STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1876-AOP-R16 AFIN: 60-00617

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Dassault Falcon Jet Corp.
3801 East 10th Street
Little Rock, Arkansas 72202

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Aircraft Manufacturing
NAICS Code: 336411

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
12/19/2023	Renewal	N/A

6. REVIEWER'S NOTES:

This is a Title V renewal for this facility. There are no changes to the permit in this renewal. The facility's permitted annual emissions are unchanged.

7. COMPLIANCE STATUS:

As of December 19, 2023, there are no compliance issues with the facility. ECHO (https://echo.epa.gov/detailed-facility-report?fid=110007409964) shows no air violation identified as of May 9, 2023.

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-80	PM_{10}, VOC, CO, NO_X, HAPs	NSPS IIII, NESHAP ZZZZ
SN-81	HAPs	NESHAP ZZZZ
SN-82	HAPs	NESHAP CCCCCC
Facility	HAPs	NESHAP HHHHHH
Facility	HAPs	NESHAP WWWWWW

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 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/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	2.29E-01	2.52E-02	3.39E-04	Yes
Acetone	1.19E03	1.31E02	6.87E01	Yes

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Arsenic	1.00E-02	1.10E-03	1.50E-05	Yes
Beryllium	5.00E-05	5.50E-06	9.00E-07	Yes
Cadmium	1.00E-02	1.10E-03	8.25E-05	Yes
Chromium Compounds	5.00E-01[1] 5.00E-02[2] 1.00E-02[3]	5.5E-02 5.5E-03 1.1E-03	1.05E-04 6.00E-03 1.50E-04	No
Cobalt	2.00E-02	2.20E-03	6.30E-06	Yes
Hexamethylene Diisocyanate	3.44E-02	3.78E-03	5.93E-02	No
Manganese	2.00E-01	2.20E-02	2.85E-05	Yes
Mercury	2.50E-02	2.75E-03	1.95E-05	Yes
POM	2.00E-01	2.20E-02	6.62E-06	Yes
Selenium	2.00E-01	2.20E-02	1.80E-06	Yes
Toluene Diisocyanate	7.12E-03	7.84E-04	8.22E-03	No

[1] Metal and Cr III compounds
[2] Water-soluble Cr VI compounds
[3] Insoluble Cr VI compounds

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 Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu g/m^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu g/m^3$)	Pass?
Chromium Compounds	5.00E-01*	9.77E-02	Yes
Hexamethylene Diisocyanate	3.44E-01	1.55E-01	Yes
Toluene Diisocyanate	7.12E-02	6.01E-02	Yes

*Water-soluble Cr VI compounds

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
If exempt, explain: the facility does not have H_2S 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	Mass Balance	VOC 5.1 lb/hr			
08A	Mass Balance	VOC 6.3 lb/hr			
08B					
08C					
08D					
08E					
09	Mass Balance	VOC 10.2 lb/hr			
10	Mass Balance	VOC 12.8 lb/hr			
12	Mass Balance	VOC 14.4 lb/hr			
17	Mass Balance	VOC 2.2 lb/hr			
18	Mass Balance	VOC 2.2 lb/hr			
19	Mass Balance	VOC 2.2 lb/hr			
25	Mass Balance	VOC 59.3 lb/hr			
26A	Mass Balance	VOC 5.0 lb/hr			
26B					
27	Mass Balance	VOC 1.7 lb/hr			
33	TANKS 4.0.9d	VOC 0.6 lb/hr			
34	TANKS 4.0.9d	VOC 0.6 lb/hr			
35	TANKS 4.0.9d	VOC 0.3 lb/hr			
37	Mass Balance	VOC 17.9 lb/hr			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
39	Mass Balance	VOC 64.0 lb/hr			
40	Mass Balance	VOC 64.0 lb/hr			
42	Mass Balance	VOC 9.9 lb/hr			
43	Mass Balance	VOC 9.9 lb/hr			
45	Mass Balance	VOC 9.9 lb/hr			
46	Mass Balance	VOC 9.9 lb/hr			
48	Mass Balance	VOC 1.8 lb/hr			
49	Mass Balance	VOC 12.3 lb/hr			
50	Mass Balance	VOC 12.8 lb/hr			
59	Mass Balance	VOC 9.9 lb/hr			
60	Mass Balance	VOC 9.9 lb/hr			
61	Mass Balance	VOC 9.9 lb/hr			
62	Mass Balance	VOC 9.9 lb/hr			
63	Mass Balance	VOC 9.9 lb/hr			
64	Mass Balance	VOC 9.9 lb/hr			
65	Mass Balance	VOC 42.6 lb/hr			
66	Mass Balance	VOC 42.6 lb/hr			
67	Mass Balance	VOC 1.8 lb/hr			
68	Mass Balance	VOC 1.8 lb/hr			
69	Mass Balance	VOC 0.2 lb/hr			
70	Mass Balance	VOC 0.2 lb/hr			
71	Mass Balance	VOC 3.4 lb/hr			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
72	Mass Balance	VOC 3.4 lb/hr			
73	Mass Balance	VOC 3.4 lb/hr			
74	Mass Balance	VOC 2.9 lb/hr			
76	Mass Balance	VOC 0.2 lb/hr			
77	Mass Balance	VOC 0.2 lb/hr			
78	AP-42 Section 1 - Tables 1.4-1 through 1.4-4	PM/PM_{10} 7.6 lb/MMcf SO_2 0.6 lb/MMcf VOC 5.5 lb/MMcf CO 84 lb/MMcf NO_X 100 lb/MMcf			
79	Mass Balance	VOC 42.6 lb/hr			
80	AP-42 Section 3 - Tables 3.3-1, 3.3-2, and certification	PM/PM_{10} 0.3 g/kW-hr SO_2 0.00205 g/kW-hr VOC 0.00205 g/kW-hr CO 5.0 g/kW-hr NO_X 4.0 g/kW-hr			158 hp 500 hr/yr operation
81	AP-42 Section 3 - Table 3.3-1 and 3.3-2	PM/PM_{10} 0.0022 lb/hp-hr SO_2 0.00205 lb/hp-hr VOC 0.00247 lb/hp-hr CO 0.00668			Two Engines 183 hp, each 500 hr/yr operation

