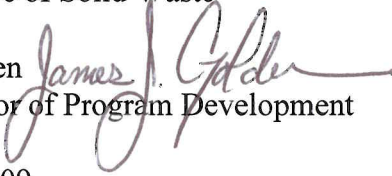


COMMONWEALTH OF VIRGINIA  
Department of Environmental Quality

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**Subject:** Waste Guidance Memo No. 02-2008  
**LANDFILL WASTE DISPOSAL LIMITS**

**To:** Waste Program Managers,  
Director, Office of Solid Waste

**From:** James J. Golden   
Deputy Director of Program Development

**Date:** January 20, 2009

**Copies:** Regional Directors, Deputy Regional Directors, OSW Director

**Summary:**

This guidance provides permit writers with a list of documents and information that should be reviewed during the evaluation of a proposed waste disposal limit.

**Electronic Copy:**

An electronic copy of this guidance is available on DEQ's website at <http://www.deq.virginia.gov/waste/guidance.html>.

**Contact Information:**

Please contact Jason Williams at (757) 518-2024 or [jewilliams@deq.virginia.gov](mailto:jewilliams@deq.virginia.gov) with any questions regarding the application of this guidance.

**Disclaimer:**

*This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate any particular method nor does it prohibit any alternative method. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.*



## LANDFILL WASTE DISPOSAL LIMITS

### I. Introduction

Permit applications and permit amendment applications for solid waste disposal facilities must demonstrate that facility designs (infrastructure) are in compliance with the Regulations. The primary input to landfill designs is based on the waste flow to the facility and the waste volume at the facility. Proper landfill management is dependent on adequate infrastructure and effective operational support. Like all engineered facilities there are physical and operation limits on the individual components that make up the total facility. Each component has a size or capacity that may limit the total facility design or operation. Most disposal facilities are referred to as waste containment facilities. Infrastructure or operational limits of the waste flow that are exceeded often result in component failure or operational failure (non-compliance) and may be a precursor to a release to the environment. This guidance will provide permit writers with a list of regulatory topics to be reviewed during the evaluation of a proposed waste disposal limit.

The procedures contained in this guidance document apply in the following scenarios:

- When an owner/operator applies for a permit or when an owner/operator applies for an amendment to an existing permit;
- When an owner/operator becomes obligated to comply with a consent order or unilateral order;

### II. Background

The following guidance document was developed in response to inquiries from regional offices regarding how to consistently establish daily maximum waste disposal limits. Multiple questions have been raised to determine which information should be reviewed and requested from the applicant when evaluating whether a proposed disposal limit is appropriate. This guidance proposes a list of criteria to be reviewed prior to approving a proposed daily maximum waste disposal limit.

### III. Authority

§ 10.1-1402 of the Virginia Waste Management Act, Chapter 14 (§ 10.1-1400 *et seq.*) of Title 10.1 of the Code of Virginia, authorizes the Virginia Waste Management Board to promulgate regulations necessary to carry out its powers and duties and the intent of the Act. §10.1-1402, 1408.1, 1409, 1411 authorizes the Board to promulgate regulations requiring an owner/operator of a solid waste disposal facility to provide planning consistency, infrastructure and operational support for a landfill that is impacted by an increase in landfill volume and waste acceptance rate

and that is safe and protects human health and the environment. The following Code of Virginia references address the issues of waste acceptance or landfill volume, directly or indirectly. § 10.1-1408.1.B.6-8, § 10.1-1408.1D.1, §10.1-1408.1.E, §10.1-1408.1.P, and §10.1-1409. Specifically, the code addresses “Disposal Limit” in two places.

1. § 10.1-1408.1.B.7 requires host agreements to include a “daily disposal limit”.
2. § 10.1-1408.1.B.8 requires applications for all publicly owned and operated landfills to identify a “daily disposal limit”

In addition, 9 VAC 20-80-520.B.1 requires all Part B applications to include “waste types and quantities to be disposed”.

