# MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

August 9, 2019

PERMIT TO INSTALL 254-05B

**ISSUED TO**Duncan Aviation

LOCATED AT 15745 South Airport Road Battle Creek, Michigan

IN THE COUNTY OF Calhoun

# STATE REGISTRATION NUMBER N3303

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

UIRED BY RULE 203:			
SIGNATURE:			
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# **PERMIT TO INSTALL**

## **Table of Contents**

COMMON ACRONYMS	2
POLLUTANT / MEASUREMENT ABBREVIATIONS	3
GENERAL CONDITIONS	4
EMISSION UNIT SPECIAL CONDITIONS	6
EMISSION UNIT SUMMARY TABLE	6
EUPaintHangar4	
EUPaintHangar5	11
FLEXIBLE GROUP SPECIAL CONDITIONS	14
FLEXIBLE GROUP SUMMARY TABLE	14
FG-2005Equipment	15
FG-Acetone	18
FGFACILITY CONDITIONS	20

#### **COMMON ACRONYMS**

AQD Air Quality Division

BACT Best Available Control Technology

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

COMS Continuous Opacity Monitoring System

EGLE Michigan Department of Environment, Great Lakes, and Energy

EU Emission Unit FG Flexible Group

GACS Gallons of Applied Coating Solids

GC General Condition
GHGs Greenhouse Gases

HVLP High Volume Low Pressure\*

ID Identification

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan Air Emissions Reporting System

MAP Malfunction Abatement Plan MSDS Material Safety Data Sheet

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standard for Hazardous Air Pollutants

NSPS New Source Performance Standards

NSR New Source Review
PS Performance Specification

PSD Prevention of Significant Deterioration

PTE Permanent Total Enclosure

PTI Permit to Install

RACT Reasonable Available Control Technology

ROP Renewable Operating Permit

SC Special Condition

SCR Selective Catalytic Reduction
SNCR Selective Non-Catalytic Reduction

SRN State Registration Number

TBD To Be Determined

TEQ Toxicity Equivalence Quotient

USEPA/EPA United States Environmental Protection Agency

VE Visible Emissions

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig

#### **POLLUTANT / MEASUREMENT ABBREVIATIONS**

acfm Actual cubic feet per minute

BTU British Thermal Unit °C Degrees Celsius CO Carbon Monoxide

CO₂e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter pegrees Fahrenheit

gr Grains

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

HP Horsepower Hydrogen Sulfide

kW Kilowatt
lb Pound
m Meter
mg Milligram
mm Millimeter
MM Million
MW Megawatts

NMOC Non-Methane Organic Compounds

NO<sub>x</sub> Oxides of Nitrogen

ng Nanogram

PM Particulate Matter

PM10 Particulate Matter equal to or less than 10 microns in diameter PM2.5 Particulate Matter equal to or less than 2.5 microns in diameter

pph Pounds per hour ppm Parts per million

ppmv Parts per million by volume
ppmw Parts per million by weight
psia Pounds per square inch absolute
psig Pounds per square inch gauge

