STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0814-AOP-R8 AFIN: 24-00057

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Correll, Inc.
300 South Hancock Street
Charleston, Arkansas 72933

3. PERMIT WRITER:

Jesse Smith

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Office Furniture (except Wood) Manufacturing
NAICS Code: 337214

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
2/9/2023	Administrative Amendment	None

6. REVIEWER'S NOTES:

Correll, Incorporated (Correll) owns and operates a metal, office furniture manufacturing facility (NAICS 337214) located at 300 South Hancock in Charleston, Franklin County, Arkansas 72933. This permitting action is to add four powder coating line related Insignificant Activities. There were no permitted emissions changes as a result of this Administrative Amendment.

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 16, 2022. There were no areas of concern noted at that time. There are no significant violations recorded in EPA's ECHO for this facility.

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? /N

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*

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
03, 04, 11A/B	HAP's	NESHAP Part 63 Subpart RRRR
19	HAP's	NESHAP Part 63 Subpart ZZZZ

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? Y
(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? Y
If not, explain why.

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 below is taken from the R6 version of the permit.

The non-criteria pollutants listed below were evaluated under the NCAP strategy which includes any single NCAP HAP with facility wide emissions equal to or greater than 10 tpy or a TLV less than 1 mg/m^3. Emergency engine emissions are included in the evaluation and the Plantwide PTE (TPY) but are not modeled per ADEQ guidance. The facility emits HAPs related to incomplete combustion, painting and coating operations.

Pollutant	TLV (mg/m^3)	Plantwide TPY	Total $\geq$ 10 tpy or TLV < 1 mg/m^3
Acetaldehyde*	45.04	9.7 e-5	No
Acetone	1187.2	0.7	No
Acrolein*	0.23	1.20E-05	Yes - PAER
Arsenic*	0.01	4.47E-06	Yes - PAER
Benzene*	1.6	8.36E-03	No
Beryllium*	0.00005	2.68E-07	Yes - PAER
1,3-Butadiene*	4.42	5E-06	No
Cadmium*	0.002	2.46E-05	Yes - PAER
Chromium*	0.01	3.13E-05	Yes - PAER

Pollutant	TLV (mg/m^3)	Plantwide TPY	Total $\geq$ 10 tpy or TLV < 1 mg/m^3
Cobalt*	0.1	1.88E-06	Yes - PAER
Cumene	246	1.94	No
Dichlorobenzene*	150.307	2.68E-05	No
Ethylbenzene	4.09	5.92E-01	No
Formaldehyde*	1.5	1.83E-03	No
Glycol Ether	97	5.79E-01	No
Hexane*	176.237	4.03E-02	No
Lead*	0.05	1.12E-05	Yes - PAER
Manganese*	0.2	8.50E-06	Yes - PAER
Mercury*	0.01	5.82E-06	Yes - PAER
Methanol	262	1.45E-01	No
Naphthalene*	52.4	1.40E-02	No
Nickel*	1.5	4.70E-05	No
POM*	0.2	2.30E-05	Yes - PAER
Selenium*	0.2	5.37E-07	Yes - PAER
Toluene*	75.4	1.39E-01	No
Xylenes*	434.19	3.1	No

* Combustion HAPs

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/m^3), 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	2.32e-4	Yes
Arsenic	0.01	0.0011	1.02e-6	Yes
Beryllium	0.00005	0.0000055	6.13e-8	Yes
Cadmium	0.002	0.00022	5.62e-6	Yes
Chromium	0.01	0.0011	7.15e-6	Yes
Cobalt	0.1	0.011	4.29e-7	Yes
Lead	0.05	0.0055	2.55e-6	Yes
Manganese	0.2	0.022	1.94e-6	Yes
Mercury	0.01	0.0011	1.33e-6	Yes
POM	0.2	0.022	4.22e-4	Yes
Selenium	0.2	0.022	1.23e-7	Yes

c) H_2S 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 H_2S Standards Y/N
If exempt, explain:_____

Pollutant	Threshold value	Modeled Concentration (ppb)	Pass?
H_2S	20 parts per million (5-minute average*)		
	80 parts per billion (8-hour average) residential area		
	100 parts per billion (8-hour average) nonresidential area		

*To determine the 5-minute average use the following equation

$Cp = Cm\ (t_m/t_p)^{0.2}$ where

Cp = 5-minute average concentration
Cm = 1-hour average concentration
t_m = 60 minutes
t_p = 5 minutes

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01, 02, & 05	AP-42 Tables 1.4-1 & -2	$\underline{lb/10^6 scf}$ PM = 7.6 SO_2 = 0.6 VOC = 5.5 CO = 84 NO_X = 100	None	N/A	Only pipeline quality natural gas used as fuel
03, 04, 11A/B	On-site test performed & MSDS	9.65 gal/hr	PM Filters	NA (Filters control PM overspray, not	Max. hourly spraying capacity incld. Permit