## IV. Definitions

The definitions in the Virginia Waste Management Act and the Virginia Solid Waste Management Regulations, 9 VAC 20-80 *et seq.* (VSWMR or Regulation) apply to these Procedures. Definitions included in the VSWMR are not included in the below list.

**“Daily maximum disposal limit”** is a limit on the amount of solid waste that is permitted to be received at the facility and shall be computed on the amount of waste received during any calendar or operating day, which ever is less.

## V. Guidance Document

### V.1 Waste Disposal Limit

The following is a summary of the topics a permit writer should review during the establishment or increase of an existing daily maximum disposal limit. While the regulations only require some of the documents below to be submitted in the event of a new or expanding landfill, the permit writer should still review the existing documentation to ensure consistency between the submitted documentation and the proposed disposal limit.

**(a) Disposal Capacity Guarantee. Sanitary Landfill** applicants for new or expansion of existing facilities are required to guarantee sufficient disposal capacity to enable localities within the Commonwealth to comply with their solid waste management plans. If the applicant is proposing to increase an existing disposal limit, documentation should be submitted to verify the increased disposal limit will not impact the facility’s ability to honor an existing Disposal Capacity Guarantee. If the facility is establishing an initial disposal limit the disposal capacity guarantee submitted as part of the Notice of Intent (NOI) process should reflect the proposed disposal limit.

**(b) Host Agreement.** The VSWMR requires the applicant for a new sanitary landfill or for expansion of an existing sanitary landfill to submit a certification from the local governing body verifying a Host Agreement between the local government and the applicant has been executed. The VSWMR requires a Host Agreement to include certain minimum information. Two of these requirements are a daily disposal limit and traffic volumes. If the applicant is proposing to increase the waste disposal limit, a certification from the local government or copies of the applicable pages of the Host Agreement should

be provided to verify the increased disposal limit does not violate the existing Host Agreement. If the applicant is establishing an initial disposal limit the Host Agreement certification submitted with the NOI should support the proposed disposal limit. If the owner or operator is a locality or a service authority of which the local governing body is a member the Host Agreement is not required.

**(c) VDOT Traffic Report.** All **Sanitary Landfills** are required to submit a VDOT (or whoever maintains the local road system) traffic report in the Part A application. If the applicant is proposing to increase an existing disposal limit, a revised VDOT Traffic Report should be submitted to verify the existing local road system is sufficient to handle the increased limit. If the applicant is establishing an initial disposal limit, the VDOT traffic study submitted in the Part A should support the proposed disposal limit.

**(d) Solid Waste Management Plans.** Local planning districts or localities are required to include a listing of existing and planned solid waste collection, storage, treatment, transportation, disposal and other management facilities, their projected capacities, expected life and systems for their use in their solid waste management plan. The applicant should provide documentation to demonstrate the requested waste disposal limit complies with the locality's solid waste management plan given the impact an increased disposal limit may have on the expected life of a facility. If the requested disposal limit is greater than the maximum currently in the SWMP, the proposed limit should not be approved on the basis of 9VAC20-80-510.J.2. If such a disposal limit were approved, the certification submitted by the facility verifying compliance with this portion of the SWMP would no longer be accurate.

**(e) Equipment.** Each landfill is required to maintain adequate numbers and types of properly maintained equipment. Arrangements should also be made for substitute equipment to be available within 24 hours should the former become inoperable or unavailable. The applicant should provide documentation verifying additional equipment required by an increased disposal limit is available to the facility. For applicants establishing initial disposal limits the equipment information and waste handling procedures submitted in the Part B application should support the proposed disposal limit. The number and types of equipment must be sufficient for the maximum daily disposal limits. It is possible for the applicant to propose a "phased" approach to equipment requirements. For example the site may have a maximum disposal limit of 10,000 tons per day, but may actually be accepting only 3,000 tons per day. In this case the facility may demonstrate the appropriate number and types of equipment required for multiple intake rates not to exceed the maximum disposal limit. This will prevent unnecessary equipment for lower disposal rates. However, the facility must demonstrate adequate equipment will be available when the intake approaches the maximum limit.

