

Fact Sheet



For General Permit Registration and Permit Renewal Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-MSWLGP-2011-00300036**

Application Received: **May 2, 2011**

Plant Identification Number: **003-00036**

Permittee: **LCS Services, Inc.**

Mailing Address: **P. O. Box 1070, Hedgesville, WV 25427**

Physical Location:	Hedgesville, Berkeley County, West Virginia
UTM Coordinates:	243.35 km Easting • 4384.46 km Northing • Zone 17
Directions:	From I-81, take exit for State Route 9 (Berkeley Springs/Hedgesville); Go approximately 6 miles to Hedgesville and turn right onto County Route 901; Go approximately 1 mile, and take a left onto County Route 3/2 (Allensville Road); Go approximately 0.8 miles on Allensville Road and landfill entrance is on left.

Facility Description

SIC Code – 4953. North Mountain Sanitary Landfill is a municipal solid waste landfill that began operation in 1991. The landfill has the potential to receive approximately 120,000 tons of waste per year on the approximate 468.7 acre site of which 67 acres is permitted for waste disposal. Waste is brought to the landfill by truck and disposed of. The waste is spread and compacted with soil placed over the active area each day for cover. The landfill also has a flare for odor control and above ground tanks which are used for leachate treatment and storage.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010-2011 Actual Emissions
Carbon Monoxide (CO)	134.23	28.9
Nitrogen Oxides (NO _x)	7.16	5.0
Particulate Matter (PM ₁₀)	24.23	Not reported
Total Particulate Matter (TSP)	101.82	44.83
Sulfur Dioxide (SO ₂)	3.00	1.75
Volatile Organic Compounds (VOC)	13.62	6.31

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2010-2011 Actual Emissions
HCl (Hydrogen Chloride)	4.12	0.88
Toluene	2.64	1.427
Xylenes	0.94	0.506
Other HAPs	4.17	2.247
Total HAPs	11.87	5.06

Some of the above HAPs may be counted as PM or VOCs.

Regulated Pollutant other than Criteria & HAP	Potential Emissions	2010-2011 Actual Emissions
CO ₂ (Carbon Dioxide)	33,792	Not Reported
CH ₄ (Methane)	12,316	Not Reported

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2010) is 21.18 Mg/yr. The projected closure year is 2044 with a projected maximum NMOC emission rate estimate of 72.19 Mg/yr. The NMOC emission rate estimates were calculated using EPA’s Landfill Gas Emissions Model (LandGEM) software. The values used for k and L_o were 0.050 year⁻¹ and 170 m³/Mg respectively. The regulatory default NMOC concentration used in the model was 600 ppmv.

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Also, this facility has the potential to emit over 100 tons per year of Carbon Monoxide (CO). Due to this facility's design capacity and its potential to emit over 100 tons of criteria pollutants, LCS Services, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6 45CSR11 45CSR13 45CSR17 45CSR23 WV Code § 22-5-4 (a) (14) 45CSR30 40 C.F.R. Part 60 Subpart WWW 40 C.F.R. Part 61 40 C.F.R. Part 82, Subpart F	Open burning prohibited. Standby plans for emergency episodes. New Source Review permits for stationary sources To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and other sources of Fugitive Particulate Matter To Prevent and Control Emissions from Municipal Solid Waste Landfills The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Standard of Performance for Municipal Solid Waste Landfills Asbestos inspection and removal Ozone depleting substances
State Only:	45CSR4 45CSR42	No objectionable odors. Greenhouse Gas Emissions Inventory Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2590	10-20-2004	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

Since the last Title V issuance there have been no changes at the facility.

Following is a discussion of applicability and non-applicability of rules mentioned in the general permit to this facility:

1. 45CSR4 – Flares will be installed to control odor. Also according to section 3.1.4 of the general permit, facility has to comply with 45CSR4-3.1 to control odor.
2. 45CSR6 – Flares are subject to 45CSR6. Per 45CSR§6-4.1, these flares must meet the particulate matter limit by weight. The Previous Title V factsheet explains compliance with 45CSR§6-4.1. Section 5.1.1 of the general permit is streamlined with R13-2590 condition A.4 (explained in previous factsheet); hence this facility is not subject to section 5.2.3 of the general permit.
Per 45CSR§§6-4.3 and 4.4, the visible particulate matter emissions from each flare shall not exceed twenty (20%) percent opacity except for visible particulate emission less than 40% for a period or periods aggregating no more than 8 minutes per start-up. Flares shall comply with 45CSR§§6-4.3 and 4.4 by complying with R13-2590 and sections 5.1.1-5.1.6, 5.2.1, 5.4.1, 5.4.2 and 5.5.1 of the general permit. Compliance will be demonstrated through monthly visible emission checks, record keeping and reporting.
3. 45CSR7 – This rule is not applicable because there is no material handling equipment at this facility.
4. 45CSR17 - Facility shall comply with 45CSR17 by complying with section 3.0 of the permit.
5. 40 C.F.R. Part 60 Subpart WWW - *Standards of Performance for Municipal Solid Waste Landfills*, and 45CSR23 - *To Prevent and Control Emissions from Municipal Solid Waste Landfills*

This facility is subject to these rules and shall comply with these rules by complying with sections 4.0.1, 4.1.1, 4.1.2 and 4.1.3 of the general permit. The current calculated NMOC emission rate is less than 50 megagrams per year, hence the facility does not have to install a collection and control system that captures the gas generated within the landfill according to 40 C.F.R § 60.752(b)(2).

