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**STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTE MANAGEMENT DIVISION
SOLID WASTE MANAGEMENT PROGRAM**

**PROCEDURE FOR APPROVAL OF ALTERNATIVE DAILY COVER
AT SOLID WASTE LANDFILLS**

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PROCEDURE FOR APPROVAL OF ALTERNATIVE DAILY COVER
AT SOLID WASTE LANDFILLS

I. Introduction

This procedure document supersedes the July 23, 1996, Alternative Daily Cover at Solid Waste Disposal Facilities Submittal and Approval Guidance document. The revised document contains changes to the definition of *cover material*, and incorporates language from the January 15, 1999, Solid Waste Management Rules, regarding the application of daily cover material.

II. Regulatory Authority

The following definitions and requirements which pertain to daily cover material are included in the Vermont Solid Waste Management Rules.

Solid Waste Management Rules §6-201 states, in part:

“Cover Material” means earthen material, or other material approved by the Secretary, that is used to cover compacted solid wastes in a discrete disposal facility in order to control fire, disease vectors and odors, prevent blowing litter, to discourage scavenging by animals, and to assure an aesthetic appearance.

“Vectors” means organisms or media (air, water, soil, etc.) that serve to transmit disease organisms.

Section §6-701(f) states, in part:

The operator shall take all steps necessary to prevent and/or control spills, nuisance dust, vectors, wind blown debris, and odors.

Section §6-702(d)(5) states:

Cover shall be in place at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires and odors, to prevent blowing litter, and to discourage scavenging by animals, without presenting a threat to human health and the environment. Grading shall be accomplished to prevent ponding. A six inch thickness is required when earthen material is used as cover material. In all areas other than the working face which have not received waste material in any given day, the owner or operator shall take all steps necessary to ensure that the cover material remains functional and stable until such time as the final cover system is installed.

USEPA's Municipal Solid Waste Disposal Facility Criteria requires that operators cover disposed waste with 6 inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease, vectors, fires, odors, blowing litter and scavenging. See, 40 CFR §258.21. Since Vermont's Municipal Solid Waste Disposal Facility Program has been approved by EPA, alternative materials of alternative thickness may be approved by the Agency on a case by case basis if the owner or operator demonstrates that the alternative material and thickness control disease, vectors, fires, odors, blowing litter and scavenging without presenting a threat to human health and the environment.

III. Performance Criteria for Alternative Daily Cover Material

The "performance" of any material as daily cover is a function of the nature of the material, the frequency and thickness of its application, the weather conditions during which the material is used, and how the material is maintained once applied. When requesting approval of a material or product for use as an alternative daily cover material, the owner or operator must demonstrate that the performance of the material or product will meet the following criteria:

- A. *Controls disease vectors* means preventing access to the waste and minimizing the potential for the waste to serve as a food source for birds, insects, or rodents.
- B. *Controls fires* means limiting the exposure of combustible materials to ignition sources and hindering the spread of fire if the disposed waste burns.
- C. *Reduces odors and prevents blowing litter* means minimizing exposure of the waste to the air and eliminating direct contact of the wind with compacted waste.
- D. *Discourages scavenging* means removing the waste from observation.
- E. *Assures an aesthetic appearance* means the covered waste is less obtrusive than uncovered waste to anyone off site of the facility.
- F. *Controls moisture and erosion* means that infiltration will be reduced and that the cover material will resist erosion.

To be considered for use as daily cover, wastewater treatment plant sludge must meet treatment requirements for both Process to Significantly Reduce Pathogens (PSRP) and Vector Attraction Reduction (VAR), as defined in 40 CFR 503.32 and 503.33. Copies of these requirements may be obtained from the Residuals Management Program ((802) 241-3822) or Solid Waste Management Program ((802) 241-3481).

IV. Submittal Requirements For Agency Approval Of An Alternative Material To Earthen Daily Cover

A written request submitted by the owner or operator must include the information listed below. Written approval of the material must be received from the Agency prior to use.

A. Submittal Requirements

1. The material type & name;
2. A material safety data sheet ("MSDS") sheet for the material, if available; and
3. A detailed operations plan which demonstrates that the performance of the material will meet the performance criteria for alternative daily cover material in Part B, including but not limited to:
 - (a) Specifications of the material, procedures for placement, the thickness of the application of the material, and weather conditions during which the material cannot be used; and
 - (b) Contingency plan for the use of earthen daily cover in the event that the alternative cover material cannot be used or is not performing adequately.

The owner or operator is encouraged to submit any available documentation of the material's use at other landfills which addresses the material's performance and regulatory status.

In addition, a field demonstration of an alternative material may be required by the Agency if the documentation submitted is found to inadequately demonstrate the performance of the material as daily cover material.

B. Additional Documentation For A Field Demonstration

If a field demonstration is required, the following information must also be submitted for approval:

1. A map depicting the proposed location and areal extent of the field demonstration;
2. Proposed timeframe for the field demonstration, taking into account seasonal conditions which affect proper use of the material;

3. A proposed scope of work to be used for conducting the field demonstration and evaluating performance of the material in accordance with the performance criteria for alternative daily cover material. The field demonstration must be conducted under the direction of a third party consultant. The evaluation of the performance of the alternative material must also be prepared under the direction of a third party consultant; and
4. The name and title of the third party consultant who will be conducting the field demonstration and evaluating the performance of the material.

V. Agency Approval of An Alternative Daily Cover

Site specific advantages and limitations will be factored into the Agency's decision to approve or deny any request. The Secretary may condition the approval as necessary to ensure satisfactory performance. Approval for use of the alternative cover material may be withdrawn by the Agency, with adequate warning, if the Agency determines that when in use the performance of the material does not meet the performance criteria listed in Part III. All such approvals are subject to periodic review by the Secretary.

If a field demonstration is necessary, the Agency approval of the use of the material will be limited to the period of time specified for completion of the field demonstration. At the conclusion of the field demonstration, the facility owner must submit documentation from the field demonstration which addresses the performance of the material with regards to the criteria listed in Part III.

Effective date

This Procedure is effective upon date of Signature.

Signature

Signature
Canute Dalmasse, Commissioner
Department of Environmental Conservation

2/8/99
Date