December 22, 1993

MEMORANDUM **GMP #41**

To: District Directors
Environmental Health Managers
Environmental Health Supervisors
Environmental Health Specialists

From: Allen L. Knapp, Enforcement Chief
Division of Onsite Sewage and Water Services

Through: Robert W. Hicks, Director
Office of Environmental Health Services

SUBJECT: Using new or unconventional methods, processes and equipment where conventional onsite system has failed.
Onsite - Repairs - Unconventional Methods

The Sewage Handling and Disposal Regulations (§ 2.25.B) provide that sewage treatment and disposal methods, processes and equipment which are not covered by the criteria in Part IV of the Regulations and which 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.

Section 2.25.B provides that the procedures for obtaining a permit must generally follow the same procedures set out in 2.25.A (experimental methods, processes and equipment for new construction) with a few exceptions. This policy is intended to establish guidelines for issuing permits under § 2.25.B.

1. When repairing or replacing a failed onsite sewage system, first consideration must be given to the use of methods, processes and equipment which are covered in Part IV of the Regulations, or that closely comply with Part IV. If a site is located on the owner's property that meets the minimum requirements of the Regulations, a permit **must** be issued for a system meeting the Regulations at that site (See § 2.16.C.2).

Consideration should also be given to systems that comply with the Regulations to the greatest extent

possible and which under the conditions present can be reasonably expected to function safely. Depending on the specific site conditions, it will be necessary to decide if a conventional system design would be most appropriate, or whether other options should be explored (See The Systematic Evaluation and Repair of Failing Drainfields in the Coastal Zone Area of Virginia, September 25, 1992).

2. If a permit for a system meeting the Regulations cannot be issued, a discharge permit may be issued. A permit may be issued for unconventional methods, processes and equipment under § 2.25.B **only** if it is not possible to provide a system with a discharge to state waters (or dry ditch). In some cases the owner may need to apply for General Permit registration and a construction permit in order to determine whether or not a permit may be issued under the Alternative Discharging Sewage Treatment System Regulations for Single Family Residences.

3. As a minimum, an application for a permit under § 2.25.B should include:

The information normally expected in a site plan (§ 3.2);

Detailed plans (formal plans may be required); and
If a proprietary system is proposed:

Testing or performance data if available from the manufacturer;

Design criteria if available from the manufacturer or distributor.

4. When considering the issuance of a permit under § 2.25.B the following requirements of § 2.25.A do **not** apply:

A backup system in case of failure;

The limit on the number of systems that may be installed per physiographic province; and

A testing and analysis program.

5. The owner must be made aware that if the disposal system fails to work satisfactorily on a year-round basis (conventional or unconventional designs), further correction to the system may be required. A statement on the construction permit should be sufficient in most cases.

6. A conventional operation permit will be issued, <u>not an experimental</u> operation permit.

7. The Division of Onsite Sewage and Water Services should be notified, although review and approval through the Division is <u>not</u> required.

Often a manufacturer or distributor seeks to demonstrate new technologies or products (with the goal of statewide approval for new construction) by installing them to repair or replace failing onsite systems. In these situations, the person seeking approval must follow the requirements set out in § 2.25.A.1 regarding testing and analysis. At times it may become necessary to separate the issuance of a permit for "repair" from the "experimental" process necessary to obtain approval for statewide use. The issuance of the repair permit should not be delayed because of the review of the experimental portion of a submittal. In these cases, there is still no requirement for a backup system and there is no limit on the number of systems that may be installed. When statewide approval of a product or technology is sought, plans and specifications along with the experimental proposal must be sent to the Division of Onsite Sewage and Water Services for review.

No expansion in building use or size should be considered under any repair unless the system being installed fully complies with the Regulations or unless the Commissioner has granted a variance from the Regulations for that specific purpose. When repairing a failed onsite sewage system, protection of public health must be the overriding concern.

pc: Office of Environmental Health Services
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