

March 18, 1993

MEMORANDUM

GMP #20

TO: Operations Directors
District Directors
District Environmental Health Managers
Office of Environmental Health Services

FROM: Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

SUBJECT: Variances to Sewage Handling and Disposal Regulations

Section 2.7.B states that a variance may be granted if a thorough investigation reveals that the hardship imposed (which may be economic) by the regulations outweighs the benefits that may be received by the public, and if granting the variance does not subject the public to unreasonable health risks.

There are three specific variances to the Regulations that have been routinely granted, regardless of the degree of hardship imposed, upon a finding that little or no additional health risks result from granting them. These specific variances are to § 4.5.E.2 (crossing a VDOT roadway with a conveyance line), § 4.30.C.1 (minimum trench depth), and to § 4.31 and Table 4.7 (minimum depth to seasonal water table for elevated sand mound).

The Division of Onsite Sewage and Water Services is preparing changes to the Regulations to incorporate these specific situations as routine installations, eliminating the need for variances. Until that time, I am granting variances under certain conditions for the specific situations described.

The following procedure has been developed to facilitate the processing of these variances:

The authority to review requests for variances and to complete the documentation necessary for granting variances under this procedure is limited to only the three special conditions noted below. All other site and soil criteria must fully comply with the Sewage Handling and Disposal Regulations without exception. In all cases where the

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minimum requirements established in this procedure cannot be met, the request for a variance will be reviewed by the District and sent to the Commissioner with a recommendation for action in the usual manner.

Action: Responding to the following variance requests:

1. Requests to cross a state or other government-owned roadway in order to access a remote drainfield location where the Virginia Department of Transportation, or appropriate government entity, has issued or will issue a CE-7 or equivalent permit.
2. Requests to install a modified, elevated sand mound to serve a single-family residence (non-commercial) with flows not to exceed 750 GPD, on sites where the depth to high water table is at least 18 inches but less than 24 inches.
3. Requests to install drainfield trenches at depths of at least 12 inches but less than 18 inches, to serve structures, excluding restaurants, with flows not to exceed 750 GPD.

Goal: To provide a competent and timely response to requests for variances where site factors and appropriate use of technology have routinely indicated that little or no additional health risks will result from granting the variances.

Procedure: The Environmental Health Specialist will identify sites that meet the specific criteria for a variance during routine site and soil evaluations. All sites proposed for modified, elevated sand mounds must be reviewed by the Department's contract Soil Scientist. Letters of denial, consistent with the Department's current policy, are still required for all sites that do not meet the minimum requirements of the Regulations.

The Environmental Health Specialist will notify the applicant that a variance may be granted, and make appropriate documentation of that notification. If the applicant desires to request a variance, a written variance request must be provided, signed by the owner of the property. Owners may designate an agent to act on their behalf by providing a written statement to the local health department. Requests for variances from lawyers who are representing owners should be handled the same as requests from owners.

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The Environmental Health Specialist will prepare a brief statement (suggested form letter is included with this memorandum) explaining the nature of the variance and confirming that there are no other conditions associated with the site, other than the specific one(s) for which the variance is being granted, that do not meet the minimum requirements of the Regulations. A copy of the appropriate pre-signed variance(s), as attached to this memorandum, must be included with the permit.

A copy of the signed permit and attached variance(s) must be sent to the Enforcement Chief, Division of Onsite Sewage and Water Services, within 5 working days following review by the responsible party. Issue Summaries are **not** required for these variances.

When an application for a variance is not granted under this procedure, the Environmental Health Specialist will notify the owner or agent in writing that the request cannot be granted under the procedure, and that the request is being sent to the Commissioner for action.

Time Frame: Concurrent with regular processing of the application for a construction permit.

Level of Review: All variances granted under this procedure must be reviewed and counter-signed by the District Health Director (unless delegated) prior to the issuance of any construction permit. At their discretion, District Directors may delegate this responsibility to the Environmental Health Manager assigned to the onsite sewage and water programs. Two copies of each signed variance are attached, one for use when the District Director is reviewing, the other when the review is delegated to the Environmental Health Manager.

VARIANCE

This is a variance to § 4.5.E.2 of the Sewage Handling and Disposal Regulations (Regulations), issued pursuant to § 2.7 of the Regulations and § 32.1-12 of the Code of Virginia. Section 4.5.E.2 requires that an easement in perpetuity be recorded where all or part of a subsurface soil absorption system is proposed to be installed on property other than the owner's. This variance is to allow installation of a sewage conveyance line within a Virginia Department of Transportation (or other government entity) roadway right-of-way.

This variance is granted with the following conditions:

1. All construction shall be in accordance with the permits issued by the Virginia Department of Transportation (or appropriate government entity). All other requirements of either VDOT or the government entity must be met. A construction permit will not be issued until a CE-7 Permit, or other equivalent permit, has been issued.
2. The construction permit shall state that the sewage conveyance line will be adjusted at the permittee's expense if it interferes with future government maintenance or construction.

