

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 2022-AR-2

IS ISSUED TO:

Lexicon, Incorporated
8900 Fourche Dam Pike
Little Rock, AR 72206
Pulaski County
AFIN: 60-01801

THIS PERMIT IS Lexicon, Incorporated'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

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Section I: FACILITY INFORMATION

PERMITTEE: Lexicon, Incorporated

AFIN: 60-01801

PERMIT NUMBER: 2022-AR-2

FACILITY ADDRESS: 8900 Fourche Dam Pike
Little Rock, AR 72206

COUNTY: Pulaski County

CONTACT PERSON: Steve Dineen

CONTACT POSITION: Corporate Safety Director

TELEPHONE NUMBER: 501-490-4200

REVIEWING ENGINEER: Derrick Brown

UTM Zone: 15

UTM North-South (Y): 3841.1

UTM East-West (X): 574.200

Section II: INTRODUCTION

Summary

Lexicon operates a structural steel fabrication shop located at 8900 Fourche Dam Pike in Little Rock (Pulaski County), Arkansas. Steel beams, bars, and other materials are fabricated and may be surface prepped and coated to meet individual job specifications. This permit modification was requested by the facility to incorporate a daily limit on the pounds of HAPs used that would be excluded from the HAPs TLV Table. This modification also revised language in the Regulations section of this permit.

Process Description

Lexicon, located in Little Rock (Pulaski County), Arkansas, operates a structural steel fabrication shop. Lexicon receives steel materials (such as steel plates, I-beams, H-beams, angles, flat bars, etc.) directly from the mill or from the warehouse distributor. The steel material is either fabricated to individual job specifications or is shipped without further changes.

The work process may include fabrication; fabrication and surface preparation; fabrication and surface coating; or fabrication, surface preparation and surface coating. The fabrication process may include cold work (drill, saw cut, punch, bend, etc.) or it may include hot work (torch cut, welding, grinding, etc.). Surface preparation may include shot blasting, sand blasting, wire-wheel cleaning, or solvent cleaning. Surface coating is accomplished using hand-held, air-powered spray guns.

For surface coating applications, single, two, and three component systems are used. Any mixing occurs prior to the painting operation. Bulk solvents are used for surface preparation of the metal components, for painting equipment cleanup, and as small quantity additives for paint thinning needed in addition to that incorporated in the as-delivered coating systems. VOC and HAP emissions occur as a result of the paints and solvents/thinners used in the surface coating process. Lexicon performs the surface coating in a designated area and vents the area through two vents. The vents are in close proximity and are considered one source (SN-01).

A distillation machine located inside the building is utilized to recover solvents for reuse. The distillation machine is a sealed process. Following the distillation cycle, the reclaimed solvents are pumped into a drum and capped. The drum of reclaimed solvents is maintained in the production facility, and the solvents are reused in the surface coating process. VOC and HAP emissions from all solvents are assumed to be 100% emitted to the atmosphere at the time the solvent is removed from the bulk storage solvent storage area for usage and contribute to the surface coating emissions (SN-01). Any VOC and HAP emissions from the distillation process and the resulting reclaimed solvents usage have been accounted for in the compliance records for SN-01.

Once the steel material has been processed, it is then loaded onto trucks, rail cars, or barges and shipped.

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Regulations

Lexicon is subject to both the Arkansas Air Pollution Control Code (Regulation No. 18) and the Arkansas Plan of Implementation for Air Pollution Control (Regulation No. 19). The facility is not subject to 40 CFR Part 63 Subpart M – National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products, because permitted HAP emissions are below major source levels.

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

Table 1 - Total Allowable Emissions

Total Allowable Emissions		
Pollutant	Emissions Rates	
	lb/hr	tpy
VOC	304	95
Total HAPs	304	23.8
Individual HAP	304	9.5

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Section III: PERMIT HISTORY

Permit #2022-A, issued August 8, 2002, was the first permit issued to the facility. This permit primarily permitted the emission of HAPs and VOCs incurred while fabricating, prepping and coating steel.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee will not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by Specific Conditions 7 and 8. [§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]

Table 2 - Criteria Pollutants

SN	Description	Pollutant	lb/hr	Tpy
SN- 1	Surface Coating – Steel (2 Stacks)	VOC	304	95.0

2. The permittee will not exceed the emission rates set forth in the following table. Compliance with this condition is demonstrated by Specific Conditions 5, 6, 13, 14 and 15. [§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]

Table 3 - Non-Criteria Pollutants

SN	Description	Pollutant	lb/hr	tpy
SN- 1	Surface Coating – Steel (2 Stacks)	Total HAPs	304	23.8
		Individual HAP	304	9.5

