

**COMMONWEALTH OF VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**WATER DIVISION**

**P.O. Box 1105**

**Richmond, VA 23218**

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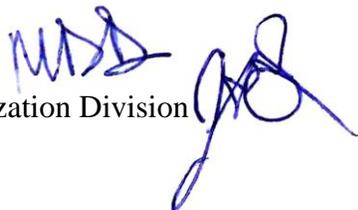
**Subject:** **Water Guidance Memo No. 14-2006**  
VPA and SWM Permitting, and BUD Approval at Solid Waste Management Facilities

**To:** Regional Directors

**From:** Melanie D. Davenport, Director, Water Division  
Jeff Steers, Director, Land Protection & Revitalization Division

**Date:** April 30, 2014

**Copies:** Deputy Regional Directors, Regional Water Permit Managers, Regional Solid Waste Managers, James Golden, Fred Cunningham, Neil Zahradka, Justin Williams



**Summary:**

The purpose of this guidance is to provide DEQ regional water permit and solid waste permit staff information and general directions on appropriate permitting options for specific pollutant management activities that have the potential to impact state waters at solid waste management facilities. This guidance is intended to minimize duplicate regulation of such activities pursuant to the Virginia Pollution Abatement Permit Regulation and Virginia Solid Waste Management Regulations.

**Electronic Copy:**

An electronic copy of this guidance in PDF format is available for staff internally on DEQNET, and for the general public on DEQ's website at: <http://www.deq.virginia.gov/>.

**Contact Information:**

Please contact Valerie Rourke, Office of Land Application Programs at (804) 698-4158 or [Valerie.Rourke@deq.virginia.gov](mailto:Valerie.Rourke@deq.virginia.gov); or Justin Williams, Office of Waste Permitting & Compliance at (804) 698-4185 or [Justin.Williams@deq.virginia.gov](mailto:Justin.Williams@deq.virginia.gov) with any questions you have regarding 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.**

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## List of Acronyms

BUD	Beneficial Use Demonstration
DEQ	Department of Environmental Quality
DLPR	Division of Land Protection and Revitalization
OLAP	DEQ Office of Land Application Programs
RO	DEQ Regional Office
VPA permit	Virginia Pollution Abatement permit
SWMF	Solid Waste Management Facility
SWM permit	Solid Waste Management permit
VPDES permit	Virginia Pollutant Discharge Elimination System permit
VSWMR	Virginia Solid Waste Management Regulations

## **I. Introduction**

Virginia Pollution Abatement (VPA) permits may be used to authorize a broad range of activities that involve a discharge into or adjacent to state waters other than a point source discharge to surface waters authorized by a Virginia Pollutant Discharge Elimination System (VPDES) permit. Virginia Solid Waste Management Regulations (VSWMR) permits may also regulate the impacts to state waters related to the activities of a solid waste management facility (SWMF). The following guidance provides:

- i. information on VPA and Solid Waste Management (SWM) permits;
- ii. the authority of these permit programs to regulate specific pollutant management activities that have the potential to impact state waters; and
- iii. general directions for Regional Office (RO) water permit and solid waste permit staff regarding the appropriate permitting options for these activities.

## **II. Authority**

This document provides guidance to implement the VPA Permit Regulation ([9VAC25-32](#)) and the VSWMR ([9VAC20-81](#)) related to DEQ permitting of specific pollutant management activities at a SWMF. The authority for promulgation of these regulations and development of this guidance is contained in §§ [62.1-44.15](#) and [10.1-1402](#) of the Code of Virginia.

## **III. Definitions**

### **A. VSWMR**

The following are terms defined in the VSWMR, [9VAC20-81-10](#):

“Beneficial use” means a use that is of benefit as a substitute for natural or commercial products and does not contribute to adverse effects on health or environment.

"Facility boundary" means the boundary of the solid waste management facility. For landfills, this boundary encompasses the waste management boundary and all ancillary activities including, but not limited to scales, groundwater monitoring wells, gas monitoring probes, and maintenance facilities as identified in the facility's permit application. For facilities with a permit-by-rule (PBR) the facility boundary is the boundary of the property where the permit-by-rule activity occurs. For unpermitted solid waste management facilities, the facility boundary is the boundary of the property line where the solid waste is located.

"Landfill" means a sanitary landfill, an industrial waste landfill, or a construction / demolition / debris landfill.

"Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials from such waste. Leachate and any material with

which it is mixed is solid waste; except that leachate that is pumped from a collection tank for transportation to disposal in an off-site facility is regulated as septage, leachate discharged into a waste water collection system is regulated as industrial waste water and leachate that has contaminated groundwater is regulated as contaminated groundwater.

"Solid waste" means any of those materials defined as "solid waste" in [9VAC20-81-95](#) (Identification of solid waste).

"Solid waste management facility" or "SWMF" means a site used for planned treating, storing, or disposing of solid waste. A facility may consist of several treatment, storage, or disposal units.

"Waste management boundary" means the vertical plane located at the boundary line of the area approved in the Part A application for the disposal of solid waste and storage of leachate. This vertical plane extends down into the uppermost aquifer and is within the facility boundary.