This variance is granted to the holder of the permit to which it is attached for the sewage disposal system covered by the construction permit. This variance is not transferrable to another sewage disposal system or property. This variance shall expire with the permit to which it is attached, and shall be revoked when the permit to which it is attached is revoked. Except as already noted, this variance shall be permanent when an operation permit for the system has been properly issued.

The effective date of this variance shall be 15 calendar days from the date of issuance of the construction permit to which it is attached. If the owner wishes to challenge the terms of this variance, a written request must be received in the office of the State Health Commissioner within 30 days of the effective date.

District Health Director

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

VARIANCE

This is a variance to § 4.5.E.2 of the Sewage Handling and Disposal Regulations (Regulations), issued pursuant to § 2.7 of the Regulations and § 32.1-12 of the Code of Virginia. Section 4.5.E.2 requires that an easement in perpetuity be recorded where all or part of a subsurface soil absorption system is proposed to be installed on property other than the owner's. This variance is to allow installation of a sewage conveyance line within a Virginia Department of Transportation (or other government entity) roadway right-of-way.

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Environmental Health Manager

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

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This is a variance to § 4.31 and Table 4.7 of the Sewage Handling and Disposal Regulations (Regulations), issued pursuant to § 2.7 of the Regulations and § 32.1-12 of the Code of Virginia.

Section 4.31 and Table 4.7 require a minimum depth of 24 inches from the ground surface to a seasonal high water table for installation of an elevated sand mound. This variance is granted to allow installation of an elevated sand mound to serve a single-family residence with a sewage flow \leq 750 gallons per day, on a site where the seasonal high water table is found at depths less than 24 inches, but at least 18 inches.

The site and soil evaluations conducted by the Department indicate that a mound system installed on the proposed site will treat and dispose of sewage effluent properly. Attention to design details, protection of the mound site before and during construction, and proper construction techniques are absolutely necessary to maximize the potential for this mound system to function properly.

This variance is granted with the following conditions:

- 1.The mound design shall incorporate 24 inches of appropriate sand beneath the absorption trenches.
- 2.The construction permit shall require permanent water saving devices; however, there shall be no corresponding reduction in the basal area. The construction permit and this variance letter shall be recorded and indexed in the grantor index under the holder's name in the land records of the clerk of the circuit court having jurisdiction over the site of the sewage disposal system.
- 3.The proposed mound site shall be fenced, roped or otherwise secured, and marked, to prevent damage by vehicular traffic. Activities on the mound site shall be severely limited in order to protect it to the greatest extent possible.
- 4.Formal plans and specifications, prepared by a licensed professional engineer, shall be required and must be

approved by the health department prior to **any** site disturbing activities.

VARIANCE: § 4.31 and Table 4.7

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5. The local health department shall be notified at least 48 hours before any work begins on the site, including delivery of materials. The mound must be constructed during dry weather and soil conditions. The contractor shall schedule a conference with the local health department to review the plans and specifications prior to beginning any phase of construction, including delivery of materials.
6. Wooded sites shall not be used unless it is shown by the applicant that the wooded site is the only site available, and if the applicant can demonstrate that the site can be properly prepared (plowed). If a wooded site is used, trees shall be removed by cutting them off at ground level, leaving the stumps in place. The cut trees shall be removed using methods that do not require driving equipment over the mound site and that do not result in the removal of any soil from the site. Larger basal areas may be required on wooded sites.

This variance is granted to the holder of the permit to which it is attached for the sewage disposal system covered by the construction permit. This variance is not transferrable to another sewage disposal system or property. This variance shall expire with the permit to which it is attached, and shall be revoked when the permit to which it is attached is revoked. This variance shall be permanent as long as an operation permit for the system has been properly issued and remains in effect.

The effective date of this variance shall be 15 calendar days from the date of issuance of the construction permit to which it is attached. If the owner wishes to challenge the terms of this variance, a written request must be received in the office of the State Health Commissioner within 30 days of the effective date.

District Health Director

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State Health Commissioner

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Section 4.31 and Table 4.7 require a minimum depth of 24 inches from the ground surface to a seasonal high water table for installation of an elevated sand mound. This variance is granted to allow installation of an elevated sand mound to serve a single-family residence with a sewage flow \leq 750 gallons per day, on a site where the seasonal high water table is found at depths less than 24 inches, but at least 18 inches.

The site and soil evaluations conducted by the Department indicate that a mound system installed on the proposed site will treat and dispose of sewage effluent properly. Attention to design details, protection of the mound site before and during construction, and proper construction techniques are absolutely necessary to maximize the potential for this mound system to function properly.

