil Profile—A soil profile is a vertical section of the soil throughout all its horizons.

4.04.03 Profile Holes

a. Acceptable Equipment

1. **Auger**—An auger is defined as a mechanical device which is used to remove a soil sample for evaluation. Devices utilizing the Archimedes screw principle are prohibited because they blend and mask the true soil characteristics.

2. **Other Equipment**—Other equipment may be used in addition to an auger to expose the soil profile as long as it does not mask or blend the true soil characteristics.

b. **General Location of Profile Holes**—Profile holes to determine design requirements shall be located in the area that is unrestricted by the criteria contained in Section 4.03 and Table 12.1. Additional profile holes outside the unrestricted area may be required to make a complete evaluation of the site.

c. **Depth of Profile Hole**—The minimum depth of the profile hole shall be five feet unless prevented or made unnecessary by some physical feature of the soil such as gray coloration, rock or when a potential horizon is found at a lesser depth. Where a potential soil horizon is considered for use, the soil evaluation shall be extended below the potential horizon to insure that there is no interference with seasonal water table, rock or impervious strata (See Section 12.00 and Table 12.1).

d. **Number and Location of Profile Holes**—A minimum of five (5) holes are necessary to determine the design requirements of an area for the placement of any absorption trenches, except where there is uniform topography and the profile holes exhibit a uniform profile a minimum of three (3) holes are necessary. The size of the area investigated shall be based on the soil texture group encountered. As a minimum, holes shall be evenly placed to bound the

area under consideration with one hole installed in the center; where three holes are utilized they shall be representative of the area. If more than one area is required in which to install the absorption trenches each area shall be evaluated as described above. If any proposed absorption trench site is found unacceptable due to soil conditions the site shall have been evaluated with a minimum of three (3) holes which characterize the soil problem(s) and support the reasons for rejection. The actual area and number of holes to be investigated shall be determined on a case by case basis.

e. In situations where a large area is to be evaluated, where the soil is highly variable, where the profile must be exposed below five (5) feet or where the soil is "tight" (dense or compact) and/or rocky the district or local health department may require that the owner have the soil profile in selected areas exposed by the digging of trenches, auger holes or pits. The actual area and number of holes to be investigated shall be determined on a case by case basis.

4.04.04 Soil Profile Documentation—Soil profiles shall be determined and a record made in writing of each boring. Additional documentation may be required by the district or local health department. (See Appendix V).

4.05 Characteristics of Soils that Determine Suitability

4.05.01 Color—Color is a key indication of the suitability of a soil.

- a. Red and yellow mottlings may indicate slow internal drainage and may indicate a seasonal water table.
- b. Gray and/or gray mottlings indicate seasonal water tables for at least three weeks duration.
- c. Black appearance may be due to organic matter which has accumulated due to poor soil drainage. Black may also be due to accumulations of manganese and other soil mineral elements which may be indicators of restricted drainage.

4.05.02 Texture—The term texture refers to the relative proportion of various size groups of individual soil grains in a mass of soil. Specifically it refers to the proportion of sand, silt, and clay.

a. **Soil Classification**—For the purpose of these Regulations soils have been categorized into four Groups based on texture as follows:

1. Texture Group I—sands, and loamy sand;
2. Texture Group II—sandy loam, loam, and sandy clay loam;
3. Texture Group III—silt loam, clay loam, silty clay loam; and
4. Texture Group IV—sandy clay, silty clay and clay

b. The soil texture shall be estimated by field testing. The field test that shall be applied is contained in Appendix VI and is entitled *Field Guide to Soil Texture Classes*. Laboratory estimation of texture by sieve and sedimentation analysis may be substituted for the field test at the owners request and expense. Samples shall be collected by the laboratory under supervision of the district or local health department.

4.05.03 Permeability—The term permeability pertains to the characteristics of the soil that enable water or air to move through its pores. The permeability of a soil profile may be limited by the presence of one nearly impermeable horizon, even though the others are permeable.

a. **Estimated rates**—The soil classifications contained in subsection 4.05.02a have been assigned the following estimated rates in minutes per inch for the purposes of design. These rates may be modified when experience has shown that because of soil structure the Texture Group has a demonstrated rate different from that assigned.

