#### **COMMONWEALTH OF VIRGINIA**

**Department of Environmental Quality** 

Subject: Waste Guidance Memo No. LPR-SW-01-2009

SCENARIOS UNDER WHICH A PART A MODIFICATION IS OR IS

**NOT REQUIRED** 

To: Regional Waste Program Managers

From: Leslie Beckwith Lister Beckwith

Director, Office of Financial Responsibility & Waste Programs

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Copies: Regional Land Protection Managers, Solid Waste Permit Coordinator, Regional

Solid Waste Permit Writers

#### **Summary:**

This guidance provides the regulated community a multiple-scenario discussion regarding when a Part A modification is required for specific permit revisions to a solid waste permit. This guidance has been updated to reflect changes made to the Virginia Solid Waste Management Regulations, including recodification in 2011. This update also replaces the May 27, 2009, Clarification of "Expansion" and "Increase in Capacity" memo from James Golden.

#### **Electronic Copy:**

An electronic copy of this guidance is available on Virginia's Regulatory Town Hall at http://townhall.virginia.gov/L/GDocs.cfm?boardid=119.

#### **Contact Information:**

Please contact Kathryn Perszyk at (703) 583-3856 or <u>Kathryn Perszyk@deq.virginia.gov</u> 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.



## Scenarios Under Which a Part A Modification is or is not Required

#### I. Introduction

It has been confusing as to when applicants need to submit a Part A modification application for siting a lateral or vertical expansion of an existing landfill or an increase in capacity. The Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 *et seq.*) include the information necessary to determine when a Part A modification application is required. However, the requirements of the Notice of Intent and Part A application can be unclear. The purpose of this guidance is to summarize the requirements of the VSWMR in a format that will assist applicants in determining when they need to submit a Part A modification application.

The following are scenarios under which a Part A modification application may or may not be required:

- (A) A brand new site (Green field) that is being proposed to be used as a landfill or a treatment and storage facility that is not covered by a Permit-by-Rule (PBR);
- (B) An existing landfill that is planning to expand the facility and waste management boundaries horizontally beyond the existing Part A approved facility and waste management boundaries;
- (C) An existing landfill that is planning to increase in capacity (airspace) by vertical expansion only (i.e. by lowering the base grade and/or increasing the final top elevation);
- (D) An existing landfill that is planning to increase the facility boundary laterally (i.e. adding more property to the facility) beyond the existing Part A approved facility boundary for the purpose of groundwater corrective action, gas migration and control, or other purpose which does not include an increase in the waste management boundary;
- (E) An existing landfill that is planning to decrease the facility boundary laterally for releasing a parcel or portion of a parcel from the existing Part A approved facility boundary to use it for other purposes;
- (F) An existing landfill that is planning to expand laterally on an unlined unit or a unit lined with a liner system that does not meet the current regulatory standards (piggybacking); and
- (G) An existing landfill that is planning to increase its daily disposal limit beyond that currently defined in the permit or permit documents.

The above scenarios are discussed individually in Section V of this guidance document. Other potential scenarios that are not presented in this guidance document will be evaluated on a case-by-case basis by the DEQ. Note that permit modifications that include the design of additional landfill units (i.e. phases or cells) within an approved Part A waste management boundary are unlikely to require a Part A modification as the modification is not considered an expansion or increase in capacity as discussed herein unless other scenarios listed above are proposed as part of the design.

# II. Background

This guidance has been created and revised in response to inquiries from the regulated community attempting to determine whether a Part A modification is necessary under various scenarios of expansion or increase in overall capacity. This guidance discusses several scenarios and their impact on the existing approved Part A application.

# III. Authority

In accordance with § 10.1-1408.4.A. of the Code of Virginia, before granting a permit which approves site suitability for a new municipal solid waste landfill, the Director shall determine, in writing, that the site on which the landfill is to be constructed is suitable for the construction and operation of such a landfill. In making his determination, the Director shall consider and address, in addition to such others as he deems appropriate, the following factors:

- 1. Based on a written, site-specific report prepared by the VDOT, the adequacy of transportation facilities that will be available to serve the landfill, including the impact of the landfill on local traffic volume, road congestion, and highway safety;
- 2. The potential impact of the proposed landfill on parks and recreational areas, public water supplies, marine resources, wetlands, historic sites, fish and wildlife, water quality, and tourism; and
- 3. The geologic suitability of the proposed site, including proximity to areas of seismic activity and karst topography.