## **B. VPA Permit Regulations**

The following are terms defined in the VPA Permit Regulation, [9VAC25-32-10](#):

"Pollutant management activity" means a treatment works with a potential or actual discharge to state waters, but which does not have a point source discharge to surface waters.

"Treatment works" means either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature. Treatment works may include but are not limited to pumping, power, and other equipment and their appurtenances; septic tanks; and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for ultimate disposal of residues or effluents resulting from such treatment. "Treatment works" does not include biosolids use on privately owned agricultural land.

## **IV. Background**

VPA permits must be issued in accordance with [9VAC25-32-30](#). Per [9VAC25-32-30.B](#), VPA permits may be issued to a broad range of activities that involve the management of a pollutant where there exists reasonable potential to adversely impact state waters resulting from a discharge of that pollutant from the activity. This does not include point source discharge to surface waters authorized by a VPDES permit ([9VAC25-32-30.C](#)), discharges to ground water through injection wells authorized by the EPA Underground Injection Control Program (40 CFR Part 144) and approved by DEQ ([9VAC25-32-40.6](#)), and land disposal activities otherwise authorized by DEQ ([9VAC25-32-40.4](#)), such as but not limited to, activities authorized by a SWM permit in accordance with [9VAC20-81](#). In addition, VPA permits cannot be issued where

the terms or conditions of the VPA permit do not comply with the applicable regulations or requirements of the law ([9VAC25-32-30.E](#)).

Historically, VPA permits have been issued to manage pollutants from animal feeding operations, land application of biosolids, industrial sludge, and treated wastewater (municipal and industrial), and storage associated with these activities. Generally, most pollutant management activities authorized by a VPA permit serve a dual purpose of disposal and beneficial use.

A SWM permit may be issued for the ownership, operation or construction of a solid waste management facility or landfill in accordance with [9VAC20-81](#). The VSWMR apply to a broad range of solid wastes identified in [9VAC20-81-95](#). However, solid waste materials that are determined by DEQ DLPR to be beneficially reused through a Beneficial Use Demonstration (BUD) ([VAC20-81-97](#)) are not considered solid wastes for the purposes of VSWMR ([9VAC20-81-95.C.6](#)). This may apply to waste materials beneficially used in a variety of manners or uses, including those on or off the site of the SWMF, such as reuse of tire shred and sandblast grit among others. A BUD may be issued with conditions and so long as those conditions are met, the material and activity are not regulated as management of solid waste. Also, certain solid wastes are exempted from the requirements of VSWMR if they are managed in accordance with requirements promulgated by the State Water Control Board to regulate wastes ([9VAC20-81-95.E](#)).

Landfills have the option to manage stormwater runoff and/or leachate collected from the landfill by treating it onsite to a quality that may be discharged to surface waters or transporting it off site for treatment. A discharge to surface waters from onsite wastewater treatment may be covered by a VPDES General Permit for Discharges of Storm Water Associated with an Industrial Activity where the original wastewater consists of stormwater runoff ([9VAC25-151](#)), or by an individual VPDES permit where the original wastewater consists of leachate or a combination of leachate and stormwater ([9VAC25-31](#)). For the purposes of the VPDES General Permit, the operation of a solid waste management facility or landfill is considered an industrial activity.

## **V. Guidance**

Where provisions of the VPA Permit Regulation and the VSWMR apply to the same pollutant management activities at a SWMF, water permit and solid waste permit staff at the RO should coordinate and work cooperatively to minimize duplicate regulation of such activities. Ideally, if one administrative action can address both programmatic requirements, then only one administrative action should occur unless the facility requests to have separate administrative actions under both programs. This is particularly the goal where the VSWMR and VPA Permit Regulation have overlapping requirements or where one set of regulations is more stringent. For example, where the activity will occur within a lined area of a landfill with existing groundwater monitoring requirements, another separate groundwater monitoring requirement should not be

imposed.<sup>1</sup>

Pollutant management activities that involve the treatment, storage, disposal or beneficial use of biosolids, industrial sludges, and/or wastewaters, such as leachate, may be authorized by a VPA permit anywhere within the SWMF boundaries. In lieu of a VPA Permit, these activities may be authorized by a BUD or SWM permit on a case-by-case basis.

#### **A. BUD/SWM Permit Conditions in lieu of VPA Permit**

Per [9VAC25-32-40.4](#) of the VPA Permit Regulation, land disposal activities that could be authorized by a VPA Permit, including biosolids use, sewage sludge disposal or onsite waste treatment, may be authorized by a BUD or changes to an existing SWM Permit in lieu of coverage under a VPA Permit at a SWMF. When evaluating a BUD for beneficial uses of solid wastes or changes in a SWM Permit that could otherwise be covered by a VPA permit, the solid waste permit staff should consult with water permit staff about any additional items to consider for the protection of state waters and public health. This evaluation should, among other things, assess whether it is appropriate to allow the proposed activity at all under a VPA permit.<sup>2</sup>

For example, the beneficial use of biosolids approved through a BUD as a soil amendment to stabilize slopes at a SWMF may need to comply with vector attraction reduction, pathogen reduction, metals limitations or setbacks specified in the VPA Permit Regulation, and should be addressed in the BUD approval process. Once these additional items have been considered, pollutant management activities that involve the beneficial use of biosolids, industrial sludges, and/or wastewaters, such as leachate, at the SWMF may be addressed as conditions within the BUD approval. Refer to Attachment A of this guidance for an example template of a BUD approval letter that would include such conditions. A BUD would most likely be used in lieu of a VPA permit where the proposed activity would occur within the lined waste management boundaries.

