

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0536-AR-6 AFIN: 23-00004

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

DBG Conway
600 Dave Ward Drive
Conway, Arkansas 72034

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Sheet Metal Work Manufacturing
NAICS Code: 332322

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
1/10/2024	Modification	Generator replacement

6. REVIEWER'S NOTES:

With this modification, the facility is replacing the old Onan natural gas generator with a new Gillette natural gas generator. This generator is used to power emergency lighting in the plant and is not wired to the electrical grid. The facility's permitted annual emissions are increasing by 0.1 tpy CO and 0.02 tpy total HAPs.

7. COMPLIANCE STATUS:

An inspector found the facility replaced the old emergency generator with a new engine before the facility submitted an application for the replacement.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
 If yes, were GHG emission increases significant?

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

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-11	VOC, CO, NO _x	NSPS 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.)

If yes, are applicable requirements included and specifically identified in the permit?
 If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
N/A		

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
N/A		

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 Division of Environmental Quality 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 Division of Environmental Quality 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?
Acetone	1,187	130.58	210.0	N
t-butyl Acetate	950	104.5	210.0	N

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each

compound has been deemed by the Division of Environmental Quality to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Acetone	11,871.1	1,225.36	Y
t-butyl Acetate	9,500.0	1,225.36	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 have H₂S emissions.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	MSDS	4.0 lbs VOC/gal 3.0 lbs HAP/gal 4.0 lbs Acetone/gal 4.0 lbs t-butyl Acetone/gal	N/A	N/A	8 guns; 6.563 gal/hr each
11	NSPS JJJJ Table 1	VOC: 1.0 g/hp-hr CO: 4.0 g/hp-hr NOx: 2.0 g/hp-hr	N/A	N/A	155 hp 1.085 MMBtu/hr 500 hr/yr
	AP-42, 3.2-2 4SLB	<u>in lb/MMBtu</u> PM: 0.01 PM ₁₀ : 7.71E-05 SO ₂ : 5.88E-04 HAPs	N/A	N/A	

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)
N/A				

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)
01	VOCs, HAPs	95.0 tons VOC/yr 9.5/24.0 tons HAPs/yr	Monthly	N
11	Hours of operation	500 hours per calendar year	Continuous	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
11	5%	Rule 18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311	Inspector observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
9	SC#9 is redundant with SC#8
10-22	NESHAP ZZZZ conditions are replaced with NSPS JJJJ conditions

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
Natural Gas Combustion	A-1	0.16	0.01	0.11	1.71	2.04		
		0.07	0.01	0.05	0.72	0.86		
		0.08	0.01	0.06	0.90	1.07		

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Sources (9.25 MM Bth/hr)		0.31	0.03	0.22	3.33	3.97		
Aboveground Diesel Storage Tank (Capacity – 6,000 gallons)	A-3			1.77				
Welding Operations	A-7	0.65						0.0204
Plasma Cutting Operations	A-7	1.249				0.688		0.011
CNC Laser Cutting	A-7	3.28				1.8		0.031
Burn-off Oven	A-13	0.212	0.0016	0.0154	0.2352	0.28		

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 #
0536-AR-5

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