The applicant shall provide such information on these factors or others at the Director's request.

In addition to the requirements contained in the Code of Virginia § 10.1-1408.1 and § 10.1-1408.4, as applicable, Part A applications must contain the information required in several sections of the regulations such as:

- § 9 VAC 20-81-450.B Notice of Intent;
- § <u>9 VAC 20-81-460</u> Part A application, which are applied to all types of landfills and treatment and storage facilities except those subsections that only apply to a specific type of facility;
- § <u>9 VAC 20-81-120</u> Siting requirements is applied to sanitary, CDD, and industrial landfills either new or expansion areas; and

• § <u>9 VAC 20-81-320</u> – Siting requirements is applied to compost facilities, transfer stations, centralized waste treatment facilities, materials recovery facilities, waste to energy and incineration facilities, and waste piles.

Facilities eligible for coverage under a Permit-by-Rule are not required to submit a Part A application. Permit-by-Rule facilities must comply with § 9 VAC 20-81-410.A. If the facility seeking a Permit-by-Rule is a transfer station the applicant must also comply with the requirements of § 9 VAC 20-81-450.B.4 and § 10.1-1408.1 of the Code of Virginia (DEQ Form SW-11-1 Request for Local Government Certification).

#### IV. Definitions

The definitions in § 10.1-1400 of the Code of Virginia and § 9 VAC 20-81-10 of the VSWMR apply to the implementation of the siting evaluation (Part A application).

"FAA" means the Federal Aviation Administration or other agency with delegated authority for oversight of aerospace travel.

"VDOT" means the Virginia Department of Transportation or other agency with delegated authority for transportation oversight (such as local government

#### V. Guidance Document

As mentioned earlier, the intent of this guidance is to summarize the information of the VSWMR in a format that will help applicant determine when and under what scenarios they need to submit a Part A modification application. The site suitability evaluation (i.e. Part A application review) is valid throughout the design, construction, operation, and closure of the facility. However, if it is specifically mentioned in future amendments of the VSWMR and the Code of Virginia, the Department can require the facility owner to revise the permit, including the Part A application in order to comply with the current changes and revisions in the VSWMR and the Code of Virginia. The following sections elaborate on the scenarios under which a Part A application or modification needs to be submitted for review and approval.

# V.A New Facility

When a green site is proposed to be used as a landfill, a Part A application must be submitted to DEQ for review and approval. Facilities eligible for coverage under a Permit-by-Rule are not required to submit a Part A application, unless they choose to pursue a full permit. The Part A application must contain all applicable information requested in § 9 VAC 20-81-450.B, § 9 VAC 20-81-460, DEQ Form SW PTA, and § 9 VAC 20-81-120 or § 9 VAC 20-81-320 of the VSWMR, depending on what type of solid waste management facility the Part A application has been prepared for. All subsections of the above sections are applicable for a new facility. Submission Instruction No. 1 includes details as to which sections and subsections are applied to each type of landfill or other facility. For a new facility Part A application, DEQ will assign an alphanumeric Permit Number (e.g. SWP650) with a facility name that will be used to identify the facility for

future correspondence and will be valid throughout the active life and post-closure period of the facility.

#### V.B Horizontal Expansion of an Existing Facility

The VSWMR now defines an expansion as "a horizontal expansion of the waste management boundary as identified in the Part A application. If a facility's permit was issued prior to the establishment of the Part A process, an expansion is a horizontal expansion of the disposal unit boundary."

Using this definition, if the area of the horizontal expansion was not included in the previous Part A application approval, a Part A modification application will be required. A Part A application will also be required if a facility's permit was issued prior to the establishment of the Part A process and there is a proposed horizontal expansion of the disposal unit boundary. If the waste management boundary is modified to identify and include previously closed disposal areas that was omitted from previous facility drawings, a Part A modification is not required. In this case, the expanded waste management boundary will be acknowledged as historical fill in the Part B permit, but not authorized for additional waste disposal (i.e. piggyback, see Section V.F.) without further permit consideration. If the facility has a Part A permit, the Near Vicinity Map (9 VAC 20-81-460.C.) should be updated and accompany the Part B modification request.