scf Standard cubic feet

sec Seconds SO<sub>2</sub> Sulfur Dioxide

TAC Toxic Air Contaminant

Temp Temperature

THC Total Hydrocarbons tpy Tons per year Microgram

μm Micrometer or Micron

VOC Volatile Organic Compounds

yr Year

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 4 of 22

#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

Duncan Aviation (N3303) Permit No. 254-05B

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

# **EMISSION UNIT SPECIAL CONDITIONS**

### **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description	Installation Date / Modification	Flouible Over 15
Emission Unit ID	(Including Process Equipment & Control Device(s))	Date 07.04.4002./	Flexible Group ID FG-Acetone
EU-PaintHangar4 (formerly	Three stage enclosed Strip / Paint Hangar operation will strip, prime, paint, and air-dry aircraft	07-01-1992 / 08-09-2019	FG-Acetone
EU-StripHanger)	just like the existing operation conducted in the EU-	00 03 2013	
20 0	PaintHangar6. EU-PaintHangar4 will be closed		
	during stripping, priming and painting operations to		
	control dust and temperature in the hangar.		
	Materials to be used include adhesives, catalysts,		
	cleaners, primer, reducer, stripper, thinner and topcoat. Primers and paints prepared for		
	application that are not applied are drummed and		
	sent out as hazardous waste. Also included in this		
	emission unit is the use of non-acetone solvents to		
	clean spray guns.		
EU-PaintHangar5	An enclosed airplane hangar in which coatings are	07-01-1992 /	FG-Acetone
(formerly EU-PaintHanger)	sprayed onto stripped airplanes. Once the coatings are applied to the planes they are allowed to dry	NA	
	inside the hanger. Also included in this emission		
	unit is the use of non-acetone solvents to clean		
	spray guns.		
EU-PaintHangar6	Three stage enclosed Strip / Paint Hangar	02-01-2006 /	FG-2005Equipment,
(formerly EU-StripPaintHanger)	operation will strip, prime, paint, and air-dry aircraft just like the existing operation conducted in the EU-	NA	FG-Acetone
E0-Surpramulanger)	PaintHangar5. EU-PaintHangar6 will be closed		
	during stripping, priming and painting operations to		
	control dust and temperature in the hangar.		
	Materials to be used include adhesives, catalysts,		
	cleaners, primer, reducer, stripper, thinner and		
	topcoat. Primers and paints prepared for application that are not applied are drummed and		
	sent out as hazardous waste. Also included in this		
	emission unit is the use of non-acetone solvents to		
	clean spray guns.		
EU-BPT-7	Three stage dry filter paint spray booth in which	02-01-2006 /	FG-2005Equipment,
(formerly	miscellaneous airplane parts are stripped as well as	NA	FG-Acetone
EU-PaintBooth)	refinished. Materials to be used include adhesives, catalysts, cleaners, primer, reducer, stripper,		
	thinner and topcoat. Also included in this emission		
	unit is the use of non-acetone solvents to clean		
	spray guns.		

		1 4 11 41	T 1
		Installation	
		Date /	
	Emission Unit Description	Modification	
Emission Unit ID	(Including Process Equipment & Control Device(s))	Date	Flexible Group ID
EU-BCBGB2	Single stage dry filtered Cabinet Shop Glue Booth	02-01-2006 /	FG-2005Equipment,
(formerly	in which adhesives are applied to aircraft cabinets	NA	FG-Acetone
EU-CabinetShopGB)	prior to assembly and applying veneers and		
	laminates. EU-BCBGB2 is a new open face booth		
	operated at a negative pressure during adhesive		
	application. Also included in this emission unit is		
	the use of non-acetone solvents to clean spray		
	guns.		
EU-BUPGB3	Single stage dry filtered Upholstery Shop Glue	02-01-2006 /	FG-2005Equipment,
(formerly	Booth in which adhesives are applied to foam and	NA	FG-Acetone
ÈU-	aircraft seats prior to assembly and shaping. EU-		
UpholsteryRmGB)	BUPGB3 is a new open face booth that will be		
, , ,	operated at a negative pressure during adhesive		
	application. Also included in this emission unit is		
	the use of non-acetone solvents to clean spray		
	guns.		
EU-BCMGB1	Single stage dry filtered Completions Room Glue	02-01-2006 /	FG-2005Equipment,
(formerly	Booth in which adhesives applied to aircraft	NA	FG-Acetone
ÈU-	components like interior panels. EU-BCMGB1 is a		
CompletionsRmGB)	new open face booth that is operated at a negative		
·	pressure during adhesive application. Also		
	included in this emission unit is the use of non-		
	acetone solvents to clean spray guns.		
			•

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 8 of 22

# **EUPaintHangar4 EMISSION UNIT CONDITIONS**

#### **DESCRIPTION**

Three stage enclosed Strip / Paint Hangar operation will strip, prime, paint, and air-dry aircraft just like the existing operation conducted in the EU-PaintHangar6. EU-PaintHangar4 will be closed during stripping, priming and painting operations to control dust and temperature in the hangar. Materials to be used include adhesives, catalysts, cleaners, primer, reducer, stripper, thinner and topcoat. Primers and paints prepared for application that are not applied are drummed and sent out as hazardous waste. Also included in this emission unit is the use of non-acetone solvents to clean spray guns.

