



COMMONWEALTH of VIRGINIA

Department of Health

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MEMORANDUM

DATE: January 25, 2008

TO: Environmental Health Specialists
District Health Directors
Authorized Onsite Soil Evaluators
Virginia Tech Contract Soil Scientists

GMP #143

FROM: Donald J. Alexander, Director
Division of Onsite Soil and Water Services

A handwritten signature in blue ink, reading "Donald J. Alexander".

SUBJECT; Disposal of spent peat media

Problem: Identify a safe, sanitary, and cost efficient method of disposing of spent peat media.

Discussion: The peat media used in residential wastewater treatment systems has a life expectancy between seven and 15 years. The spent peat media must be removed and properly disposed of in a safe and sanitary manner and fresh media must be installed to maintain the treatment efficiency of the system.

Limited data collected in North Carolina suggests that spent peat media from residential applications is safe to landfill, provided the media is not saturated. Based on the currently available information, VDH believes that the spent media from residential applications is safe to dispose of in municipal waste landfills provided:

1. The spent media is removed by a licensed sewage handler or a maintenance provider recognized by the manufacturer. After July 1, 2009, maintenance providers must be licensed by the Department of Professional and Occupational Regulations.

GMP #143

January 25, 2008

Page 2

2. The spent media is mixed with hydrated lime at a nominal rate of 1 lbs. of lime per 0.9-1.0 cubic feet of media.¹ The spent media and lime are to be combined thoroughly.
3. The spent media must not exhibit free liquid when it is placed in a landfill. If there is any question about the moisture content of material, the EPA Paint Filter Liquids Test (Method 9095B) should be conducted. To make the field implementation of the test more practical, a one half cup (4 oz, 113.4 gr., or 118 ml.) volume of spent media may be used where a 100 gr. or 100 ml. sample is called for in section 6.0 of the EPA Paint Filter Test.

At the time this policy was developed, VDH had not reviewed any data on spent media from non-residential applications. Therefore, spent media from non-residential applications must be considered on a case-by-case basis.

When material is encountered that will not pass the EPA Paint Filter Test the spent media must be dried prior to disposing in a municipal landfill. Drying may occur either on site or off site but must be done in a manner that does not allow human exposure to the spent media either directly or indirectly. When spent media is dried on site, the media must be held in an enclosed container that restricts contact by humans or vectors. Additionally, the container used to dry or drain the media must be located in compliance with Table 4.1 of the *Sewage Handling and Disposal Regulations* which specifies the setback distances for Pretreatment Units. Liquids leaching from the container must be delivered to a permitted treatment system in a sanitary manner.

Manufacturers interested in using Virginia municipal landfills to dispose of spent media should arrange with VDH to submit biological and chemical results on an ongoing basis for review. VDH will cooperate with manufacturers seeking to dispose of spent media in municipal landfills by reviewing the biological and chemical test results of spent media on an ongoing basis to assure the efficacy and appropriateness of the disposal method. After July 1, 2008, only manufacturers with current continuing test data will be listed under this policy.

Nothing in this policy mandates that a municipal landfill must accept spent peat media. Maintenance providers are encouraged to check with the landfill prior to delivering the spent media to be sure the landfill will accept the material.

¹ For currently approved systems this requirement equals approximately one 50 lb bag of lime per Puraflo module, or three 50 lb bags of lime for an STB 500 Premier Tech container or four 50 lb bags of lime per STB 650 container.

GMP #143

January 25, 2008

Page 3

Proposals have been advanced suggesting that spent media can be land applied onsite, composted onsite, taken to a landfill, or treated as a Class A or B biosolid. At this time, the Division of Onsite Sewage and Water Services believes disposal of spent media by land application or composting onsite under commonly encountered residential environments is inappropriate. Residential environments are generally unsuited for disposal of spent media because of the difficulty limiting access to potentially pathogenic material by children, pets, and vectors.

Currently, there is insufficient data to recommend land application of spent media as either a Class A or B biosolid. Manufacturers or others interested in applying spent media from peat based treatment devices should contact DEQ to establish compliance with the biosolid regulations.

Conclusion: Spent peat media from residential treatment systems is safe and appropriate to landfill when done in accordance with the criteria contained in this policy statement.