Since the expansion is for an existing facility that has an alphanumeric Permit Number (e.g. SWP650), the additional siting information required for horizontal expansion is treated as a modification to the existing Part A application. However, in accordance with the definition of a "new solid waste management facility" the Part A modification application will be reviewed as a new solid waste management facility and all the subsections of the applicable sections (§ 9 VAC 20-81-450.B, § 9 VAC 20-81-460, DEQ Form SW PTA, and § 9 VAC 20-81-120 or § 9 VAC 20-81-320, depending on what type of solid waste management facility the Part A application has been prepared for) of the VSWMR that are designated for a new facility or a modification allowing a facility expansion will be applicable. The applicant may reference portions of the existing approved Part A application that will remain unchanged in lieu of submitting duplicate For example, the applicant may reference the existing geotechnical and hydrogeological report if the total number of borings completed during the initial Part A application is sufficient including the expansion acreage and the results of that previous study indicate there is no change in the geology or hydrology in the expansion area. These existing documents shall be included in the modification application, if requested by DEQ. In accordance with § 9 VAC 20-81-460.E.1.b, DEQ may require additional borings if the number of borings previously submitted is not sufficient to describe the geologic formations and groundwater flow patterns below the proposed expansion. The applicant shall include a discussion in the executive summary of the Part A modification application detailing why previously submitted information continues to satisfy the siting requirements of the Code of Virginia and the VSWMR.

## V.C Increase in Overall Capacity by Vertical Expansion

Increase in overall capacity through vertical expansion (i.e. without modifying waste management boundary - WMB) for an existing facility can be accomplished by:

- 1. increasing (steepening) the existing side slopes; or
- 2. expanding the facility vertically up to an elevation beyond the existing Part A or Part B approved elevation; or
- 3. lowering the base grades beyond the existing Part A or Part B approved base grades of a unit prior to construction; or
- 4. substituting an approved bottom liner or final cover design which is thinner than a previously approved bottom liner or final cover design, thus increasing the capacity.

## V.C.1 Steepening Side Slopes

If the increase in capacity is accomplished only by changing (steepening) the side slopes without lowering the base grade beyond the previously approved Part B base grades or without increasing the final top elevation beyond the previously approved Part A or Part B final top elevation, a Part A modification application is not required. However, this expansion would meet the description of an increase in capacity as stated in § 9 VAC 20-81-450. The NOI for the Part B permit modification application must address the following sections of the VSWMR.

- 1. § 9 VAC 20-81-450.B.1 A letter accompanied by area and site location maps
- 2. § 9 VAC 20-81-450.B.2 Disclosure Statement (DEQ Forms <u>DISC-01</u> and <u>DISC-02</u>)
- 3. § 9 VAC 20-81-450.B.3 Local Government Certification (DEQ Form SW-11-1)
- 4. § 9 VAC 20-81-450.B.8 and § 9 VAC 20-81-450.B.8 a or 8.b Demonstration of Need
- 5. § 9 VAC 20-81-460.G VDOT Adequacy Report Applicable only to requests for an increase in the daily disposal limit.
- 6. § 9 VAC 20-81-460.H Landfill Impact Statement *Applicable only to sanitary landfills*.
- 7. § 9 VAC 20-81-460.I Notification to adjacent property owners/occupants
- 8. § 9 VAC 20-81-120 Siting requirements *Applicable if siting requirements have changed since the Part A was approved.*

# V.C.2 Expansion vertically to higher elevation

If the increase in capacity is accomplished by expanding the facility vertically up to an elevation beyond the existing Part B approved final elevation, **a Part A modification application is not required**. However, this expansion would meet the description of an increase in capacity as stated in § <u>9 VAC 20-81-450</u>. The NOI for the Part B permit modification application must address the following sections of the VSWMR.