1. Texture Group I—up to 16;
2. Texture Group II—17 to 45;
3. Texture Group III—46 to 90; and
4. Texture Group IV—equal to or greater than 91

b. **Percolation Tests**—When the estimated percolation rates are in question percolation tests may be performed, however, the district or local health department may require percolation tests to determine “measured” percolation rates.

1. **Requirements**—Percolation tests are to be performed under the supervision of the district or local health department. Test holes shall be located at points and depths selected and/or approved by the district or local health department. A minimum of three holes representative of the absorption area are required. When the results of the individual test holes have a spread of more than 30 minutes/inch, five holes with at least one hole in the center of the proposed absorption area are required. Records of all percolation tests performed shall be attached to the application (See Appendix VII).

2. **Procedure**—All percolation tests shall be performed in accordance with the procedure contained in Appendix VII.

3. **Records**—Data on swelling, saturation and measurement of the percolation rate shall be recorded on forms provided by the district or local health department; examples of these forms are contained in Appendix VII.

4. **Interpretation of Percolation Test Results**—The absorption trench area shall be based on the average percolation rate measured in the test holes. The average percolation rate shall be computed by determining the percolation rate (minutes/inch) for each hole and averaging those values. When the percolation rate for an individual hole is in excess of 240 minutes/inch the area represented by the unsatisfactory percolation hole shall be retested and if the percolation rate is still in excess of 240 minutes/inch the absorption area shall be readjusted to eliminate the unsatisfactory area.

c. **Unsatisfactory Percolation Rate**—Soils having an estimated or measured percolation rate greater than 120 minutes per inch are unsatisfactory for installation of subsurface soil absorption systems.

4.05.04 Alluvial and Colluvial Deposits—Placement of subsurface soil absorption systems in alluvial and colluvial deposits with shallow depths, extended periods of saturation, or possible flooding is prohibited.

4.05.05 Soil Restrictions—A soil restriction is a feature in the soil that impedes the percolation of water. Restrictions generally consist of a layer or soil horizon within a soil that is firmly compacted or is very rich in clay. Soils containing restrictions may require verification of the percolation rate by percolation tests. In addition, soil restrictions in themselves may form the basis for outright rejection of the site. Examples of restrictions are listed below.

a. **Pans**—the term pans include hard pans, fragipans, clay pans, plowpans, traffic pans, iron pans and plinthic horizons.

b. **Stoniness**—The term stoniness pertains to the relative proportions of stones present in a soil. Stoniness reduces the soil volume for absorption and, therefore, may require a larger subsurface soil absorption field than would be indicated by soil texture or percolation tests.

4.05.06 Soil Concretions—Soil concretions are hard grains, pellets, or nodules from concentrations of compounds in the soil that cement the soil grains together. Concretions are indicative of slow percolation rates, restrictions, and/or seasonal water tables.

4.05.07 Free Standing Water—The presence of free standing water in a profile hole may be grounds for rejection of the site.

4.05.08 Shrink-Swell Soils—When soils containing horizons with shrink-swell characteristics (See definitions, Section 2.00) have been identified, they shall be rejected for use for subsurface soil absorption systems. Shrink-swell soils may exhibit satisfactory percolation rates when dry and therefore must be thoroughly wetted before a percolation test is performed.

4.06 Availability of Suitable Soils—Sufficient suitable soils shall be available to install the subsurface soil absorption system and reserve area. Design criteria for subsurface soil absorption systems are contained in Part D, Section 12.00 and reserve area requirements are contained in Section 8.06.

5.00 Pump and Haul of Sewage

5.01 General—Pump and haul pertains to an unusual circumstance wherein sewage is permitted to be transported by vehicle to a point of disposal. Pump and haul includes all facilities and appurtenances necessary to collect and store the sewage for handling by a contractor having a valid sewage handling permit.

