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TO: Environmental Health Managers
District Health Directors
Office of Environmental Health Services Staff
VPI/SU Soil Consultants

GMP #146

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State Health Commissioner

SUBJECT: Interim Guidance for House Bill 1166

Background

House Bill 1166, approved during the 2008 General Assembly and effective July 1, 2008, will introduce important changes to the onsite sewage program in Virginia. The new law, § 32.1-163.6 of the *Code of Virginia*, requires the Virginia Department of Health (VDH) to accept designs for onsite treatment works (onsite sewage systems) from individuals licensed as professional engineers (PE). There are several points to emphasize about the new law:

1. The law allows a PE to design an onsite sewage system, for the purpose of obtaining a construction permit, outside the majority of the prescriptive site, soil, and design requirements of the *Sewage Handling and Disposal Regulations* (12 VAC 5-610-10 et seq., the "*Regulations*"). These designs must be compliant with standard engineering practice and performance requirements established by the Board of Health. They also must comply with those horizontal setback requirements necessary to protect the public health and the environment. In addition, the designs must reflect the degree of skill and care ordinarily exercised by licensed members of the engineering profession.
2. The law allows VDH to review designs and perform field analysis of work as it deems necessary to protect public health and the integrity of the environment.
3. The law allows VDH to accept designs that do not comply with the minimum requirements of the *Regulations* as long as they comply with the requirements set forth in the law.

4. The law establishes time limits for VDH review of engineering plans submitted pursuant to the new law- 21 calendar days for systems sized at 1,000 gpd or smaller and 60 calendar days for systems larger than 1,000 gpd.
5. The law requires VDH to establish a four-member engineering design review panel. Whenever VDH denies a design submitted pursuant to the new law, the engineer, with the owner's written consent, may request an informal fact-finding conference with the review panel. The Department is required to consider the review panel's recommendations in deciding whether to approve the application or re-affirm its denial.
6. The law states that it does not prohibit any locality from adopting or enforcing any ordinance duly enacted pursuant to Chapter 21 of Title 15.2 of the *Code of Virginia*.

Scope/Applicability

This policy provides guidance to VDH staff and professional engineers about § 32.1-163.6 of the *Code of Virginia*. This policy applies to any and all applications for onsite sewage system construction permits when the engineer responsible for such designs and other documentation has written on the plans that they are being submitted to VDH under the provisions of § 32.1-163.6 of the *Code of Virginia*. This interim guidance will be reviewed and may be revised in accordance with new regulatory requirements that are expected to take effect July 1, 2009, which include licensing requirements for onsite sewage system professionals and operation and maintenance requirements for alternative onsite sewage systems.

Discussion

This policy was developed in a collaborative fashion with input from several stakeholder groups including the American Council of Consulting Engineering Companies of Virginia, the Virginia Society of Professional Engineers, the Virginia Association of Counties, the Virginia Department of Environmental Quality, and VDH staff. This stakeholder work group shared a consensus that the Virginia Department of Professional and Occupational Regulation (DPOR) is responsible for licensing engineers, enforcing those licensing requirements, and for establishing and enforcing standards of practice and conduct. For these reasons, the group believed that VDH should not attempt to define or establish boundaries for "standard engineering practice." Instead, VDH should allow this concept to develop as plans are reviewed on a case by case basis and permitting decisions are rendered (and reviewed) pursuant to § 32.1-163.6 of the *Code of Virginia*.

The new law requires an engineer to design a system in accordance with performance requirements established by the Board of Health. The Board of Health's current performance standards are expressed in § 350 of the *Regulations* as follows:

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.

The stakeholder's work group agreed that an engineer designing in accordance with § 32.1-163.6 of the *Code of Virginia* must justify, within reason, that a proposed design does not pose greater risk of the occurrence of a malfunction as defined in § 350 of the *Regulations* than current regulatory designs. The group agreed that the new law does not establish new requirements for submitting supporting documentation, calculations, etc. However, engineers are reminded that providing additional documentation, calculations, etc. may reduce review times, especially during the early stages of implementation of the new law.

The stakeholder's work group recommended that a preliminary engineering conference should not be an absolute requirement for each application. An engineer may request a PEC before an application for a construction permit is filed and VDH may request a PEC after an application is received. VDH staff is reminded that holding a PEC does not change the timeframes for reviewing an application.