- 1. § 9 VAC 20-81-450.B.1 A letter accompanied by area and site location maps
- 2. § 9 VAC 20-81-450.B.2 Disclosure Statement (DEQ Forms <u>DISC-01</u> and <u>DISC-02</u>)
- 3. § 9 VAC 20-81-450.B.3 Local Government Certification (DEQ Form SW-11-1)
- 4. § 9 VAC 20-81-450.B.8 and § 9 VAC 20-81-450.B.8 a or 8.b Demonstration of Need
- 5. § 9 VAC 20-81-460.G VDOT Adequacy Report Applicable only to requests for

- an increase in the daily disposal limit.
- 6. § 9 VAC 20-81-460.H Landfill Impact Statement *Applicable only to sanitary landfills*.
- 7. § 9 VAC 20-81-460.I Notification to adjacent property owners/occupants
- 8. § 9 VAC 20-81-120 Siting requirements Applicable if siting requirements have changed since the Part A was approved. Siting requirements related to airports and FAA standards may need to be updated based on the proximity to an airport and proposed landfill height.

## V.C.3 Expansion by lowering base grades

If the increase in capacity is accomplished by expanding the facility vertically down (i.e. by lowering base grades beyond the existing Part A or Part B approved base grades), the Part A site investigation borings will need to be reviewed to verify the original borings approved are still adequate for the new proposed base grades. If the original approved numbers and depth of borings do not meet the necessary regulatory requirements, a Part A modification will be required. If the original numbers and depths of borings still meet the necessary regulatory requirements, a Part A modification will not be required. However, supporting documentation as outlined below demonstrating the adequacy of the approved Part A borings shall be submitted with the NOI for the Part B application. If a Part A modification is required, the facility should submit DEQ Form SW PTA.

- 1. § 9 VAC 20-81-450.B.1 A letter accompanied by area and site location maps
- 2. § 9 VAC 20-81-450.B.2 Disclosure Statement (DEQ Forms <u>DISC-01</u> and <u>DISC-02</u>)
- 3. § 9 VAC 20-81-450.B.3 Local Government Certification (DEQ Form SW-11-1)
- 4. § 9 VAC 20-81-450.B.8 and § 9 VAC 20-81-450.B.8 a or 8.b Demonstration of Need
- 5. § 9 VAC 20-81-460.E.1.a and 1.e Number and depth of borings
- 6. § 9 VAC 20-81-460.G VDOT Adequacy Report Applicable only to requests for an increase in the daily disposal limit.
- 7. § 9 VAC 20-81-460.H Landfill Impact Statement *Applicable only to sanitary landfills*
- 8. § 9 VAC 20-81-460.I Notification to adjacent property owners/occupants
- 9. § 9 VAC 20-81-120 Siting requirements Applicable if siting requirements have changed since the Part A was approved. Separation for seasonal high groundwater may need to be addressed based on the lowering of the base grade.

# V.C.4 Substituting bottom liner or final cover

If the increase in capacity is accomplished by substituting an approved bottom liner or final cover design which is thinner than a previously approved bottom liner or final cover with all other vertical and horizontal waste management boundaries remaining the same, a **Part A modification application is not required.** For purposes of determining the type of permit modification, this will not be classified as an increase in capacity; however, the proposal to change the bottom liner or final cover design will require a Part B major permit modification in accordance with Table 5.2 of § 9 VAC 20-81-600. If a

capacity increase is measured, the facility shall update its designed permitted capacity with the permit modification.

#### Additional discussions for V.C

The Part B permit modification application review needs to be coordinated with the SWMP reviewer at central office in regards to additional capacity, site life, and daily disposal limits to ensure the Part B permit modification application is consistent with the local or regional SWMP.

If the daily disposal limit is increased beyond the existing daily disposal limit for a sanitary, CDD or non-captive industrial landfills, the Part B application must include a traffic impact approval letter from VDOT, the County, or the City, as applicable. This letter should certify sufficient infrastructure exists to safely handle the traffic flow (§ 10.1-1408.1.D.1(iii)). Since § 10.1-1408.1.D.1 does not apply to captive industrial landfills, no traffic impact approval letter from VDOT, the County, or the City is required. If an increase in the daily disposal limit for a landfill is not proposed, there will be no additional traffic impact report required. If a VDOT adequacy report is not available/included in the existing approved Part A application, a new VDOT adequacy report must be submitted with the Part B NOI to meet the requirements of § 9 VAC 20-81-460.G.