5.02 Permanent Pumping and Hauling Prohibited—Pumping and hauling on a permanent basis is prohibited unless done under the auspices and supervision of a government entity as provided for in Section 5.05 below (See Section 3.29.01b for exception). Pumping and hauling for over one year shall be considered as a permanent pumping and hauling operation.

5.03 Emergency Pumping and Hauling—When serious malfunctioning of an existing sewage disposal system, sewerage system or treatment works occurs pumping and hauling may be authorized for a definite time period until the malfunctioning system can be reconstructed or repaired.

5.04 Temporary Pumping and Hauling—Temporary pumping and hauling may be permitted under the following conditions:

- a. it must be demonstrated that the temporary pumping and hauling of sewage is not the usual practice in order to permit premature and unplanned real estate or commercial development in an area where sewerage facilities do not exist;
- b. construction of an approved sewerage system and/or treatment works is actively in progress with personnel and machinery at work in the particular area, bonding, cash escrow or other assurances shall be required to guarantee completion of the sewerage system and/or treatment works;
- c. the completion of the sewerage system and/or, treatment works is assured and a completion date within the definition of temporary pumping and hauling has been set; and
- d. any and all delays from the anticipated completion date shall be reported immediately by the holder of the pump and haul permit to the district or local health department, delays not resulting from circumstances beyond the control of the holder of the pump and haul permit shall be grounds for revocation of the pump and haul permit.

5.05 Permanent Pump and Haul—Permanent pumping and hauling of sewage may be permitted under the following conditions:

- a. that the government entity enter into a contract with the Department setting forth that the government entity will provide pump and haul services, either directly or through a private contractor holding a sewage handling permit, to the home(s), commercial establishment(s) or occupied structure(s) for the period the occupied structure is utilized or until connection can be made to an approved sewerage facility;
- b. upon completion of the contract between the Department and the government entity the Commissioner shall issue a single pump and haul permit to the government entity, a separate construction permit shall be issued to the government entity for each sewage storage facility, the sewage storage facility(s) shall be designed and constructed in accordance with Section 14.00; and
- c. when the government entity provides the sewage pump and haul services it shall conform to the conditions contained in Sections 3.26 and 15.00.

Section 6.00 Sewage Handling

6.01 General—It is the obligation of every owner holding a valid sewage handling permit to assure that the sewage handled is transported and disposed in a safe and sanitary manner.

6.02 Restrictions

6.02.01 Direct land disposal of septage is prohibited. See Appendix VIII for criteria relating to land disposal.

6.02.02 Disposal of septage into bodies of water and streams is prohibited.

6.02.03 All sewage handling equipment in contact with sewage shall be washed in such a manner and location that the wastewater from washing is transported to an approved sewerage system or treatment works.

6.03 Acceptable Disposal Sites

a. **Approved Sewerage System or Treatment Works**—An approved sewerage system or treatment works is a system for which a certificate to operate has been issued jointly by the Department of Health and the State Water Control Board or a system which has been issued a separate permit by the Commissioner.

b. **Special Facility**—A special facility is a facility specifically designed and constructed for stabilizing septage such as an anaerobic lagoon.

6.03.01 Methods Utilized in Special Facilities

a. The following methods are described with associated criteria in the *Commonwealth of Virginia Sewerage Regulations, State Department of Health, State Water Control Board, February 1977*.

1. aerobic Digestion
2. anaerobic Digestion
3. chemical Oxidation
4. incineration

b. Anaerobic Lagooning (See Section 16.00 for design criteria).

6.03.02 Anaerobic Lagoon Operation

a. The lagoon contents shall not be removed for land application until a time period of at least 90 days has elapsed from the time the last load of septage has been discharged into the lagoon.

b. Records shall be kept in a manner satisfactory to the district or local health department. As a minimum, the records shall reflect the quantity of septage (gallons) discharged into the lagoon daily, the quantity (gallons) removed daily for land application, the land application site, and the date the last load was discharged into the anaerobic lagoon (See Appendix VIII).

c. The site shall be maintained in a condition free from tall grass and weed overgrowth and rodent harborage.