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		lb/hp-hr NO_X 0.031 lb/hp-hr			
82	TANKS 4.0.9d	VOC 11.9 lb/hr			
83A 83B	Mass Balance	VOC 1.4 lb/hr			
84A 84B	Mass Balance	VOC 1.8 lb/hr			
85A 85B	Mass Balance	VOC 12.1 lb/hr			
86A 86B	Mass Balance	VOC 12.1 lb/hr			
87	Mass Balance	VOC 1.9 lb/hr			
88	Mass Balance	VOC 1.9 lb/hr			
89	Mass Balance	VOC 1.9 lb/hr			
90	Mass Balance	VOC 1.9 lb/hr			
91	Mass Balance	VOC 10.3 lb/hr			
92	Mass Balance	VOC 12.3 lb/hr			
93 94 95	Mass Balance	VOC 5.7 lb/hr			
96A 96B 96C 96D 96E	Mass Balance	VOC 2.8 lb/hr			
97	Mass Balance	VOC 4.9 lb/hr			
98	Mass Balance	VOC 4.9 lb/hr			
99	Mass Balance	VOC 1.0 lb/hr			
100A 100B	Mass Balance	VOC 2.0 lb/hr			
101A	AP-42 Section 12 - Table 12.20-2	PM/PM_{10} 4.2 gr/hr-ft^2			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
101B	AP-42 Section 12 - Table 12.20-2	PM/PM_{10} 4.2 gr/hr-ft^2			
102	Mass Balance	PM/PM_{10} 0.01 lb/hr VOC 0.2 lb/hr	Mobile Paint Booth	PM/PM_{10} 99.78% VOC 90%	
103	Mass Balance	PM/PM_{10} 0.8 lb/hr VOC 0.7 lb/hr			
104-107	Mass Balance	VOC 20.7 lb/hr, per stack			
108-111	Mass Balance	VOC 9.66 lb/hr, per stack			

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)
facility wide	VOC content and purchases of VOC containing materials	165.0 tpy of VOC emissions	monthly	Y
facility wide	Acetone content and purchases of Acetone containing materials	70.00 tpy of Acetone emissions	monthly	N
facility wide	HAP content and purchases of HAP containing materials	9.6 tpy - single HAP 22.0 tpy - combined	monthly	N
facility wide	VOC, Acetone and HAP credit, amount of VOC, Acetone and HAP shipped off-site to a Hazardous Disposal Facility	There is no applicable limit for this requirement.	quarterly	N
facility wide	VOC, Acetone and HAP credit, amount of VOC, Acetone and HAP contained in materials that have exceeded their shelf life	There is no applicable limit for this requirement	monthly	N
facility wide	natural gas usage	150 MMscf per consecutive twelve month period	monthly	N
facility wide	Surface Coating Operation	Annual Notification of Changes Report	N/A	N
facility wide	Paint Stripping Operations	Less than 1 ton per year of methyl chloride	annually	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
facility wide	Records described in § 63.11177	N/A	as necessary	N
facility wide	Electrolytic Operations	Maintain tank cover 95% of electrolytic process time	daily	N
facility wide	Polishing Operations	Capture and control system manufacturer's specifications and instructions and inspections	N/A	N
facility wide	Electrolytic Operations and Polishing Operations	Annual Compliance Certification Report	N/A	N
80	Hours of Operation	500 hr/yr	monthly	Y
	Fuel Specification	Maximum 15 ppm wt% S and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume	Per Fuel Shipment	N
81	Hours of Operation	500 hr/yr	monthly	Y
82	Monthly Throughput of Gasoline per MACT 6C	10,000 gal/mo 120,000 gal/yr	monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
All Sources (except SN-80 & SN-81)	5%	§18.501	Natural gas only
80, 81	20%	§19.503(B)	Daily observation for events lasting 24 hours or more

