

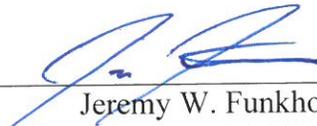
**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Valley Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Augusta Regional Landfill  
Augusta County, Virginia  
Permit No. VRO-81573

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Augusta County Service Authority has applied for a Title V Operating Permit for the Augusta Regional Landfill in Augusta County, Virginia. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact:

  
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Date: 7/13/16

Air Permit Manager:

  
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Janardan R. Pandey, P.E.

Date: 7/14/16

## **FACILITY INFORMATION**

### Permittee

Augusta County Service Authority  
P.O. Box 859  
18 Government Center Lane  
Verona, Virginia 24482

### Facility

Augusta Regional Landfill  
749 Christians Creek Road  
Staunton, Virginia 24401

## **REQUESTED MODIFICATION**

On April 22, 2016, the Valley Regional Office received a request from the Augusta County Service Authority, dated the same day, for a minor permit modification to the Augusta Regional Landfill Article 1 operating permit, with an effective date of August 19, 2014, and expiration date of August 18, 2019. The minor permit modification requests the removal of requirements for emission units that do not cause the source to be subject to Article 1 in accordance with 9 VAC 5-80-110 A.2.

## **REASON FOR MODIFICATION**

This minor modification removes requirements for emission units that do not cause the source to be subject to Article 1 in accordance with 9 VAC 5-80-110 A.2. The regulation, 9 VAC 5-80-110 A.2, states:

*For any source other than a major source subject to this article (Article 1), the board shall include in the permit all applicable requirements that apply to emissions units that cause the source to be subject to this article.*

Augusta Regional Landfill is subject to the requirements of 9 VAC 5, Chapter 80, Article 1 in accordance with 40 CFR 60.752(b) since the landfill design capacity is greater than 2.5 million megagrams and 2.5 million cubic meters. Since the facility is a source subject to the requirements of 9 VAC 5-80-110 A.2, all requirements that are applicable to the emission units that cause the source to be subject to Article 1 must be included in the Title V permit. The landfill and associated landfill roads are the only emission units that cause the source to be subject to Article 1. At the request of the facility the Title V permit is being modified to only include the applicable requirements for emission units that cause the source to be subject to Article 1. The following sections are removed from the Title V permit with this permit action:

- *Cement Silo and Engine (Emission Unit EU-14):* The Conditions for the cement silo and associated diesel engine have been removed from the Title V permit. The cement silo and

associated diesel engine will continue to be subject to the requirements of the Minor New Source Review permit, dated May 9, 2016, as well as the requirements of 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ.

- *Emergency Generators (Emission Units EU-3 and EU-4):* The Conditions for the two diesel emergency generators have been removed from the Title V permit. The emergency generators will continue to be subject to the requirements of 40 CFR 63 Subpart ZZZZ.

In addition to the removal of requirements for emission units that do not cause the source to be subject to Article 1, the General Conditions for *Malfunction as an Affirmative Defense* have also been removed from the Title V permit.

### **APPLICABILITY OF 9 VAC 5-80-210**

According to 9 VAC 5-80-210, minor modification procedures are used for those permit modifications that:

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit such as a change to the method of monitoring to be used, a change to the method of demonstrating compliance or a relaxation of reporting or recordkeeping requirements;
- Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable federal requirement and that the source has assumed to avoid an applicable federal requirement to which the source would otherwise be subject.
- Are not Title I modifications; and
- Are not required to be processed as a significant modification under 9VAC5-80-230 or as an administrative permit amendment under 9VAC5-80-200.

The changes proposed by Augusta Service Authority meet the criterion, as stated in 9 VAC 5-80-210.A.