6.06.03 Anaerobic Lagoon Abandonment—In the event the facility ceases to be operated, it shall be the responsibility of the owner to abandon the facility properly. The following steps are required:

- a. the owner shall notify the district or local department at least 30 days in advance that the facility is to be abandoned;
- b. the contents of the lagoon shall be disposed of in an approved manner under the supervision of the district or local health department; and
- c. the lagoon structure shall be dismantled and the site returned approximately to its natural contours.

7.00 Installation of Residential Sewage Disposal Systems in Political Subdivisions Having Soil Drainage Management Contracts with the State Health Department

7.01 General—It is the policy of the Department to grant sewage disposal system permits for private residential systems utilizing subsurface soil absorption whenever such permits can be granted without endangering public health. Many soils are limited in their ability to accept sewage by high seasonal water tables. Some soils can accept sewage when an adequate local plan for soil drainage exists. When a political subdivision enters into a Soil Drainage Management Contract with the Department and subsequently develops Soil Drainage Management Plan(s) in an area in which soils respond to artificial drainage and the plan is acceptable to the Department, the Department will consider the approval of subsurface soil absorption systems in soils that were previously unacceptable because of high seasonal water tables.

7.02 Definitions

- a. **Soil Drainage Management Contract (SDMC)**—means a contract between the Department and the political subdivision for the development, operation, maintenance, and enforcement of all soil drainage management plans within the political subdivision.
- b. **Soil Drainage Management Plan (SDMP)**—means a plan approved by the Commissioner, pursuant to Section 7.04 below, meeting the criteria set forth in section 7.05 below.

7.03 Applicability

Section 7.00 shall be applicable only in those political subdivisions which enter into Soil Drainage Management Contracts with the Department.

7.04 Procedures for Entry into or Withdrawal from a Soil Drainage Management Contract (SDMC)

a. Entry

1. Any political subdivision in the Commonwealth may at any time apply to the Department through the district or local health department for entry into an SDMC with the Department. The application shall contain the following minimum elements:

- a. a proposed contract between the Department and the political subdivision; and
- b. drafts of all ordinances, required easements, or other legal documents which the political subdivision proposes to adopt as a portion of the SDMC including a local ordinance requiring the holder of a sewage disposal construction permit issued in conjunction with the SDMC to have the permit recorded in the land records of the Circuit Court having jurisdiction.

2. The Department shall, within 60 days of the submission of an application for entry into an SDMC, evaluate the application and propose to the political subdivision any suggestions for modification to the SDMC.

3. The political subdivision may review the Department's suggested modifications and resubmit a revised application within such time as the political subdivision elects.

4. The Department shall accept or reject entry into an SDMC within 90 days of receipt of the final application from a political subdivision.

5. Upon rejection by the Department of a final application for entry into an SDMC, the political subdivision may appeal the Department's decision to the appropriate Circuit Court. The Virginia Administrative Process Act, § 9-6.14:1, et seq., shall apply to such an appeal.

b. Withdrawal

1. If the Department determines that a political subdivision is failing to abide by the terms set forth in its SDMC with the Department, the Department may withdraw from the contract.
2. The Department shall, within sixty (60) calendar days of its proposed withdrawal from an SDMC notify the political subdivision of the Department's intent.
3. The political subdivision may apply to the Department for a hearing upon the proposed withdrawal. Such hearing shall be held in accordance with the provisions governing case decisions contained within the Virginia Administrative Process Act.
4. Within thirty (30) calendar days after such hearing, the Department shall notify the political subdivision whether the Department will withdraw from the SDMC.
5. A decision by the Department to withdraw from an SDMC may be appealed to the appropriate Circuit Court pursuant to the provisions of the Virginia Administrative Process Act.
6. If withdrawal occurs, continued maintenance of all SDMP's shall be the responsibility of the political subdivision in areas where permits were issued in accordance with these Regulations.