Most existing modern sanitary landfills have a landfill impact statement (LIS) contained in the current approved Part A application meeting the requirements of § 9 VAC 20-81-460.H. It is very unlikely increasing the landfill capacity without a horizontal expansion will have any potential impact on parks, recreational areas, wildlife management areas, critical habitat areas of endangered species, public water supplies, marine resources, wetlands, historic sites, fish and wildlife, water quality, and tourism. As a result, the LIS included in the existing approved Part A application may be used to meet the requirements of § 9 VAC 20-81-460.H. If the LIS is not available/included in the existing approved Part A application, a new LIS must be submitted with the Part B NOI to meet the requirements of § 9 VAC 20-81-460.H.

# V.D Expansion of Facility Boundary for an Existing Facility

A Part A application must be submitted to DEQ for review and approval if the facility wants to modify (i.e., increase) the facility boundary for groundwater corrective action, landfill gas migration monitoring and control, or other purpose. In this scenario, the waste management boundary is not expanded nor is there an expansion of the waste footprint or an increase in capacity. As such the only portions of the Part A application that must be revised include the drawings identifying the Facility Boundary and the documentation for demonstration of legal control provided all other portions of the Part A application remain unchanged. These changes do not substantially alter permit conditions, increase the size of the operation, require an extensive review, or reduce the capacity of the facility to protect human health or the environment. In accordance with § 10.1-1402.1 of the Code of Virginia, this change constitutes a "minor modification" and as such no fee is required.

The expansion of the facility boundary and revision of the groundwater monitoring, corrective action, or gas management/remediation plans will require a modification to the existing Part B permit. If the facility's permit predates the Part A application procedure there is no requirement to

submit a revision to the Part A application since there are no drawings that must be updated. However, the facility must provide proof of ownership documentation and an updated site plan drawing showing the new facility boundary, existing disposal boundaries, and all landfill monitoring networks with the Part B modification.

#### V.E Reduction of Facility Boundary

A Part A application is required to be submitted to the VDEQ for review and approval if the facility wants to modify (i.e. decrease) the facility boundary for releasing a parcel or potion of a parcel to use it for other purposes. If the concentration of landfill gas exceeds the lower explosive limit at the existing or proposed facility boundary, then the facility will not be allowed to reduce the facility boundary until such time as a landfill gas remediation plan is successfully implemented and gas levels return to compliant levels. In addition, if the facility is currently in corrective action for groundwater or has exceeded groundwater protection standards, a reduction in the facility boundary would not be allowed unless the applicant demonstrates the reduced facility boundary will not impact the facility's ability to complete corrective action and will not pose an increased risk to potential receptors. The owner or operator of a solid waste management facility (SWMF) can modify the facility boundary as long as the new facility boundary is at least 50 feet from the waste management boundary (WMB) or any other distance that is allowed by the siting and design sections of the VSWMR for a specific type of SWMF. However, all the existing structures, perimeter roads, gas monitoring probes, ground water monitoring wells, etc. must be located within the new facility boundary. The Part A modification application to reduce the facility boundary must include the following:

- 1. A completed, signed, and dated <u>DEQ Form SW PTA</u> as required by § 9 VAC 20-81-460.A.
- 2. Key Map [Attachment IX to DEQ Form SW PTA, § 9 VAC 20-81-460.B] delineating the general location of the proposed facility boundary plotted on a seven and one-half minute United States Geological Survey topographical quadrangle. The map and drawing approved with the original Part A for the site must be amended to show the new facility boundary.
- 3. Near Vicinity Map [Attachment IX to DEQ Form SW PTA, § 9 VAC 20-81-460.C] showing the location of the proposed facility boundary and depicting required structures and features within 500 feet from the proposed facility boundary.
- 4. Proof of Ownership [Attachment X to DEQ Form SW PTA, § 9 VAC 20-81-460.D]. No documentation of ownership will be necessary for the reduction of a facility boundary if the applicant has previously provided documentation of ownership.
- 5. Hydrogeological and Geotechnical Report [Attachment XI to DEQ Form SW PTA, § 9 VAC 20-81-460.E]. The hydrogeological and geotechnical report does **NOT** need to be submitted as part of the Part A modification application. If the reduction of the facility boundary will result in the relocation of gas monitoring probes and/or groundwater monitoring wells, a revised groundwater or gas monitoring plan must be submitted as part of the Part B modification process. This plan must be certified by a qualified groundwater scientist or professional engineer, as applicable.