The calculated maximum NMOC emission rate is greater than 50 megagrams per year (The projected closure year is 2044 with a projected maximum NMOC emission rate estimate of 72.19 Mg/yr), hence the facility will be required to install a collection and control system that captures the gas generated within the landfill according to 40 C.F.R § 60.752(b)(2) when the annual NMOC emission rate exceeds 50 Mg/yr.

This facility is subject to these rules according to 60.750(a) because this landfill commenced construction, reconstruction or modification on or after May 30, 1991. This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters; hence the facility has to comply with the following sections of Subpart www:

60.752(b) – 60.752(b)(2) is not applicable if NMOC is less than 50 Mg.

60.752(d) – this section addresses the closure of the landfill.

60.753 - this section is not applicable if NMOC is less than 50 Mg.

60.754 – Test methods and procedures.

60.755 - this section is not applicable if NMOC is less than 50 Mg.

60.756 - this section is not applicable if NMOC is less than 50 Mg.

60.757(a) and (b) – reporting requirements for this landfill.

60.757 (c) to (g) - these sections are not applicable if NMOC is less than 50 Mg.

60.758(a) & (f) – Recordkeeping Requirements.

60.758 (b) to (e) - these sections are not applicable if NMOC is less than 50 Mg.

60.759 - this section is not applicable if NMOC is less than 50 Mg.

6. 40 C.F.R. Part 63 Subpart AAAA – A facility is subject to this subpart if the facility meets the criteria in 40 C.F.R. § 63.1935 (a) or (b).

40 C.F.R. § 63.1935 (a) If the facility owns or operates a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

(1) The MSW landfill is a major source of HAPs.

(2) The MSW landfill is collocated with a major source of HAPs.

(3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

This facility is not a major source of HAPs or not collocated with a major source of HAPs.

The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions greater than 50 megagrams per year (Mg/yr) NMOC [The projected closure year is 2044 with a projected maximum NMOC emission rate estimate of 72.19 Mg/yr.].

Hence the facility is subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1935 (a).

According to 40 C.F.R. § 63.1955 (a) the facility shall comply with the requirements of 40 CFR Part 60, Subpart WWW.

Because the facility does not operate a bioreactor, §§ 63.1947, 63.1952 and 63.1980(c) to (h) of 40 C.F.R. Part 63 Subpart AAAA are not applicable.

7. 40 C.F.R. Part 60 Subpart OOO - This rule is not applicable because this facility is not a non-metallic mineral processing plant.
8. 40 C.F.R. Part 60 Subpart JJJJ - This rule is not applicable because there are no stationary spark ignition (SI) internal combustion engines (ICE) at this facility.
9. 40 C.F.R. Part 60 Subpart IIII - This rule is not applicable because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
10. 40 C.F.R. Part 60 Subpart KKKK - This rule is not applicable because there is no stationary combustion turbine at this facility.
11. 40 C.F.R. Part 61 Subpart M - Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 40 C.F.R. §§ 61.149, 61.150, or 61.155 shall meet the requirements of 40 C.F.R. § 61.154 as described in section 7.0 of the general permit.
12. 45CSR2 – This rule is not applicable because there are no fuel burning units at this facility.
13. 40 C.F.R. Part 63 Subpart ZZZZ - This rule is not applicable because there is no stationary RICE (A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile at this facility).
14. 40 C.F.R. 60.18 – the flares at the facility are installed for odor control only. As explained above they are not installed as NSPS control system, hence 40 CFR § 60.18 is not applicable to them.
15. There are no Greenhouse Gas Clean Air Act requirements for this facility because this is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit
16. 40 C.F.R. Part 60 Subpart Kb - Tanks 009A and 009B have a capacity greater than or equal to 151 cubic meters (m³) and are used to store volatile organic liquids (VOL) for which construction,

reconstruction, or modification is commenced after July 23, 1984; An example of this low vapor pressure is reflected in EPA Region 4's Applicability Determination Index (API) determination in 1994 for leachate tanks that had a VOL vapor pressure of only 6.37×10^{-4} kPa. The landfill leachate is mostly water and has very low VOL vapor pressure (much less than 3.5 kPa); hence, according to 40 C.F.R. §60.110b(b), tanks 009A and 009B are not subject to this rule. The existing permit also does not have any requirements for these tanks.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 CFR64 (CAM) – This is the second permit renewal for this facility. At the time of the first renewal, CAM was determined not to be applicable to the sources at this facility, Therefore, a CAM applicability determination is not required.
- 2.

40 C.F.R. §60.757 (a)(3) (March 12, 1996)	The design capacity of this facility is greater than 2.5 million megagrams and 2.5 million cubic meters. Therefore, amended design capacity reports are not required.
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Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A
Ending Date: N/A

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

N/A

Point of Contact

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Response to Comments (Statement of Basis)

Not applicable.