7.05 Minimum Standards for Soil Drainage Management Plans

a. Every SDMP offered in conjunction with a SDMC shall meet the following minimum standards for surface and groundwater management.

b. The SDMP shall provide for:

1. positive surface grading in the area of a dwelling and subsurface soil absorption area at a minimum of 0.5%;
2. drainage ditches for diverting surface water and for lowering the seasonal groundwater table which shall:
 - (a) completely surround the subsurface soil absorption system
 - (b) have a minimum grade of 0.2%
 - (c) be located 70 ± 10 feet from the drainfield
 - (d) have the invert of the ditch placed in a Group I, II or III soil at an elevation so that the normal water surface in the ditch is at least six inches below the invert of the trench of the subsurface soil absorption system;
3. a French drain on one side in lieu of an open drainage ditch on one of the four sides;
4. diversion ditches or swales shall be:
 - (a) required where adjacent property is equal to or higher in elevation than the proposed site and the adjacent property may be expected to discharge water onto the proposed site;
 - (b) designed to meet such site specific individual requirements as the Department determines to be necessary;
5. a receiving stormwater and groundwater drainage system which is adequate in capacity so that waters from a proposed site shall be conveyed to it in accordance with the political subdivision's criteria;
6. diversion ditches, where required, or other ditches to transport stormwater and/or groundwater from a site to a receiving body in accordance with the political subdivision's criteria;
7. ditches to remain open and not be piped and covered unless approved by appropriate local government official, such approval to be granted only with the concurrence of the Department;

8. only appurtenances to the subsurface soil absorption system shall be constructed within the confines of the perimeter ditches required in 7.05,B,2,a above except where a French drain is provided on one side; and

9. lots which shall be a minimum of three (3) acres in size not including swamps or marshland.

7.06 Department Procedures Relating to Subsurface Soil Absorption System Applications in SDMC Counties and Cities

a. All applications for subsurface soil absorption systems will be evaluated based on the criteria contained in Section 4.00 and Part D of these Regulations. When the site is limited only by a high seasonal water table and/or surface runoff the Department shall require that a satisfactory SDMP be in place and functioning satisfactorily before issuance of a Construction Permit. Typed on the construction permit will be the following statement which shall be signed by the applicant:

I understand that this soil has severe limitations for the disposal of septic effluent. With the aforementioned drainage measures the Health Department expects reasonable serviceability, however, it may malfunction during extreme conditions.

I understand and acknowledge the above and agree to install and maintain the drainage measures.

Date_____ Signed_____

b. soils to be considered shall demonstrate their ability to be artificially drained and shall fall generally into Texture I, II, III;

c. the SDMP and site specific drainage system(s) shall be certified, supervised, maintained and prepared by or under the direct supervision of a professional engineer certified in Virginia who is a full time employee of the political subdivision. In addition the political subdivision shall have the manpower or other capability to maintain the applicable conditions of the SDMP, this certification shall become a part of the subsurface soil absorption system permit;

d. proper easements shall be provided for drainage to assure access for proper maintenance;

e. political subdivisions shall assure proper installation and maintenance of the stormwater and groundwater drainage system(s); and

f. the Department retains the right to reject any SDMP if in the opinion of the Department the SDMP proposed will result in a nuisance or health hazard condition.

8.00 General Requirements

8.01 General—The criteria contained in this section shall apply to all construction work. The criteria contained in this section may be modified by the local health department in an approved manner.

8.02 Sewage Flow—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.03 Water-Saving Plumbing Devices—Water-saving plumbing devices are required on all new construction. The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.04 Recycle and Reuse Systems—Recycle and reuse systems are required on all new construction. The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

Part D Design and Construction Criteria

8.05 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.06 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.07 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.08 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.09 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.10 Design and Construction Criteria—The design and construction of the sewerage system shall be based on the average flow shown in Table 8.02.