This variance is granted with the following conditions:

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3. The proposed mound site shall be fenced, roped or otherwise secured, and marked, to prevent damage by vehicular traffic. Activities on the mound site shall be severely limited in order to protect it to the greatest extent possible.
4. Formal plans and specifications, prepared by a licensed professional engineer, shall be required and must be

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VARIANCE: § 4.31 and Table 4.7

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This variance is granted to the holder of the permit to which it is attached for the sewage disposal system covered by the construction permit. This variance is not transferrable to another sewage disposal system or property. This variance shall expire with the permit to which it is attached, and shall be revoked when the permit to which it is attached is revoked. This variance shall be permanent as long as an operation permit for the system has been properly issued and remains in effect.

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Environmental Health Manager

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

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This is a variance to § 4.30.C.1 of the Sewage Handling and Disposal Regulations (Regulations), issued pursuant to § 2.7 of the Regulations and § 32.1-12 of the Code of Virginia. Section 4.30.C.1 requires a minimum absorption trench installation depth of 18 inches. This variance is granted to allow installation of drainfield trenches at depths less than 18 inches, but at least 12 inches deep. This system is for use where the sewage flow does not exceed 750 gallons per day and there is no commercial food service. All other minimum requirements of the regulations must be met, including separation distance to seasonal water table, separation distance to rock and impervious strata, and slope factors that require increasing the depth of installation.

The site and soil evaluations conducted by the Department indicate that a shallow-placed sewage treatment and disposal system installed on the proposed site will treat and dispose of sewage effluent properly. Attention to design details, protection of the site before and during construction, and proper construction techniques are absolutely necessary to maximize the potential for this system to function properly.

This variance is granted with the following conditions:

1. The drainfield trenches must be installed at a depth of at least 12 inches. The design percolation rate may be increased to provide a larger drainfield area if heavier soil textures occur in the strata up to 12 inches below the trench. This increase will affect only the square footage of the drainfield and shall not be applied to the determination of separation distance to seasonal water table, reserve area, or any other percolation-rate dependent variables. A minimum of 6 inches of additional topsoil shall be placed and mounded over the drainfield to promote surface runoff.
2. Install a recirculating or intermittent sand filter between the septic tank and the drainfield to provide additional treatment of the effluent. This sand filter should be designed to be accessible, and must be lined to prevent infiltration of ground water. The sand filter design shall not be reduced because of a reduction in the proposed sewage flow as a result of water saving plumbing fixtures. The sand filter should be designed using accepted engineering practice and the criteria

VARIANCE: § 4.30.C.1

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established in the U.S. EPA Design Manual for Onsite Wastewater Treatment and Disposal Systems. The filter should be capable of producing an effluent meeting discharge limits of 30 mg/l BOD₅ and suspended solids.

3. The construction permit and this variance letter are to be recorded and indexed in the grantor 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 system. Permanent water saving fixtures shall be specified as a condition of the construction permit; however, there shall be no corresponding reduction in the absorption area required.
4. The sewage treatment and disposal system shall be considered a Type III System. Formal plans and specifications prepared by a licensed professional engineer shall be required.
5. An Operation and Maintenance Manual shall be developed to assist the homeowner. This manual shall become part of the permit and shall impose operational conditions upon the owner or future owners of the system. The manual should assist the homeowner in performing any maintenance that is appropriate, and should advise when to seek professional service for the system.
6. If this is a wooded site, all clearing must be done by hand. No traffic or equipment is allowed on the site at any time, other than the minimum activities required to install the system.

This variance is granted to the holder of the permit to which it is attached for the sewage disposal system covered by the construction permit. This variance is not transferrable to another sewage disposal system or property. This variance shall expire with the permit to which it is attached, and shall be revoked when the permit to which it is attached is revoked. This variance shall be permanent as long as an operation permit for the system has been properly issued and remains in effect.

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District Health Director

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

Rescinded
11/12/2000

VARIANCE

Page One of Two

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The site and soil evaluations conducted by the Department indicate that a shallow-placed sewage treatment and disposal system installed on the proposed site will treat and dispose of sewage effluent properly. Attention to design details, protection of the site before and during construction, and proper construction techniques are absolutely necessary to maximize the potential for this system to function properly.

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VARIANCE: § 4.30.C.1

Sewage Handling and Disposal Regulations

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Environmental Health Manager

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

Rescinded
11/12/2000

_____, 199

MEMORANDUM

TO: FILE

FROM: Environmental Health Specialist

SUBJECT: Variance to § _____, Sewage Handling and Disposal Regulations

In accordance with GMP #20, of March 18, 1993, this is to confirm that I have evaluated the site and soil conditions on the property located at _____, Tax Map Number _____, _____ County. Based on my site and soil evaluations, a variance to § _____ of the Sewage Handling and Disposal Regulations may be granted as outlined in the above reference Guidance Memorandum.

I further certify to the best of my knowledge that the site and soil conditions on the proposed site comply with the minimum requirements of the Sewage Handling and Disposal Regulations with the exception of the specific requirement for which a variance is being granted.

Environmental Health Specialist