

State of Utah

SPENCER J. COX Governor

DEIDRE HENDERSON Lieutenant Governor Department of Environmental Quality

> Tim Davis Interim Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird Director

DAQE-AN122020004-25

March 17, 2025

Eric Lewis Align Precision 526 Aviation Way Cedar City, UT 84721 eric.lewis@alignprecision.com

Dear Mr. Lewis:

Re: Approval Order: Administrative Amendment to Approval Order DAQE-817-01 for Equipment and Emission Updates Project Number: N122020004

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on August 27, 2024. Align Precision must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Lucia Mason**, who can be contacted at (385) 707-7669 or lbmason@utah.gov. Future correspondence on this AO should include the engineer's name as well as the DAQE number shown on the upper right-hand corner of this letter.

Sincerely,

auth

Bryce C. Bird Director

BCB:LBM:jg

## STATE OF UTAH Department of Environmental Quality Division of Air Quality

# APPROVAL ORDER DAQE-AN122020004-25 Administrative Amendment to Approval Order DAQE-817-01 for Equipment and Emission Updates

Prepared By Lucia Mason, Engineer (385) 707-7669 lbmason@utah.gov

Issued to Align Precision - Aircraft Parts Manufacturing Facility

> Issued On March 17, 2025

> > **Issued By**

Sucht

Bryce C. Bird Director Division of Air Quality

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#### **GENERAL INFORMATION**

#### **CONTACT/LOCATION INFORMATION**

**Owner Name** Align Precision

**Mailing Address** 

526 Aviation Way

Cedar City, UT 84721

**Source Name** Align Precision - Aircraft Parts Manufacturing Facility

**Physical Address** 597 North 1500 West Cedar City, UT 84721

Source Contact Name: Eric Lewis Phone: (435) 586-3871 Email: eric.lewis@alignprecision.com UTM Coordinates 316,354 m Easting 4,173,035 m Northing Datum NAD83 UTM Zone 12

SIC code 3728 (Aircraft Parts & Auxiliary Equipment, NEC)

#### SOURCE INFORMATION

General Description

Align Precision manufactures and finishes aircraft parts. Machined parts are brought to the site by truck then dipped into a series of tanks. All treatment tanks are in the same line, and each tank has a duct above it, which leads to three (3) roof-mounted ceilcote scrubbers. Additionally, Align Precisions operates several natural gas-heated paint booths that discharge into ambient air. The building also has a wastewater treatment system which discharges into the same scrubber system as the chemical process lines.

<u>NSR Classification</u> Administrative Amendment

Source Classification Located in Attainment Area Iron County Airs Source Size: B

Applicable Federal Standards None DAQE-AN122020004-25 Page 4

<u>Project Description</u> Align Precision is proposing the following changes in equipment to AO DAQE-817-01, dated October 4, 2001:

Removal of one (1) 2.52 MMBtu/hr natural gas boiler
 To be replaced with one (1) 1.99 MMBtu/hr natural gas boiler (Equipment ID II.A.8)
 Removal of two (2) Anodize/Alodine Chemical Process Lines
 To be replaced with one (1) automated processing line (Equipment ID II.A.10)
 Removal of one (1) wet scrubber associated with the wastewater treatment plant\*
 To be replaced with one (1) ceilcote wet scrubber (Equipment ID II.A.12)\*
 Removal of one (1) Zinc/Phosphate Descale Process Line
 Removal of one (1) Sludge Drier

\*Emissions from the wastewater treatment plant are now routed through the same three (3) wet scrubbers (Equipment ID II.A.12) as emissions from the chemical process lines.

These changes qualify as a reduction in air pollutants and are thus exempt from the requirement to submit a notice of intent and obtain an approval order prior to construction under R307-401-12.

Additionally, the facility underwent an ownership change from Metalcraft Technologies Inc. to Align Precision in December of 2021. Documentation of this change has been included in the source file.

#### SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
$CO_2$ Equivalent	-273	8569.00
Carbon Monoxide	-0.19	6.72
Nitrogen Oxides	-0.23	9.14
Particulate Matter - PM <sub>10</sub>	-0.02	0.71
Particulate Matter - PM <sub>2.5</sub>	-0.02	0.71
Sulfur Dioxide	0	0.06
Volatile Organic Compounds	0	15.04

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Chromium Compounds (CAS #CMJ500)	0	3
Ethylene Glycol (CAS #107211)	0	810
Generic HAPs (CAS #GHAPS)	0	1638
Hexamethylene-1,6-Diisocyanate (CAS #822060)	0	10
Hydrochloric Acid (Hydrogen Chloride) (CAS #7647010)	0	112
Hydrogen Fluoride (Hydrofluoric Acid) (CAS #7664393)	0	18
Methyl Isobutyl Ketone (Hexone) (CAS #108101)	0	2000
Methylene Chloride (Dichloromethane) (CAS #75092)	0	1000
Toluene (CAS #108883)	0	1000

Xylenes (Isomers And Mixture) (CAS #1330207)	0	4000
	Change (TPY)	Total (TPY)
Total HAPs	-2.50	5.30