If the facility boundary is modified to exclude a parcel or portion of a parcel, the new facility boundary must continue to meet the buffer requirements of § 9 VAC 20-81-120 or § 9 VAC 20-81-320. It is assumed the majority of the siting requirements will remain unchanged. However, a discussion must be provided to demonstrate the new facility boundary meets all required setbacks and buffer requirements. If the reduction of the facility boundary requires the relocation of leachate containment, stormwater, or groundwater wells/gas monitoring probes the applicant must verify these new locations meet all siting and buffer requirements included in the above sections.

# V.F Increase in Capacity by Lateral Expansion Over an Existing Waste Unit (Piggybacking)

### V.F.1 Expansion within the Part A Waste Management Boundary

If the applicant proposes to expand over an existing adjacent waste unit that is **inside the facility's approved Part A WMB**, **a Part A application is not required**. However, this expansion would meet the description of an increase in capacity as stated in § <u>9 VAC 20-81-450</u>. The NOI for the Part B permit modification application must address the following sections of the VSWMR.

- 1. § 9 VAC 20-81-450.B.1 A letter accompanied by area and site location maps
- 2. § 9 VAC 20-81-450.B.2 Disclosure Statement (DEQ Forms <u>DISC-01</u> and <u>DISC-02</u>)
- 3. § 9 VAC 20-81-450.B.3 Local Government Certification (DEQ Form SW-11-1)
- 4. § 9 VAC 20-81-450.B.8 and § 9 VAC 20-81-450.B.8 a or 8.b Demonstration of Need
- 5. § 9 VAC 20-81-460.G VDOT Adequacy Report Applicable only to sanitary landfills requesting an increase in the daily disposal limit.
- 6. § 9 VAC 20-81-460.H Landfill Impact Statement *Applicable only to sanitary landfills*.
- 7. § 9 VAC 20-81-460.I Notification to adjacent property owners/occupants
- 8. § 9 VAC 20-81-120 Siting requirements Applicable if siting requirements have changed since the Part A was approved. However, documentation must be submitted to verify an appropriate factor of safety and stability calculations as part of the Part B modification to address construction on an existing waste mass.

# V.F.2 Expansion outside the Part A Waste Management Boundary

If the applicant proposes to expand a permitted facility over an existing adjacent waste unit that does **not** have an existing Part A approval or is **outside the approved Part A WMB**, a Part A modification application **is required**. In this scenario the modification application would be treated as a horizontal expansion, and therefore, the requirements and process discussed in section V.B above shall apply to these situations.

# V.G. Increase in Daily Disposal Limit

If an increase in the daily disposal limit is proposed, a **Part A modification is not required** unless other proposed changes discussed herein require a Part A modification. However, a Part B major modification would be necessary for the increase in daily disposal limit pursuant to Table 5.2 of <u>9 VAC 20-81-600</u>. The Part B modification application must include a transportation adequacy

report from VDOT, the County, or the City, as applicable, in accordance with <u>9 VAC 20-81-460</u>.G. in addition to any other applicable Part B modification documentation. For sanitary landfills, this report should certify sufficient infrastructure exists to safely handle the traffic flow (§ <u>10.1-1408.1.D.1(iii)</u>). This report is not required for captive industrial landfills (see § <u>10.1-1408.1.D.1.</u> and D.2.)

#### VI. Collaboration Process

This guidance was developed internally, peer reviewed by the Regional Waste Program Managers, and issued on April 15, 2009. Kathryn Perszyk, Solid Waste Permit Coordinator, revised this guidance and the permit writers and waste program managers provided comments.

# VII. Other Application Information

This Guidance replaces GM 04-1999 "Guidance for Facility Property Boundary Modifications." This revision replaces the April 15, 2009, version of this guidance and replaces the May 27, 2009, Clarification of "Expansion" and "Increase in Capacity" memo from James Golden.