8.00 General Requirements

8.01 General—The criteria contained in this section shall apply to all on-site sewage disposal systems. Deviations from these criteria may be considered by the district or local health department on a case by case basis.

8.02 Sewage Flows—Subsurface soil absorption systems shall be designed on the basis of the sewage flows tabulated in Table 8.1.

8.03 Water Saving Plumbing Devices—Water saving plumbing devices are encouraged to lengthen the life of the subsurface soil absorption system. However, only permanent water saving plumbing devices such as low flush toilets shall be considered in reducing the size of the absorption area. Devices such as inserts in showers are considered temporary.

8.04 Recycle and Reuse Systems—Recycle and reuse systems are methods, processes and equipment in which sewage is restored to a condition suitable for reuse. When recycle and reuse systems are utilized in conjunction with toilet wastes only, an approved method of sewage disposal shall be provided to properly dispose of sewage generated via handwashing and other related sanitation activities. All recycle and reuse systems shall provide for an approved method of sewage disposal to handle excess sewage generated within the system. These systems are considered experimental unless they have been previously deemed to be satisfactory in accordance with the provisions of Section 3.25 and/or as a minimum have been certified by the National Sanitation Foundation as meeting the current Standard 41 as determined by the Bureau. Water recycle and reuse systems intended to produce water for other than toilet flush water are considered experimental and shall comply with the provisions of Section 3.25. All proposals for recycle and reuse systems shall be submitted to the Bureau through the district or local health department.

8.05 Site Preparation and Alteration

8.05.01 Preservation of Soil Structure—The preservation of the original structure of the soil in the area selected for placement of the absorption trenches is essential to maintaining the percolative capacity of the soil.

a. **Prohibition on Construction**—Subsurface soil absorption systems shall not be constructed in Texture Group III and IV soils during periods of wet weather when the soil is sufficiently wet at the depth of installation to exceed its plastic limit. For the purpose of these Regulations the plastic limit of a soil shall be considered to have been exceeded when the soil can be rolled between the palms of the hands to produce threads $\frac{1}{8}$ inch in diameter without breaking apart and crumbling.

b. **Soil Compaction**—Special caution shall be taken in allowing wheeled and tracked vehicles to traverse the area selected for placement of the absorption systems before, during and after construction of the trenches, especially during wet weather. Precaution is especially important where Texture Group III and IV soils are involved. Alteration of soil structure by movement of vehicles may be grounds for rejection of the site and/or system.

c. **Soil Smearing**—Excavating equipment utilized to construct the absorption system shall be so designed as not to compress or smear the side walls or bottom of the system. Excessive smearing of the usable absorption trench sidewalls or bottom during construction may result in irreversible damage to the soil infiltrative surface and may be grounds for rejection of the site and/or system.

8.05.02 Removal of Vegetation—Vegetation such as maple, cottonwood, willows and other plant species with extremely hydrophilic (water loving) root systems shall be removed for a minimum of ten (10) feet from the actual absorption areas. Other trees should be removed from the absorption area.

8.05.03 Grading

a. **PreGrading**—the proposed site for the subsurface soil absorption system shall not be graded until the district or local health department has completed the site evaluation contained in Section 4.00

