

STATEMENT OF BASIS

For the issuance of Air Permit # 1781-AOP-R4 AFIN: 60-01071

1. PERMITTING AUTHORITY:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

City of Little Rock—Solid Waste Facility
10803 Ironton Cutoff Rd.
Little Rock, Arkansas 72206

3. PERMIT WRITER:

Skylar Redman

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Solid Waste Landfill
NAICS Code: 562212

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
11/1/2023	Modification	Remove 4 emergency generators and add 4 emergency generators

6. REVIEWER'S NOTES:

Little Rock Solid Waste Facility (LRSWF) operates a municipal solid waste landfill located at 10803 Ironton Cutoff Road, approximately 0.5 miles south of the Dixon Road and Arch Street intersection, in Little Rock, Pulaski County, Arkansas 72206. This permitting action will remove SN-12, SN-14, SN-15, and SN-16; it also adds SN-17, SN-18, SN-19, and SN-20. Annual emission changes are as follows: an increase of 0.2 tpy of NO_x, an increase of 0.05 tpy of Total Chargeable Non-criteria air pollutants (NCAPs), a decrease of 0.6 tpy of VOC, a decrease of 1.0 tpy of CO, and a decrease of 2.21 tpy of Total HAPs.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility was last inspected on March 14th 2023 with violations identified.

- Gasoline Throughput data for March 2021 was not included in the SAM reports submitted 07/30/21, 12/31/21, 07/28/22, 01/25/23 and the Gasoline Sheet-Feb. 23 submitted 03/30/23.
 - The permittee shall maintain monthly records to demonstrate compliance with SC-36 and SC-37.
- The copy for the first quarter 2022 was not provided for the Explosive Gas and New Source Performance Standards (NSPS) Surface Monitoring Results.
 - The permittee shall demonstrate compliance with PC-11.c.
- The permittee is currently not submitting an annual report under WWW.
 - The permittee shall provide an annual compliance report as required by Subpart WWWW. The first report shall address the inspection period of 07/01/20 to 02/28/23. This report shall be due by 05/01/23. The next reports may follow the schedule established in GP-21.
- SN#11: Landfill Gas Flare: Upset 06/26/22
Lighting strike damaging blower units # 104 & 103 Automatic system shutdown and valves closing preventing bypass or release. Additional valves were closed to ensure no release from the system piping.
SN#8 & 10: Unknown Upset On 03/30/23.
 - Initial and written reports were not provided as required by this permit. At this time, the DEQ does not have any information regarding, among other things, the extent of the problem, corrective actions taken, emission exceedances.
- Data gathered show that the permittee might have replaced up to three (3) generators, SN-14, SN-15, and SN-16 without updating Permit 1781-AOP-R3.
 - The permittee shall apply for modification to their current air permit to add the unpermitted sources.

https://echo.epa.gov/detailed-facility-report?fid=110001700213&ej_type=sup&ej_compare=US

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b) Is the facility categorized as a major source for PSD? N

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Facility	VOC (NMOC)	NSPS Subpart WWW
Facility	HAPs	NESHAP Subpart AAAA
SN-17, SN-18, SN-19, SN-20	HAPs	NESHAP Subpart ZZZZ
SN-19 and SN-20	NO _x , CO, VOC, PM	NESHAP Subpart IIII
SN-17 and SN-18	NO _x , CO, VOC, PM	NSPS Subpart JJJJ

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N
 (Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
SN-11	PM ₁₀	Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311
	SO ₂	
	VOC	
	CO	
	NO _x	
	HAPs	

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acrolein	0.23	0.0253	0.0027	Y
Mercury	0.01	0.0011	0.000004	Y
Total POM	0.2	0.022	0.00039	Y