In addition to designing in accordance with standard engineering practice and performance requirements, the new law requires engineers to adhere to "those horizontal setback requirements necessary to protect the public health and the environment." The stakeholder's work group recommended that the following horizontal setback requirements of the *Regulations* are necessary to protect public health and the environment: 1) shellfish waters, 2) public drinking water sources (i.e. wells, reservoirs, springs, rivers, streams, etc.), 3) private drinking water sources on adjacent properties, and 4) sinkholes.

The stakeholder group discussed requirements for site and soil evaluation reports. It was the consensus of the group that the new law gives authority to PEs for the design of *onsite treatment works*, the definition of which includes a soil component when applicable. Therefore, the group concluded that engineers are not prohibited, within limits established in the *Code of Virginia* and by DPOR, from performing independent site and soil evaluations for the purpose of establishing the soil component of a treatment works. An engineer is not prevented from obtaining a site and soil evaluation through

currently-accepted methods (i.e. by an Authorized Onsite Soil Evaluator, by a PE in consultation with an Authorized Onsite Soil Evaluator, by a Certified Professional Soil Scientist, or via bare application filed with a local health department).

Procedures

Beginning July 1, 2008, VDH will accept designs and other supporting documentation from licensed engineers under § 32.1-163.6 of the Code of Virginia for onsite sewage system permits in accordance with the following procedures:

1. Except as noted in this guidance document, existing VDH requirements for filing applications, including, but not limited to, application forms, intake procedures, and applicable fees are not affected.
2. VDH will accept applications only for construction permits.
3. Plans must state clearly, preferably on the title page, that the design is being submitted under the provisions of § 32.1-163.6 of the *Code of Virginia*. Plans which are not clearly marked will be reviewed under the *Regulations*. Engineers are encouraged to pay particular attention to this requirement since failing to properly identify a set of plans will inevitably result in processing delays.
4. Except as noted in this guidance document, VDH requirements for plan submittals and reviews under the *Regulations* (i.e. Type III Systems) are unchanged.
5. VDH staff may approve any plans submitted pursuant to § 32.1-163.6 of the *Code of Virginia* in accordance with VDH policies and procedures for reviewing engineering plans. However, VDH staff must consult with a VDH staff engineer before denying any application containing a plan submitted pursuant to § 32.1-163.6 of the *Code of Virginia*.
6. The horizontal setback requirements prescribed in Tables 4.1 and 4.2 of the *Regulations* shall be met for 1) shellfish waters, 2) public drinking water sources (i.e. wells, reservoirs, springs, rivers, streams, etc.), 3) private drinking water sources on adjacent properties, and 4) sinkholes.
7. There shall be a site characterization report using the Field Book for Describing and Sampling Soils, Version 2.0, National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, September 2002.¹ The report may contain such information that the professional deems appropriate, however it must describe the following minimum attributes of the site:

¹ The Field Book may be obtained using ftp://ftp-fc.sc.egov.usda.gov/NSSC/Field_Book/FieldBookVer2.pdf

- A. Depth to limiting feature(s), including, but not limited to, seasonal or perched water table, pans, restrictions, pervious or impervious bedrock;
 - B. Slope of the project area;
 - C. Hydraulic conductivity at the proposed installation depth;
 - D. Landscape and/or landform; and
 - E. Project area, along with those physical features in the vicinity of the proposed onsite sewage system normally associated with plans for onsite sewage systems, including, but not limited to, streams, bodies of water, roads, utilities, wells and other water supplies, existing and proposed structures, and property boundaries, etc.²
8. The new law states that it is not to be “construed to prohibit any locality from adopting or enforcing any ordinance duly enacted pursuant to Chapter 21...of Title 15.2.” In order to implement this provision of the law, local health departments are required to provide the following information whenever a submittal is denied as a result of a local ordinance:
- A. A statement that the denial results from a local ordinance or ordinances;
 - B. A citation to the appropriate ordinance or ordinances;
 - C. Any appeal procedures that may be provided by the locality.

Any questions about the interpretation or enforcement of local ordinances must be directed to the appropriate local government officials.

² The project area is typically the boundary of the property associated with a particular onsite sewage project. It may include other areas, such as areas acquired by easement, etc.