Flexible Group ID: FG-Acetone

#### POLLUTION CONTROL EQUIPMENT

Particulate matter will be controlled by 3-stage filtration system with recycle loop.

#### I. EMISSION LIMIT(S)

			Time Period /		Monitoring / Testing	Underlying Applicable
	Pollutant	Limit	Operating Scenario	Equipment	_	Requirements
1.	VOC	2,000 lb/month	Calendar Month	EU-PaintHangar4	SC VI.3	R 336.1702(d)
2.	VOC	10.0 tpy	12-month rolling time period as determined at the end of each calendar month		SC VI.3	R 336.1702(d)
3.	Acetone (CAS No. 67-64-1), t-butyl acetate (TBA, CAS No. 540-88-5), and p-chlorobenzotrifluoride (PCBTF, CAS No. 98-56-6), combined	19.6 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.4	R 336.1224

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1702(a))
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. (R 336.1224, R 336.1370)
- 3. The permittee shall handle all VOC and / or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 9 of 22

4. The permittee shall equip and maintain the stripping / painting hangar of EU-PaintHangar4 with a device to show that it operates under negative pressure whenever stripping / painting process is taking place. (R 336.1224, R 336.1225, R 336.1702(a))

### IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU-PaintHangar4 unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)
- 2. The permittee shall not operate EU-PaintHangar4, unless each paint booth / each paint hangar is operating under negative pressure. (R 336.1224, R 336.1225, R 336.1702(a))
- 3. The permittee shall equip and maintain EU-PaintHangar4 with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (R 336.1702(a))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1224, R 336.1702)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1702)
- 3. The permittee shall keep the following information for EU-PaintHangar4:
  - a) Date and differential pressure measurement on a calendar day basis.
  - Gallons (with water) of each VOC-containing material used and, if applicable, reclaimed, on a monthly basis.
  - c) VOC content (with water) of each material as applied on a monthly basis.
  - d) VOC mass emission calculation determining the monthly emission rate in tons per calendar month on a monthly basis.
  - e) VOC mass emission calculation determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month on a monthly basis.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1702)

- 4. The permittee shall keep the following information on a monthly basis for EU-PaintHangar4:
  - a) Gallons (with water) acetone-, TBA-, and PCBTF-containing materials used and, if applicable, reclaimed.
  - b) Acetone, TBA, and PCBTF content (with water) of each material as applied.
  - c) Acetone, t-butyl acetate, and p-chlorobenzotrifluoride mass emission calculations (separate and combined) determining the monthly emission rate in tons per calendar month.

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 10 of 22

d) Acetone, t-butyl acetate, and p-chlorobenzotrifluoride mass emission calculations (separate and combined) determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.<sup>1</sup> (R 336.1224)

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-PaintHangar4-1	42	59	R 336.1225, 40 CFR 52.21(c) & (d)
2.	SV-PaintHangar4-2	42	59	R 336.1225, 40 CFR 52.21(c) & (d)
3.	SV-PaintHangar4-3	42	59	R 336.1225, 40 CFR 52.21(c) & (d)

### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 11 of 22

# EUPaintHangar5 EMISSION UNIT CONDITIONS

#### **DESCRIPTION**

An enclosed airplane hangar in which coatings are sprayed onto stripped airplanes. Once the coatings are applied to the planes they are allowed to dry inside the hanger. Also included in this emission unit is the use of non-acetone solvents to clean spray guns.

Flexible Group ID: FG-Acetone

#### POLLUTION CONTROL EQUIPMENT

Particulate matter will be controlled by dry filters.