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards Y

If exempt, explain: The facility does not emit H₂S.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
08 & 10	NMOC on-site sample	EPA LandGEM computer modeling	None	NA	25% uncontrolled 75% routed to Flare
09	AP-42 Section 13.2.2	PM = 1.887 lb/VMT* PM ₁₀ = 0.509 lb/VMT* 6.4% silt content 50,000 miles/yr 20.83 tons MVW	Water suppression as necessary	75%	
11	LandGEM AP-42 Table 2.4-5	Varies by Pollutant POC: 39 lb _{NOx} /MMdscf _{Methane} 46 lb _{CO} /MMdscf _{Methane} 15 lb _{PM/PM10} /MMdscf _{Methane} 1.88 lb _{SO2} /lb _{gas} Flared	Flare	98.0%	
13	TANKS	5,000 gal tank 11 turnovers/yr 1.3 lb _{VOC} /hr 1.31 ton _{VOC} /yr	None	NA	Thru-put limited to 50,000gal/yr
17	AP-42	0.00999 lb _{PM/PM10} /MMBTU 0.118 lb _{VOC} / MMBTU 4.08 lb _{NOx} / MMBTU 0.557 lb _{CO} /MMBTU 0.000588 lb _{SO2} /MMBTU	None	NA	
18	AP-42	0.00999 lb _{PM/PM10} /MMBTU 0.118 lb _{VOC} / MMBTU 4.08 lb _{NOx} / MMBTU 0.557 lb _{CO} /MMBTU 0.000588 lb _{SO2} /MMBTU	None	NA	
19	AP-42	0.0022 lb _{PM/PM10} /MMBTU 0.00247 lb _{VOC} / MMBTU 0.031 lb _{NOx} / MMBTU 0.00668 lb _{CO} /MMBTU 0.00205 lb _{SO2} /MMBTU	None	NA	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
20	AP-42	0.0022 lb _{PM} /PM ₁₀ /MMBTU 0.00247 lb _{VOC} / MMBTU 0.031 lb _{NO_x} / MMBTU 0.00668 lb _{CO} /MMBTU 0.00205 lb _{SO₂} /MMBTU	None	NA	

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

17. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
11	Pressure at each Wellhead	Pressure Gauge	Monthly	Y, Exceedances
	O ₂ Concentration at each Wellhead	Portable Oxygen Meter Method 3A or 3C	Monthly	Y, Exceedances
	N ₂ Concentration at each Wellhead	Portable Monitor	Monthly	Y, Exceedances
	Temperature at each Wellhead	Temperature Gauge	Monthly	Y, Exceedances
	Methane Concentration at surface perimeter & 30 meter intervals	Organic vapor analyzer, flame ionization detector, or other portable Monitor	Quarterly	Y, Exceedances
	Presence of Flame	Heat sensor OR gas flow meter	Continuous	Y, Exceedances
17 18 19 20	Hours of Operation	Non-resettable hour meter	Monthly	Y

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
Facility	Total in-place Solid Waste	7.74 MM tons design capacity	Monthly	Y
	Plot Map of collector system	n/a	On-going	N
	Occurrence & length of time Flame is absent at Flare	n/a	On-going	Y
	Asbestos-containing or non-degradable waste: nature, date, quantity received & location	n/a	On-going	N
17 and 18	Hours of operation	Total: 500 hr/yr Non-emergency*: 100 hr/yr	Monthly	Y
	Performed Maintenance	According to Manufacturer's Written Instructions	Monthly	N
	Certification	Required Emission Standards	Monthly	N
19 and 20	Hours of operation	Total: 500 hr/yr Non-emergency**: 100 hr/yr	Monthly	Y
	Performed Maintenance	According to Manufacturer's Written Instructions	Monthly	N
	Certification	Required Emission Standards	Monthly	N

*Must conform to the limits listed in Specific Condition 26.

**Must conform to the limits listed in Specific Condition 42.

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
11	0%	NSPS Part 60 Subpart WWW	Method 22, Upon Inspection
17 and 18	5%	Department Guidance	Inspector Observation
19 and 20	20%	Rule 19.503 and 40 C.F.R. § 52 Subpart E	Inspector observation
12	20%	§18.501 & A.C.A	Annual observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
11-33 and 42-59	Sources were removed
9 - 19	Facility is subject to more stringent effective state plan

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
5,000 gallon Diesel Storage Tank	A-3			0.01			0.01	0.01
1,000 gallon Used Oil Tank	A-3			0.01			0.01	0.01
<i>Total for A-3 activities</i>				0.02			0.02	0.02
Diesel Storage Tanks (15,000 gal & 5,000 gal)	A-13			0.01			0.01	0.01
<i>Total for A-13 activities</i>		0.40	0	0.01	0	0	0.01	0.01

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1781-AOP-R3

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: City of Little Rock - Solid Waste Facility
 Permit Number: 1781-AOP-R4
 AFIN: 60-01071

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	100
Permit Type	Modification	Permit Fee \$	1000

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	-0.35
Initial Title V Permit Fee Chargeable Emissions (tpy)	

HAPs not included in VOC or PM: Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants: All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensable PM, H2S in TRS, etc.)

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		51	51	0	0	51
PM ₁₀		16.6	16.6	0		
PM _{2.5}		0	0	0		
SO ₂		2.5	2.5	0	0	2.5
VOC		11.4	10.8	-0.6	-0.6	10.8
CO		13.2	12.2	-1		
NO _x		11	11.2	0.2	0.2	11.2
Total other HAPs* (also all VOC)	<input type="checkbox"/>	7.6	7.64	0.04		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Total Chargeable NCAPs	<input checked="" type="checkbox"/>	9.85	9.9	0.05	0.05	9.9