# ADEQ MINOR SOURCE AIR PERMIT

Permit #: 2069-A

IS ISSUED TO:

IESI-AR Landfill Corp. dba Cherokee Sanitary Landfill 300 Landfill Road Cherokee Village, AR 72529 Fulton County AFIN: 25-00028

THIS PERMIT IS IESI-AR LANDFILL CORPORATION'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ*.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Michael Bonds Chief, Air Division Date

# **Table of Contents**

Section I:	FACILITY INFORMATION	
Section II:	INTRODUCTION	4
<u>Summary</u>		
Process De	escription	
<u>Regulations</u>	<u>S</u>	
Section III:	PERMIT HISTORY	6
Section IV:	EMISSION UNIT INFORMATION	7
<u>Specific Co</u>	nditions	7
NSPS Requ	tirements	7
Section V:	INSIGNIFICANT ACTIVITIES	9
Section VI:	GENERAL CONDITIONS	10
APPENDIX	A 40 CFR 60, SUBPART WWW	14

#### Section I: FACILITY INFORMATION

- PERMITTEE: IESI-AR Landfill Corp. dba Cherokee Sanitary Landfill
  - AFIN: 25-00028
- PERMIT NUMBER: 2069-A
- FACILITY ADDRESS: 300 Landfill Road Cherokee Village, AR 72529 COUNTY: Fulton
  - CONTACT PERSON: Rod Smith
- CONTACT POSITION Landfill Manager
- TELEPHONE NUMBER: (870)994-7717
  - FAX NUMBER (870)994-2219
- REVIEWING ENGINEER: Paul Osmon
  - UTM North-South (Y): Zone 15, 4016.06 km N
    - UTM East-West (X): Zone 15, 621.94 km E



#### Section II: INTRODUCTION

#### Summary

IESI-AR Landfill Corporation owns and operates both Class 1 and Class 4 solid waste landfills in Fulton County located approximately 5 miles northwest of the city of Ash Flat (off Arkansas Highway 289). The Cherokee Sanitary Landfill, Inc. was originally permitted for solid waste disposal in 1975. The facility has a 120 acre permitted Class 1 landfill area, a 20 acre Class 4 waste disposal area, and a 10 acre area used for support facilities. CSL is currently permitted for the total acceptance of 8,801,364 cubic yards (approximately 4,500,000 Mg) of total void space. The estimated cumulative land fill void space consumed at the end of 2003 is approximately 1,600,000 cubic yards.

Landfills with a design capacity greater than 2,500,000 Mg that commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991 are subject to NSPS Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills. Landfills subject to NSPS Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills are required to install and operate a collection and incineration device for the destruction of the NMOC and HAP portions of the landfill gases given off by the decomposition of the waste if their projected NMOC emissions exceed 50 megagrams per year.

A facility is first required to perform Tier 1 testing which consists of calculating their emissions using formulae listed in 40 CFR §60.754 and a default value of 4000 ppmv NMOC concentration in the landfill gases. Based on this methodology, Cherokee Landfill has VOC emissions would be required to obtain a Title V permit and install a landfill gas collection system.

Alternatively, a facility may perform Tier 2 testing where actual gas samples are taken from the landfill gas and analyzed for NMOC concentrations. The emissions from the landfill are then recalculated using the formulas listed in 40 CFR §60.754 and the NMOC emission factor experimentally determined. The emission limits shown in this permit are based on Tier 2 testing (a report of which was received for the subject facility dated February 6, 2001 for testing completed in August, 2000) and the estimated fill in place. The field measured NMOC concentrations for the Cherokee Landfill by this Tier 2 testing is 456.6 ppmv.

Cherokee Landfill is a non-major source which is exempt from the obligation to obtain a part 70 permit until such time that the Administrator completes a rule making to determine how the program should be structured for non-major sources. This is the first air permit for the facility.

#### **Process Description**

Municipal Solid Waste (MSW) is collected from the surrounding areas industrial, commercial, and residential sources. The MSW is dumped onto the landfill surface and compacted. Daily cover or intermediate cover, which consists of six or twelve inches of soil, respectively, is placed upon the garbage at the end of the work day.



The application of daily and intermediate cover encapsulates the refuse from each day. The refuse will undergo the various phases of gas production, and dependent upon when the cell was created, various cells will undergo different quantities of gas production. Factors such as available nutrients, moisture content, and compaction will greatly affect the quantity of gas produced.

Emissions from the facility will be uncontrolled landfill gases (SN-1) which are non-point source emissions.

### Regulations

The following table is a summary of the facility's total emissions.

<b>Total Allowable Emissions</b>			
Pollutant	<b>Emissions Rates</b>		
Ponutant	lb/hr	tpy	
VOC	4.3	18.4	
Total HAP	1.31	5.75	
1,1,2,2- tetrachloroethane	0.027	0.121	
1.1-dichloroethane	0.033	0.143	
Toluene	0.500	2.183	
Vinyl Chloride	0.063	0.276	

#### **Table 1 - Total Allowable Emissions**



# Section III: PERMIT HISTORY

Permit No. 2069-A is the initial air permit for Cherokee Sanitary Landfill.