### **SOURCE DESCRIPTION**

NAICS Code 562212 (Refuse Systems)

The Augusta Regional Landfill is a municipal solid waste management (MSW) facility located on State Route 648 in Augusta County, east of Interstate 81 and approximately 1.5 miles east of the City of Staunton. The physical address for the facility is 749 Christians Creek Road, in Staunton, Virginia. The landfill is owned by the City of Waynesboro, City of Staunton, and

Augusta County. It is operated by Augusta County Service Authority. The landfill site consists of two permitted landfills; Permit No. 21, which is closed, and Permit No. 585 which is currently open and operating. For air permitting purposes, both landfills (Solid Waste Permit Nos. 21 and 585) are considered a single waste disposal facility since the landfills are contiguous and have the same owner.

Augusta Regional Landfill was permitted as a Sanitary Landfill by the Virginia Department of Health (VDH) under Permit No. 21, and began accepting waste in 1971. No design capacity under VDH permit no. 21 was listed at time of issuance, however waste acceptance records from the facility were used to determine a waste capacity of 1.43 million Megagrams (2.37 million m<sup>3</sup>). A second area of the site was permitted as a Solid Waste Facility (Solid Waste Permit No. 585) under the Virginia Solid Waste Disposal Regulations on May 31, 1995. The Solid Waste Permit No. 585 was amended March 1, 2011 to increase the capacity of the open landfill by changing the ratio of the side slopes of Phases 1-3 to 3:1, to reflect changes in the Solid Waste Regulations. The change in the side slope ratio increases the design capacity (volume) of Phases 1-3 by approximately 721,498 cubic yards. In addition to the revised side slope ratio, the facility has implemented increased compaction strategies, resulting in a waste compaction rate of 1,500 lb/yd<sup>3</sup>, according to compaction testing. The revised design capacity of the landfill is 4,793,106 megagrams and 6,143,873 cubic meters.

Since the permitted design capacity of the Augusta Regional Landfill is greater than 2.5 million m<sup>3</sup> and 2.5 million megagrams, and the landfill was modified after May 30, 1991, the landfill is regulated according to New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills (40 CFR 60 Subpart WWW). As stated in 40 CFR §60.752 (b), landfills above the 2.5 million m<sup>3</sup> and 2.5 million megagrams design capacity are subject to Title V permitting requirements.

MSW landfills with a design capacity greater than or equal to 2.5 million m<sup>3</sup> and 2.5 million Mg with estimated uncontrolled NMOC emissions equal to greater than 50 Mg/yr are subject to Maximum Achievable Control Technology (MACT) Standard (40 CFR Part 63, Subpart AAAA) for Municipal Solid Waste Landfills. The permitted design capacity of the Augusta Regional Landfill is greater than 2.5 million m<sup>3</sup> and 2.5 million megagrams, and Augusta Regional Landfill estimated that their annual NMOC emissions are over 50 Mg/yr using Tier 1 procedures; as a result, the facility is subject to 40 CFR 63, Subpart AAAA.

On June 13, 2007, Draper Aden Associates, on behalf of Augusta Regional Landfill, estimated that the annual NMOC emissions are over 50 Mg/yr using Tier 1 procedures. As a result of Tier 1 estimates, the facility first conducted Tier 2 testing on October 3-5, 2007 to determine the site-specific NMOC concentration. On May 16, 1995, the Environmental Protection Agency (EPA) published a memorandum for sources subject to MACT standards. The memo outlines a “once in, always in” interpretation of the MACT standard, requiring major HAP sources to comply permanently with the MACT standards, to ensure that maximum achievable reductions in toxic emissions are achieved and maintained. The MACT, Subpart AAAA compliance date for existing affected sources was January 16, 2004. Since the first Tier 2 test date was after the

MACT compliance date (January 16, 2004), the facility is subject to the MACT according to the “once in, always in” memorandum on MACT standards. The final MACT rule required that an existing landfill comply with the NSPS (40 CFR 60 Subpart WWW) at that time (the compliance date of 1/16/04). Compliance with the *additional* requirements of the final rule (those over and above the NSPS requirements) is required by January 16, 2004, *or* the date the source is required to install a collection and control system by the NSPS, whichever is later.