**Table 8.1
Sewage Flows**

Discharge Facility	Design Units	Flow gpd	BOD ₅ #/day	S.S. #/day	Flow Duration Hour
Dwellings*	per person total	75	0.2	0.2	24
Food Preparation		15			
Toilet Facilities		20			
Bathing Facilities		20			
Hand Washing Facilities		5			
Laundrying		15			
Schools with showers and cafeteria	per person	16	0.04	0.04	8
Schools without showers and with or without cafeteria	per person	10	0.025	0.025	8
Boarding Schools	per person	75	0.2	0.2	16
Motels at 65 gals/person (rooms only)	per room	130	0.26	0.26	24
Trailer Courts*	per person	75	0.2	0.2	24
Restaurants	per seat	50	0.2	0.2	16
Interstate or through highway restaurants	per seat	100-180	0.7	0.7	16
Interstate Rest Areas	per person	5	0.01	0.01	24
Service Stations	per vehicle served	10	0.01	0.01	16
Factories & Office Buildings	per person per 8-hr. shift	15-35	0.03-0.07	0.03-0.07	Operating Period
Shopping Centers	per 1000 ft. ² of ultimate floor space	200-300	0.1	0.1	12
Hospitals	per bed	300	0.6	0.6	24
Nursing Homes	per bed	200	0.3	0.3	24
Homes for the Aged	per bed	100	0.2	0.2	24
Doctors Office in Medical Center	per 1000 ft. ²	500	0.1	0.1	12
Laundromats, 9 to 12 # machines	per machine	500	0.3	0.3	16
Community Colleges	per student and faculty	15	0.03	0.03	12
Swimming Pools	per swimmer	10	0.001	0.001	12
Theaters, Drive-In Type	per car	5	0.01	0.01	4
Theaters, Auditorium Type	per seat	5	0.01	0.01	12
Picnic Areas	per person	5	0.01	0.01	12
Camps, Resort Day and Night with limited plumbing	per camp site	50	0.05	0.05	24
Luxury Camps with flush toilets	per camp site	100	0.1	0.1	24
Dump Station	per camp site	50	0.05	0.05	24

*For all dwelling units the design shall be based on two (2) persons per bedroom

b. **Interim Grading**—Interim grading means site grading during or immediately preceding the construction of the absorption system. Any such grading shall be done in accordance with the conditions contained in the construction permit. The district or local health department may require notification upon completion of the interim grading but before actual installation of the absorption system.

c. **Final Grading**—Final grading of the absorption area site for diversion of surface water (e.g. crowning) for the purpose of eliminating surface water from flowing or ponding on the site, preparation for seeding etc. shall be accomplished to avoid damaging the absorption area. Prior to grading, the distribution box, pretreatment unit and absorption area shall be clearly staked.

8.05.04 Drainage

a. **Surface Water**—the area surrounding the absorption area shall be graded to divert surface water from the absorption area site. The absorption area site shall also be graded to eliminate the ponding of water.

b. Roof drains, basement sump discharges (nonsewage), floor drains, footing drains etc. are prohibited from being connected to the sewage disposal system and shall be directed away from the absorption area site in a manner to preclude water flow into, through or over the site. Discharge of sewage into a basement sump collecting water from floor drains, storm water etc. is prohibited.

c. Lateral groundwater movement interceptors (LGMI) (e.g. French drains) may be required to divert groundwater movement away from the absorption area site. The LGMI shall be placed perpendicular to the general slope of the land and generally parallel to the absorption trenches. A tight drain from the LGMI shall be constructed to discharge into a natural or man-made drainage way.

8.05.05 Protection of Subsurface Soil Absorption System

a. No structures shall be placed over the subsurface soil absorption system. Driveways or parking lots shall not be constructed on the subsurface soil absorption system unless the invert of the lead or header lines or top of the gravel in the absorption trenches is deeper than thirty (30) inches below the ground surface and the driveway or parking lot is paved with portland cement or bituminous concrete. Driveways and parking lots shall not be constructed over the distribution box.

b. Where all or part of a subsurface soil absorption system is proposed to be installed on property other than the owners, an easement in perpetuity shall be recorded with the Clerk of the Court prior to issuance of a construction permit (See Section 3.16). The easement shall be of sufficient area to permit access, construction, required reserve area (See Section 8.06) and maintenance of the system.

8.05.06 Pre and Post Placement of Utilities—Subsurface soil absorption systems shall not be placed in an underground utility easement. No buried utility service, e.g. water lines, electrical lines, gas lines etc., shall traverse the subsurface soil absorption system area nor shall the buried service be closer than ten (10) feet to the system.

8.06 Reserve Absorption Area Sites—Separate reserve area(s) meeting the requirements of section 4.00 and equalling fifty (50) percent of the required absorption area shall be provided where the estimated or measured percolation rate exceeds 45 minutes/inch.