SN	Opacity	Justification for limit	Compliance Mechanism
			otherwise annual observation

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
Mold Machine Shop (Manufacturing Shop) Nat. Gas Fired Curing Oven	A-1	0.02	0.002	0.02	0.25	0.30	0.02	0.02
Mold Machine Shop (Manufacturing Shop) Nat. Gas Fired Curing Oven	A-1	0.04	0.003	0.03	0.43	0.52	0.03	0.03
Machine Shop (Manufacturing Shop) Nat. Gas Fired Oven	A-1	0.03	0.003	0.02	0.36	0.43	0.02	0.02
Wastewater Evaporator	A-1	0.05	0.004	0.04	0.54	0.64	0.04	0.04
Wastewater Evaporator	A-1	0.02	0.002	0.02	0.27	0.32	0.02	0.02
Natural gas fired pressure washers (2)	A-1	0.03	0.002	0.02	0.30	0.36	0.02	0.02
A-1 Total		0.19	0.016	0.15	2.15	2.57	0.15	0.15
Diesel Storage Tank (1,000 gal)	A-3	0.001	-	-	-	-	0.001	0.001

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
FAA Burn Test Room	A-13	0.10	-	-	-	-	-	-
Cabinet Shop - Vacuum Filter No. 1	A-13	0.03	-	-	-	-	-	-
Cabinet Shop - Vacuum Filter No.2	A-13	0.03	-	-	-	-	-	-
Production Warehouse - Vacuum Filter	A-13	0.03	-	-	-	-	-	-
Machine Shop (Manufacturing Shop) drilling and cutting	A-13	-	-	0.28	-	-	-	-
Gel-Coat Booth	A-13	-	-	1.86	-	-	0.63	0.96
Cabinet Shop - Polish Room, Detail Polish Room and Buffing Room	A-13	0.08	-	-	-	-	-	-
Welding Inspection Booth	A-13	-	-	0.09	-	-	-	-
Wastewater Aeration	A-13	-	-	-	-	-	-	-
Machine Shop (Manufacturing Shop) Welding	A-13	-	-	-	-	-	-	-
Plating Shop - Diffuse Particulate Filter	A-13	Filtered air is blown back into the Plating Shop. No emissions are released to the atmosphere from the diffuse particulate filter.						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
Service Center-Dust Collector/Filter	A-13	Filtered air is blown back into the Service Center. No emissions are released to the atmosphere by the dust collector/filter.						
Cabinet Shop - Sanding Room Baghouses (2)	A-13	0.25	-	-	-	-	-	-
Cabinet Shop - Six Diffuse Particulate Filters	A-13	Filtered air is blown back into the Cabinet Shop. No emissions are released to the atmosphere from the diffuse particulate filters.						
Cabinet Shop - Dust Collector with Fabric Filter	A-13	0.15	-	-	-	-	-	-
Headliner Shop - Sanding Booths (2)	A-13	0.08	-	-	-	-	-	-
OptiFlex Laser Cutter	A-13	0.78	-	0.23	-	-	0.23	0.23
A-13 Total		1.50	-	2.46	-	-	0.86	1.19

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 #
1876-AOP-R15

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Dassault Falcon Jet Corp.
Permit Number: 1876-AOP-R16
AFIN: 60-00617

$/ton factor	28.14	Annual Chargeable Emissions (tpy)	250.5
Permit Type	Renewal No Changes	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		4.4	4.4	0		
PM_{10}		4.4	4.4	0	0	4.4
$PM_{2.5}$		0	0	0		
SO_2		0.4	0.4	0	0	0.4
VOC		165	165	0	0	165
CO		7.4	7.4	0		
NO_X		10.7	10.7	0	0	10.7
Total HAPs	☐	22	22	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	☑	70	70	0	0	70
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
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