Tier 2 testing is required every five years in accordance with NSPS Subpart WWW; Tier 2 testing for the facility was conducted on September 24 – 25, 2012. Results of the Tier 2 testing show the landfill NMOC average concentration was 306.2 ppmv as hexane, yielding 27.7 megagrams (Mg) per year of NMOC emissions.

The permit includes the requirements for the permittee to comply with all operational, monitoring, recordkeeping, reporting, and testing requirements of the MACT, Subpart AAAA. No action under the MACT is triggered until the permittee is required to install a collection and control system, as provided in the NSPS, Subpart WWW.

This source is located in an attainment area for all pollutants. The PSD major source threshold level is 250 tons per year (tpy) for any regulated pollutant. The potential emissions of each regulated pollutant from the facility fall below this threshold; therefore, this facility is not subject to permitting requirements under 9 VAC 5 Chapter 80, Article 8. The maximum potential emissions, based on the capacity and waste compaction, are projected to occur in the year 2028; the maximum potential emissions are based on waste acceptance data from the May 14, 2012 permit amendment.

**Table 1: Potential Emissions from the Landfill (EU-1)**

2028 Pollutant Emissions (Plant wide Total)	
Pollutant	Annual Tons Emittted
<i>Criteria Pollutants</i>	
PM-10	-
VOC	8.42
NO <sub>x</sub>	-
CO	3.25
SO <sub>2</sub>	-
TRS	1.25
H <sub>2</sub> S	2.75
<i>Non Methane Organic Compounds (NMOC)</i>	
NMOC	21.61
<i>Hazardous Air Pollutants (HAP)</i>	
Total HAP	5.60

As shown above in Table 1, emissions from the landfill are below the Major New Source Review (NSR) levels; therefore Major NSR permitting does not apply to the Augusta Regional Landfill

at this time. The landfill portion of the facility is currently permitted under a Minor NSR Permit issued on August 6, 2007, and amended on August 8, 2008 and May 14, 2012. Additional information is available in the LandGEM emission summary provided in in the engineering analysis for the May 14, 2012 NSR permit.

### **COMPLIANCE STATUS**

The facility is inspected on a biennial basis. The facility was last inspected on July 22, 2015. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. The facility has not been found to be in violation of any state or federal applicable requirements at this time.

**EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at this facility consist of the following:

**Table 2. Significant Emission Units**

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Landfill</b>							
EU-1	-	MSW Landfill	4.79 million Mg	--	--	--	08/06/2007 Permit, as amended 08/08/2008 and 05/14/2012
<b>Landfill Roads</b>							
LR	-	Landfill Roads	--	--	--	--	08/06/2007 Permit, as amended 08/08/2008 and 05/14/2012

## **CHANGES TO EXISTING TITLE V PERMIT**

### **Emission Unit Applicable Requirements – (EU-1)**

There are no changes to the applicable requirements for the landfill (EU-1)

### **Cement Silo and Engine (Emission Unit EU-14)**

The Conditions for the cement silo and associated diesel engine have been removed from the Title V permit. The cement silo and associated diesel engine will continue to be subject to the requirements of the Minor New Source Review permit, dated May 9, 2016, as well as the requirements of 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ.

### **Emergency Generators (Emission Units EU-3 and EU-4)**

The Conditions for the two diesel emergency generators have been removed from the Title V permit. The emergency generators will continue to be subject to the requirements of 40 CFR 63 Subpart ZZZZ.

### **Facility Wide Conditions**

There are no changes to the Facility Wide applicable requirements.

### **Insignificant Emission Units**

The Insignificant Emission Units were removed from the permit since they are not associated with the emission units that cause the facility to be subject to the requirements of Article 1.

### **General Conditions**

The conditions related to “Malfunction as an Affirmative Defense” were removed from the Title V permit in accordance with DEQ policy.

## **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. Therefore, all portions of the Title V application are suitable for public review.

## **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 do not extend to minor permit modifications.

The Environmental Protection Agency (EPA) and the affected state of West Virginia were provided copies of the permit application and redline copy of the proposed changes to the permit on May 20, 2016. The 45 day comment period ended on July 5, 2016. No comments were received.