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC		21.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-PaintHangar5	SC VI.3	R 336.1702(a)

#### II. MATERIAL LIMIT(S)

NA

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1702(a))
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. (R 336.1224, R 336.1370)
- 3. The permittee shall handle all VOC and / or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1205(3), R 336.1224, R 336.1702(a))
- 4. The permittee shall equip and maintain the paint hangar of EU-PaintHangar5 with a device to show that it operates under negative pressure whenever painting process is taking place. (R 336.1224, R 336.1225, R 336.1702(a))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate EU-PaintHangar5 unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)
- 2. The permittee shall not operate EU-PaintHangar5, unless each paint booth / each paint hangar is operating under negative pressure. (R 336.1224, R 336.1225, R 336.1702(a))

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 12 of 22

3. The permittee shall equip and maintain EU-PaintHangar5 with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (R 336.1702(a))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1224, R 336.1702)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1702)
- 3. The permittee shall keep the following information on a calendar day basis for EU-PaintHangar4:
  - a) Date and differential pressure measurement
  - b) Gallons (with water) of each stripper, primer, topcoat, purge and clean up solvents (non-acetone), etc. (material) used.
  - c) VOC content (minus water and with water) of each material as applied.
  - d) VOC emission calculations determining the volume-weighted average VOC content minus water of the materials as applied on a calendar day basis.
  - e) VOC, acetone, t-butyl acetate, and p-chlorobenzotrifluoride mass emission calculations (separate and combined) determining the monthly emission rate in tons per calendar month.
  - f) VOC, acetone, t-butyl acetate, and p-chlorobenzotrifluoride mass emission calculations (separate and combined) determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1224, R 336.1702(a))

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-PaintHangar-1	48	60	R 336.1225, 40 CFR 52.21(c) & (d)

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2.	SV-PaintHangar-2	48	60	R 336.1225, 40 CFR 52.21(c) & (d)
3.	SV-PaintHangar-3	48	60	R 336.1225, 40 CFR 52.21(c) & (d)
4.	SV-PaintHangar-4	48	60	R 336.1225, 40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

#### **FLEXIBLE GROUP SPECIAL CONDITIONS**

# **FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-2005Equipment	Five emission units permitted in the year 2005	EU-PaintHangar6, EU-BPT-7, EU-BCBGB2, EU-BUPGB3, EU-BCMGB1
FG-Acetone	Purge and cleanup operation using acetone in seven emission units.	EU-PaintHangar4 EU-PaintHangar5 EU-PaintHangar6, EU-BPT-7, EU-BCBGB2, EU-BUPGB3, EU-BCMGB1

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 15 of 22

# FG-2005Equipment FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Five emission units permitted in the year 2005.

Emission Unit: EU-PaintHangar6, EU-BPT-7, EU-BCBGB2, EU-BUPGB3, EU-BCMGB1.

#### POLLUTION CONTROL EQUIPMENT

Particulate matter will be controlled by dry filters

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	41.4 tpy	12-month rolling time period as determined at the end of each calendar month		SC VI.3	R 336.1702(a)

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste stripping/coating and paint sludge (materials) and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1702(a))
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. (R 336.1224, R 336.1370)
- 3. The permittee shall handle all VOC and / or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))
- 4. The permittee shall equip and maintain each stripping / painting hangar of FG-2005Equipment with a device to show that it operates under negative pressure whenever stripping / painting process is taking place. (R 336.1224, R 336.1225, R 336.1702(a))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate each stripping / painting booth portion of FG-2005Equipment unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)
- 2. The permittee shall not operate FG-2005Equipment, unless each paint booth / each paint hangar is operating under negative pressure. (R 336.1224, R 336.1225, R 336.1702(a))

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 16 of 22

3. The permittee shall equip and maintain each paint booth portion of FG-2005Equipment with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (R 336.1702(a))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1702)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1702)
- 3. The permittee shall keep the following information on a calendar month basis for FG-2005Equipment:
  - a) Date and differential pressure measurement
  - b) Gallons (with water) of each stripper, primer, topcoat, clean-up and purge solvents (non-acetone), etc. (material) used.
  - c) VOC content (with water) of each material as applied.
  - d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - e) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1702(a))