#### **B. VPA Permit in lieu of BUD and SWM Permit**

Where a beneficial use or disposal activity at a SWM facility cannot be authorized by a BUD under [VAC20-81-97](#) or through a condition of a SWM permit, respectively, and has the potential to impact state waters, the RO water permit staff may evaluate the activity to determine if it can be appropriately authorized by a VPA permit. In these cases, the RO water permit staff is encouraged to consult OLAP for assistance.

Although [9VAC25-32-30.B](#) of the VPA Permit Regulation suggests that a VPA permit can be used to authorize a broad range of non-point source pollutant management activities with

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<sup>1</sup> If a landfill applies biosolids within an area included in the groundwater monitoring network and such application results in the exceedance of Groundwater Protection Standards, the DEQ would not consider an Alternate Source Demonstration for the exceedance and all applicable VSWMR would apply to address the exceedance.

<sup>2</sup> An entity should not use a BUD to get approval for an activity that VPA would not otherwise allow under its program. The goal of this Guidance is not to allow regulatory program shopping for activities.

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potential to impact state waters, this should not be interpreted to mean that a VPA permit can be used to authorize all such activities. Per [9VAC25-32-30.E.1](#), “No VPA permit shall be issued ... [where] the terms or conditions of the VPA permit do not comply with the applicable regulations or requirements of the law.” For example, a VPA may not be issued to authorize a land disposal activity where the pollutant management activity would violate the Ground Water Standards ([9VAC25-280](#)). Therefore, a VPA Permit should not be issued for a pollutant management activity at a SWMF that (i) would require extensive ground water characterization, modeling and routine monitoring as a result of the proposed activity, and (ii) would likely become an alternate source of groundwater contamination in addition to contamination from solid waste activities authorized by the SWM permit. However, where the RO Solid Waste Permit Program can assist in suggesting appropriate limitations, monitoring requirements and special conditions for the VPA permit, as well as potentially providing technical support to review and interpret ground water modeling, monitoring plans, and monitoring results submitted in accordance with the permit, the scope of VPA permitted activities could be expanded.

## Attachment A – BUD Approval Letter Template

[DEQ Letter Head]

[Date]

[Facility Contact]

[Facility Address]

RE: Beneficial Use of XXX  
XXX Landfill, Solid Waste Permit No.  
XXX

Dear [Facility Contact]:

The Virginia Department of Environmental Quality (DEQ) XXX (XRO) received your Beneficial Use request dated XXX, 20XX for the use of Class B Biosolids generated by wastewater treatment plants operated by XXXXX. The proposed beneficial use of the Class B biosolids is [describe beneficial use] at the XXXX Landfill, Permit No. XXX.

In accordance with 9VAC25-32-40 of the Virginia Pollution Abatement (VPA) regulations, a VPA permit is not required for biosolids use or sewage sludge disposal when this activity is otherwise authorized by DEQ. The use of Biosolids to [description of beneficial use] is considered a beneficial use of solid waste in accordance with 9 VAC 20-81-97 of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81) and is authorized with the following conditions:

### [Outline conditions necessary after coordination with VPA Permit Program Staff]

3. The Land Protection Program Manager, XXX in the XXX Regional Office ((XXX-XXX-XXXX or XXX@deq.virginia.gov) shall be notified when the beneficial use of the biosolids will begin. Use of the material shall be in a manner consistent with the conditions of all state and local permits issued to the facility.
4. In accordance with 9 VAC 20-81-97.A.4., the Department may revoke this determination if it finds that one or more of the items of information submitted serving as the basis for this determination was incorrect or is no longer valid, the Department finds that there has been a violation of any condition attached to this determination, or that the use, reuse or reclamation process has become a public nuisance.

## **Attachment A – BUD Approval Letter Template (Continued)**

If you do not agree to any of the above conditions in this approval, you must notify the Department prior to the use of the solid waste as a beneficial material. In doing so, you may request either a meeting with staff or an informal fact-finding pursuant to Va. Code § 2.2-4019 to present argument or information regarding why this approval should be granted without the contested conditions and to receive a final decision on the requirement of the conditions for approval.

Please note that it is the responsibility of applicant to obtain any other permits or authorizations that may be necessary. If you have any questions regarding this matter, please contact **XXX**, Solid Waste Permit Writer, at **(XXX) XXX-XXXX** or [XXX.XXX@deq.virginia.gov](mailto:XXX.XXX@deq.virginia.gov).

Sincerely,

Regional Land Protection Program Manager