#### Section IV: EMISSION UNIT INFORMATION

#### **Specific Conditions**

1. The permittee will not exceed the emission rates set forth in the following table. [§19.501 *et seq.* of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective December 19, 2004 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	Тру
SN- 1	Landfill Gases Uncontrolled	VOC	4.3	18.4

#### Table 2 - Criteria Pollutants

2. The permittee will not exceed the emission rates set forth in the following table. [§18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN- 1	Landfill Gases Uncontrolled	Total HAP	1.31	5.75
		1,1,2,2-tetrachloroethane 1.1-dichloroethane Toluene Vinyl Chloride	0.027 0.033 0.500 0.063	0.121 0.143 2.183 0.276

- 3. The permittee will not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]
- 4. The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [§18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

#### **SN-1** Conditions

#### **NSPS Requirements**

- 5. The permittee is subject to and shall comply with 40 CFR Part 60 Subpart WWW -Standards of Performance for Municipal Solid Waste Landfills (Attachment 1) since it has a design fill capacity in excess of 2,500,000 Mg and the facility was modified after May 30, 1991. Based on Tier 2 testing, it is exempt from the first cycle of Part 70 permitting due to emissions of all criteria pollutants being less than 100 tpy and is exempt at this time from the requirements for installation of a landfill gas collection and control system because their NMOC emissions are calculated to be less than 50 Mg per year. [§19.304 of Regulation 19 and 40 CFR 60, Subpart WWW]
- 6. The permittee shall not accept more than 7,224,676 Cubic yards (4,063,889 million tons) of refuse in the landfill after January 1, 2004. The permittee shall maintain records of the amount of refuse accepted to date. Records shall be updated by the last day of the following month, kept on site and provided to Department personnel upon request. [§19.304 of Regulation 19 and 60.758(a) of 40 CFR 60, Subpart WWW]
- 7. The permittee shall submit each year an annual and projected 5 year emissions report to ADEQ using the calculation methods outlined in 40 CFR § 60.754(a)(1) until the calculated NMOC emission rate exceeds 50 Mg per year or the landfill is closed. Calculations shall use the latest measured site specific NMOC concentration. [§19.304 of Regulation 19 and 60.752(b) of 40 CFR 60, Subpart WWW]
- 8. The permittee shall retest their site specific NMOC concentration every 5 years using the test methods described in 40 CFR § 60.754(a)(3) for as long as the calculated emissions are less than 50 Mg per year. The permittee shall notify the Department of the scheduled date of testing at least fifteen (15) days in advance of such test. The next test shall be completed prior to September 1, 2005. Test results shall be submitted to the Department within thirty (30) days after the completed testing. [§19.304 of Regulation 19 and 40 CFR 60, Subpart WWW]
- 9. Should the calculated NMOC emission rate exceed 50 Mg per year, the permittee shall design, install, and operate a landfill gas collection and control system as outlined in 40 CFR § 60.752(b)(2) or proceed with Tier 3 testing as outlined in 40 CFR § 60.754(a)(4) to establish that the actual NMOC emissions are less than 50 Mg per year. [§19.304 of Regulation 19 and 60.73(b)(ii)(A) of 40 CFR 60, Subpart WWW]
- The permittee shall be required to modify this permit before starting any modification, construction, or reconstruction at the facility not described in this permit including but not limited to installation of a gas collection system and /or flare system. [§19.304 of Regulation 19 and 40 CFR 60, Subpart WWW]

#### Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated June 16, 2004.

Description	Category
2,500 gallon diesel fuel tank	Group A, No. 3
Several Routine Group B Items – air conditioning units, maintenance of grounds, and equipment repair.	

#### **Table 4 - Insignificant Activities**

#### Section VI: GENERAL CONDITIONS

- 1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
- 2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [§19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- Construction or modification must commence within eighteen (18) months from the date of permit issuance. [§19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

> Arkansas Department of Environmental QuaDivision ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 8. The permittee will provide: [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods
  - b. Safe sampling platforms
  - c. Safe access to sampling platforms
  - d. Utilities for sampling and testing equipment
- 9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [§19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [§19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.

- b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
- c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.
- 11. The permittee will allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
  - c. To inspect any monitoring equipment or monitoring method required in this permit;
  - d. To sample any emission of pollutants; and
  - e. To perform an operation and maintenance inspection of the permitted source.
- The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [§19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of

the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [\$19.407(B) of Regulation 19 and/or \$18.307(B) of Regulation 18 and A.C.A. \$8-4-203 as referenced by A.C.A. \$8-4-304 and \$8-4-311]

- 15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

# APPENDIX A

# 40 CFR 60, SUBPART WWW