#### VII. REPORTING

NA

### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-PaintHangar6-1	42	62	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-PaintHangar6-2	42	62	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-PaintHangar6-3	42	62	R 336.1225, 40 CFR 52.21(c) & (d)

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4.	SV-PaintHangar6-4	42	62	R 336.1225, 40 CFR 52.21(c) & (d)
5.	SV-BPT-7	32	30	R 336.1225, 40 CFR 52.21(c) & (d)
6.	SV-BCBGB2	26 x 26	60	R 336.1225, 40 CFR 52.21(c) & (d)
7.	SV-BUPGB3	26 x 26	60	R 336.1225, 40 CFR 52.21(c) & (d)
8.	SV-BCMGB1	26 x 26	60	R 336.1225, 40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

**Footnotes:** <sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

Duncan Aviation (N3303) Permit No. 254-05B

# FG-Acetone FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Purge and cleanup operation using acetone in seven emission units.

Emission Unit: EU-PaintHangar4, EU-PaintHangar5, EU-PaintHangar6, EU-BPT-7,

EU-BCBGB2, EU-BUPGB3, EU-BCMGB1

#### **POLLUTION CONTROL EQUIPMENT**

NA

### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1	. Acetone (CAS No. 67-64-1)	50.0 tpy	12-month rolling time period as determined at	FG-Acetone	SC VI.3	R 336.1224
			the end of each calendar month			

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste stripping/coating and paint sludge (materials) and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1224, R 336.1225)
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225)

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 19 of 22

- 3. The permittee shall keep the following information on a calendar month basis for FG-Acetone:
  - a) Gallons (with water) of each acetone containing material used.
  - b) Acetone content (in pounds per gallon) of each acetone containing material used.
  - c) Acetone mass emission calculations determining the monthly emission rate in tons per calendar month.
  - d) Acetone mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1224, R 336.1225)

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 20 of 22

#### **FGFACILITY CONDITIONS**

**<u>DESCRIPTION</u>**: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	Each Individual HAP	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.3	R 336.1205(3)
2.	Aggregate HAPs	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.3	R 336.1205(3)
3.	VOC	Less than 90.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.4	R 336.1205(3)
4.	Methylene Chloride*	530 lbs/day <sup>1</sup>	Calendar day	FG-Facility	SC VI.5	R 336.1225

# II. MATERIAL LIMIT(S)

	Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	Low-use coatings	55 gal/yr	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.6	R 336.1702(a)

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the HAP content of any coating, stripping, and/or other material (material) as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. (R 336.1205(3))

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 21 of 22

2. The permittee shall determine the VOC content, water content, and density of any coating, stripping, and/or other material (material), as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1205(3))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3), R 336.1225)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1225)
- 3. The permittee shall keep the following information on a calendar month basis for FG-Facility:
  - a) Gallons or pounds of each HAP containing material used.
  - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
  - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - e) Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1205(3))

- 4. The permittee shall keep the following information on a calendar month basis for FG-Facility:
  - a) Gallons or pounds of each VOC containing material used.
  - b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
  - c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
  - d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
  - e) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1205(3))

- 5. The permittee shall keep the following information on a calendar day basis for FG-Facility:
  - a) Gallons or pounds of each methylene chloride containing material used.
  - b) Where applicable, gallons or pounds of each methylene chloride containing material reclaimed.
  - c) The methylene chloride content in pounds per gallon or pounds per pound, of each methylene chloride containing used.
  - d) Methylene Chloride mass emission calculations determining the daily emission rate in pounds per calendar day.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.<sup>1</sup> (R 336.1225)

Duncan Aviation (N3303)

Permit No. 254-05B

August 9, 2019

Page 22 of 22

6. The permittee shall keep monthly total usage records of low-use coatings in gallons per year along with coating identification on a 12-month rolling time period as determined at the end of each calendar month for FG-Facility. The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. (R 336.1702(a))

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

#### IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHHHHH for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources by the initial compliance date. (40 CFR Part 63, Subpart A and Subpart HHHHHHH)

#### Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).