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	sheets			VOCs)	#0814-AOP-R1. No physical changes made to booths since test
14	MSDS & Usage	N/A	None	N/A	Solvent used in small maintenance parts washer.
15	Equipment Spec TCEQ Wood Industry	2.0 lb PM/ton wood waste 1.2 lb PM_{10} /ton wood waste	Baghouse in Conjunction w/cyclone	98%	Air flow thru collection system 100 ft^3/min
16	MSDS & Usage	Density= 7.3 lb/gal	None	N/A	Touch-up painting w/aerosol cans.
17	MSDS & Usage	Density= 7.12 lb/gal	None	N/A	Packaging w/adhesive spray cans
18	ADEQ Memo 8/22/03	<u>Storage & Loading(lb/ton)</u> PM= 0.0033 PM_{10}= 0.00027	None	n/a	-
19	AP-42 3.3-1	<u>lb/MMBtu</u> PM/PM_{10} = 0.31 SO_2 = 0.29 VOC = 0.36 CO = 0.95 NO_X = 4.41			370 HP BSFC 18.3 gal/hr

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	Solvent Throughput	3960 gal or 72 drums / rolling 12 months.	Monthly	N
	Solvent VOC content	0.70 lb/gal	Monthly	N
03, 04, 11A/B	Enamel Paints & Catalyst Throughput	44,237 gallons / rolling 12 months.	Monthly	N
	Enamel Paints & Catalyst VOC content	5.44 lb/gal	Monthly	N
	Solvent Throughput	33,126 gal / rolling 12 months.	Monthly	N
	Solvent VOC content	7.45 lb/gal	Monthly	N
14	Solvent Throughput	110 gal / rolling 12 months.	Monthly	N
	Solvent VOC content	7.45 lb/gal	Monthly	N
16	Aerosol Spray Paint Throughput	400 gal / rolling 12 months.	Monthly	N
	Aerosol Spray Paint VOC content	7.3 lb/gal	Monthly	N
	Acetone Content Limit	2.487 lb/gal	Monthly	N
17	Aerosol Spray Adhesive Throughput	974 cans (12 oz each) = 102.5 gal / rolling 12 months	Monthly	N
	Aerosol Spray	4.9 lb/gal	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	Adhesive VOC content			
	Aerosol Spray Adhesive Acetone content	2.23 lb/gal	Monthly	N
19	Hours of Operation	100 Annually	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 02, & 05	5%	Dept Guidance	Natural Gas Usage
15	5%	Dept Guidance	Weekly Inspection
18	20%	Dept Guidance	Annual Loadout Inspection
19	5%	Dept Guidance	Annual Inspection

20. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

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
Powder Coating Dry-Off Oven	A-1	0.04	3.22 E-03	0.03	0.45	0.54	0.01	0.01
Powder Coating Curing Oven	A-1	0.04	3.22 E-03	0.03	0.45	0.54	0.01	0.01
Powder Coating Wash Tank Burner	A-1	0.03	2.06 E-03	0.02	0.29	0.34	6.49 E-03	6.49 E-03
Diesel Tank (500 gal) for SN-19	A-3	0.0	0.0	2.15E-04	0.0	0.0	0.0	0.0
Welding	A-7	0.104	0.0	<0.01	0.0	0.0	0.007	0.00706

40,000 lbs of rods/yr AP-42 12.19-1 -2								
Heat pre-glued Laminates (1.0 ppm formaldehyde)	A-13	0.0	0.0	0.009	0.0	0.0	0.009	0.009
Stencil Ink (10 gal/yr)	A-13	0.0	0.0	0.04	0.0	0.0	0.0	0.0
Table Top Asm - Adhesive	A-13	0.0	0.0	0.04	0.0	0.0	0.04	0.08
Powder Coating Paint System	A-13	1.00	0.0	0.0	0.0	0.0	0.0	0.0

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 #
0814-AOP-R7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Correll, Inc.
Permit #: 0814-AOP-R8
AFIN: 24-00057

$/ton factor	27.27	Annual Chargeable Emissions (tpy)	253.7
Permit Type	AA	Permit Fee $	0

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	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	0
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 condensible 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		1.7	1.7	0	0	1.7
PM_{10}		1.1	1.1	0		
$PM_{2.5}$		0	0	0		
SO_2		0.4	0.4	0	0	0.4
VOC		247.9	247.9	0	0	247.9
CO		2.2	2.2	0		
NO_X		3	3	0	0	3
Single HAP	☐	3.28	3.28	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Total HAPs	☐	6.6	6.6	0		
Acetone	☑	0.7	0.7	0	0	0.7