**(f) Staffing.** Each landfill is required to employ appropriately trained operators in adequate numbers to safely operate the facility. If the applicant proposes an increased disposal limit, that also requires an increase in the number of equipment operated, the number of operators should increase proportionality. For applicants establishing initial disposal limits the Part B application should document the adequate number of employees necessary to operate at the proposed disposal limit. The applicant should also ensure an adequate number of operators will be onsite during all times of operation.

**(g) Infrastructure.** In addition to adequate numbers and types of equipment the applicant is required

by the Code of Virginia to provide documentation sufficient for the Director to determine if an infrastructure exists to support a new facility or an expansion or increase in capacity. This submitted documentation should be reviewed to ensure adequate infrastructure exists to accommodate the proposed disposal limit. Examples of infrastructure necessary include queuing capacity, adequate internal roads, scales or other means of tracking disposal, internal traffic control, etc.

## **V.2 Revised Template**

The revised template is provided in Attachment A. Note, the complete module will be placed in DEQNET.

## **VI. Collaborative Process**

No project team was formed to develop this guidance. Jason Williams revised this guidance and the permit writers and waste program managers provided comments.

# ATTACHMENT A - Revised Module I Template

**(For use until New Streamline Permit Structure is Implemented)**

## SOLID WASTE FACILITY PERMIT

PERMIT NUMBER \_\_\_\_\_  
[ON DEQ LETTERHEAD]

**Facility Name:**

**Facility Type:**

**Latitude:** 39E08'22"

**Site Location:**

**Longitude:** 78E05'59"

**Location Description:** The facility is located on

**Background:** The facility is to serve as a *sanitary landfill*, in compliance with 9 VAC 20-80-10 et seq. *Include the total acres of disposal area within the facility boundary; the acres of disposal acres that is new as a result of this permit. If the facility is a landfill, provide the total air capacity in cubic yards and the approximate design life of the facility. Site a reference to the approved waste list in the permit and any special waste considerations. Briefly describe the service area for the facility and a sentence description on the waste haulers using the landfill. Provide any special background information that might be needed.*

**Permit Limits:** The landfill disposal limit is a maximum daily tonnage of \_\_\_\_\_ tons/day. This limit is based on the design, infrastructure, equipment, and staffing maintained by this facility.

**Permit Highlights:** *This section should discuss design information specific to the facility. Examples include: number of cells/phases, liner design, cap design, leachate recirculation, leachate management, etc.*

**Permit Amendment:** *If amendment, describe the specific permit modification involved.*

THIS IS TO CERTIFY THAT:

*Permittee  
Address*

is hereby granted a permit to construct, operate, and maintain the facility as described in the attached Permit Modules *specify which permit modules and attachments were used and list them in the Reference List*. These Permit Modules and Permit Attachments are as referenced hereinafter and are incorporated into and become a part of this permit.

The herein described activity is to be established, modified, constructed, installed, operated, used, maintained, and closed in accordance with the terms and conditions of this permit and the plans, specifications, and reports submitted and cited in the permit. The facility shall comply with all regulations of the Virginia Waste Management Board. In accordance with Chapter 14, § 10.1 - 1408.1(D) of the Code of Virginia, prior to issuing this permit, any comments by the local government and general public have been investigated and evaluated and it has been determined that the *proposed* facility poses no substantial present or potential danger

to human health or the environment. The permit contains such conditions and requirements as are deemed necessary to comply with the requirements of the Virginia Code, the regulations of the Board, and to prevent substantial or present danger to human health or the environment.

Failure to comply with the terms and conditions of this permit shall constitute grounds for the revocation or suspension of this permit and for the initiation of necessary enforcement actions.

The permit is issued in accordance with the provisions of § 10.1-1408.1.A, Chapter 14, Title 10.1, Code of Virginia (1950) as amended. *Provide any information regarding variances associated with the facility and the page of the permit where they are located*

Issued: *Date of original permit issuance, only if this is an amendment*

Amendment: *Date of prior permit amendment, only if this is another amendment*

**APPROVED:**

\_\_\_\_\_  
Regional Deputy Director

DATE: \_\_\_\_\_  
Amended *only for amendments*