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]
5. The permittee shall not exceed 9.5 tons per year of any individual HAP or 23.8 tons per year of total HAPs at the facility per consecutive twelve month period. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. The permittee shall maintain monthly usage records and HAP emission records which demonstrate compliance with Specific Condition #5. The permittee will update the monthly records by the fifteenth day of the following month. The permittee will revise the monthly HAP emission records to reflect any HAP emission credits from waste disposal as allowed by Specific Condition #15. The monthly HAP emission records will be revised by the fifteenth day of the month following the period to which the waste credit applies. The permittee will keep the records onsite and make the records available to Department personnel upon request. [§18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall not exceed 95 tons per year of VOC at the facility per consecutive twelve month period. [§19.501 of Regulation 19 and A.C.A. §8-4-304 and §8-4-311]
8. The permittee shall maintain monthly emission records which demonstrate compliance with Specific Condition #7. The permittee may revise the monthly VOC emission records to reflect any VOC emission credits from waste disposal as allowed by Specific Condition #16. The monthly VOC emission records shall be updated by the fifteenth day of the month following the period (not to exceed three months) to which the waste credit applies. The permittee will keep records onsite and make records available to Department personnel upon request. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall not use any “As Delivered” coating formulation containing any HAP, as listed in CAA §112(b)(1), unless it is a VOC and is below the content limits described in the table below for the HAPs TLV. The term “As Delivered” refers to the paint, thinner, or solvent as described in the MSDS documents. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant TLV Greater than or Equal To (mg/m3)	Maximum Allowable Pollutant Weight Content (wt. %)
377.7	100.0%
339.9	90.0%
302.2	80.0%
264.4	70.0%
262.1	69.4%
233.5	61.8%
226.6	60.0%

204.8	54.2%
188.9	50.0%
188.0	49.8%
151.1	40.0%
113.3	30.0%
75.5	20.0%
52.4	13.9%
37.8	10.0%
18.9	5.0%
5.0	1.3%
3.8	1.0%
1.6	0.4%

10. The permittee shall only use coatings for which the facility has MSDS or equivalent documents. The facility shall not use more than 912 gallons per day of coatings containing HAPs. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
11. The permittee shall maintain daily records which demonstrate compliance with Specific Condition #10. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 and §8-4-304 and §8-4-311]
12. The permittee shall maintain records for every new coating which demonstrate compliance with the limits set in Specific Condition #9 and which may be used by the Department for enforcement purposes. Compliance shall be determined by inspecting the ACGIH TLV values as listed on current MSDS forms, or in the most recently published ACGIH handbook of Threshold Limit Values (TLVs) and Biological Exposure Indices (BELs) and properly noting on the monthly VOC records (required by Specific Condition #8 whether the material in question is compliant with the table contained in Specific Condition #9). These records shall be maintained onsite and shall be provided to Department personnel upon request. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by 8-4-304 and §8-4-311]

13. For demonstration of compliance with the conditions of this permit, all calculations, recordkeeping and monitoring of emissions and other data shall be based on defensible data. Defensible data shall consist of sufficient documentation to evaluate the source and relative accuracy of the data. When using data consisting of ranges of values the permittee shall use the worst-case values (resulting in the highest estimated emissions) in calculations or reporting.

The permittee shall demonstrate that the degree of accuracy of the calculations used to determine emissions is sufficient to prove that the permit thresholds (i.e. 95 tpy of a criteria pollutant, 9.5/23.75 tpy of individual/combined HAPs) have not been exceeded if the actual emissions are calculated at or above 95% of the major threshold. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

14. Coating formulations containing HAPs that are unable to meet the requirement of Specific Condition #9 may be used provided that all of the following conditions are met. Any HAP used that can not meet the requirement of Specific Condition 9 must be included in the limits of Specific Condition #5 and on the HAP records required by Specific Condition #6. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- a. Emissions of HAPs from coatings that can not meet the requirement of Specific Condition 9 will not exceed 20 pounds of any single HAP during any one day and 200 pounds of any single HAP during any one month.
 - b. Emissions of any single HAP from coatings that can not meet the requirements of Specific condition #9 may not exceed 1 ton per year nor may the combined HAP emission rate exceed 2.5 tons per year.
15. The permittee shall maintain daily and monthly usage records which demonstrate compliance with the HAPs used but excluded from the HAP TLV Table as specified per Specific Condition #14. The permittee will update the monthly records by the fifteenth day of the following month. The permittee will keep the records on-site and make the records available to Department personnel upon request. [§18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
16. The permittee may use all scrap VOCs and HAPs that are drummed and shipped offsite to a proper disposal site as credit towards the facility's VOC and HAP emissions. Only the VOC and HAP portion of the shipment may be taken as a credit. Before a credit can be applied, the following conditions must be met. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

- a. Testing will be performed at the time of or just prior to shipping to establish representative concentrations of the VOCs and HAPs present in the waste. This testing will be performed by an independent laboratory. Representative samples will be taken from the waste drums containing VOCs and HAPs. The samples will be tested for percentage of VOC and HAP content by weight and reported as such. The average of the samples will be applied to all the VOC and HAP containing waste disposed of. The length of time between shipping shall not exceed three months.
- b. The ADEQ Air Division District Field Inspector will be notified no later than seven days prior to the date the samples are taken. The Air Division Inspector will have the option of attending the sampling and selecting the drum(s) to be sampled.
- c. The sampling reports will be maintained on site with the VOC and HAP emissions records required by this permit. VOC and HAP reduction credits will be applied retroactively to the months to which the waste was generated prorated to the individual months applied material and solvent usage. These records will be made available to Department personnel upon request.
- d. The permittee will maintain a spreadsheet which reflects the waste stream(s) and the respective weight fractions of VOC and HAP shipped on a monthly basis. This spreadsheet will also contain monthly calculations for VOC and HAP emissions reductions. A copy of this spreadsheet will be made available to Department personnel upon request.

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 **3/21/2005**.

Table 5 - Insignificant Activities

Description	Category
Welding and cutting operations	Group A, No. 7
Auto shot blasting	Group A, No. 13
Sandblasting	Group A, No. 13
Solvent bulk storage area	Group A, No. 13

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]
4. 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]
6. 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
Quality
Air Division
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.
- 12. 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)]