## **SECTION I: GENERAL PROVISIONS**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

# SECTION II: PERMITTED EQUIPMENT

### II.A THE APPROVED EQUIPMENT

II.A.1	Align Precision
	Aircraft Part Manufacturing Facility

II.A.2	One (1) Enclosed Paint Booth Dimensions: 15x30x9 ft Filter Medium: Three-Stage Filter System Rating: 13,500 acfm		
II.A.3	One (1) Open-Faced Paint Booth Dimensions: 28x11x9 ft Filter Medium: Three-Stage Filter System Rating: 25,200 acfm		
II.A.4	Three (3) Open-Faced Paint Booths Dimensions: 14x11x9 ft Filter Medium: Three-Stage Filter System Rating: 12,600 acfm		
II.A.5	One (1) Walk-in Oven Fuel: Natural Gas Rating: 0.70 MMBtu/hr *Listed for informational purposes only		
II.A.6	One (1) Bake Oven Fuel: Natural Gas Rating: 1.05 MMBtu/hr *Listed for informational purposes only		
II.A.7	One (1) Make-up Air Heater Fuel: Natural Gas Rating: 9.5 MMBtu/hr		
II.A.8	Miscellaneous Boilers and Heaters Fuel: Natural Gas Rating: less than 5 MMBtu/hr each *Listed for informational purposes only		
II.A.9	One (1) Passivation/Brass Bright Dip Process Line		
II.A.10	One (1) Anodize/Alodine Chemical Process Line		
11.A.11	One (1) Wastewater Treatment Plant		
	A. Chromium treatment tank B. Noutralization tank 1		
	C Neutralization tank 2		
	D Flocculation tank		
	E. Clarifier		
	F. Filter press		
	G. Reject holding tank		
	G. Reject holding tank   H. Sand filter feed tank		

II.A.12	Three (3) Ceilcote Wet Scrubbers
	Rating: 35,000 acfm
	Control for:
	- Passivation/Brass Bright Dip Chemical Process Line (Equipment ID II.A.9)
	- Anodize/Alodine Chemical Process Line (Equipment ID II.A.10)
	- Wastewater Treatment Plant (Equipment ID II.A.11)

## SECTION II: SPECIAL PROVISIONS

### II.B <u>REQUIREMENTS AND LIMITATIONS</u>

II.B.1	Site-wide Requirements		
II.B.1.a	The owner/operator shall not exceed the following opacity limits from the listed point sources:		
	A. Heaters and boilers - 10%		
	B. Paint booth exhaust stacks - 5%		
	C. Scrubber exhaust stacks - 15%		
	D. All other points - 20%.		
	[R307-401-8]		
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]		
II.B.1.b	The owner/operator shall use only natural gas as fuel. [R307-401-8]		
II.B.2	Ceilcote Wet Scrubber Requirements		
II.B.2.a	The owner/operator shall vent all emissions from the passivation/bright dip chemical process line (Equipment ID II.A.9), the anodize/alodine chemical process line (Equipment ID II.A.10) and the wastewater treatment plant (Equipment ID II.A.11) through wet scrubbers. [R307-401-8]		
II.B.2.b	The owner/operator shall:		
	A. Maintain a liquid flow through the ceilcote control scrubbers between 108 and 144 gallons per minute		
	B. Ensure the monitoring equipment is accurate to plus or minus 5 gallons per minute		
	C. Locate the monitoring equipment such that an inspector/operator can safely read the output at any time.		
	[R307-401-8]		
II.B.3	Spray Booth Requirements		
II.B.3.a	The owner/operator shall equip spray booths with a set of paint arrestor particulate filters, or equivalent, to control particulate emissions. The owner/operator shall direct all air exiting the booths through this control system before venting it to the atmosphere. [R307-401-8]		

II.B.4	VOC & HAP Requirements		
II.B.4.a	The owner/operator shall not emit more than the following from the spray booth operations:		
	A. 15.04 tons per rolling 12-month period of VOCs		
	B. 0.50 tons per rolling 12-month period for Toluene		
	C. 2.00 tons per rolling 12-month period for Xylene		
	D. 2.50 tons per rolling 12-month period for Methyl Ethyl Ketone		
	E. 1.00 tons per rolling 12-month period for Methyl Isobutyl Ketone		
	F. 2.84 pounds per rolling 12-month period for Chromium Compounds		
	G. 810.00 pounds per rolling 12-month period for Ethylene Glycol		
	H. 10.00 pounds per rolling 12-month period for Hexamethylene-1,6-diisocynate		
	I. 111.60 pounds per rolling 12-month period for Hydrochloric Acid (HCL)		
	J. 18.39 pounds per rolling 12-month period for Hydrofluoric Acid		
	K. 1000.00 pounds per rolling 12-month period for Methylene Chloride		
	L. 1638.00 pounds total per rolling 12-month period for all other HAPs		
	M. 5.30 tons per rolling 12-month period of all HAPs combined.		
	[R307-401-8]		
II.B.4.a.1	The owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. The owner/operator shall use a mass-balance method to calculate emissions from evaporative sources. The owner/operator may use the following equations with applicable units to comply with the mass-balance method:		
	VOCs = [% VOCs by Weight/100] x [Density] x [Volume Consumed]		
	HAP = [% HAP by Weight/100] x [Density] x [Volume Consumed]		
	[R307-401-8]		
II.B.4.a.2	The owner/operator shall use a mass-balance method to quantify any amount of VOCs and HAPs reclaimed. The owner/operator shall subtract the amount of VOCs and HAPs reclaimed from the quantities calculated above to provide the monthly total emissions of VOCs and HAPs. [R307-401-8]		

II.B.4.a.3	The owner/operator shall keep records each month of the following:		
	А.	The name (as per SDS) of the VOC- and HAP-emitting material	
	B.	The maximum percent by weight of VOCs and each HAP in each material used	
	C.	The density of each material used	
	D.	The volume of each VOC- and HAP-emitting material used	
	E.	The amount of VOCs and the amount of each HAP emitted from each material	
	F.	The amount of VOCs and the amount of each HAP reclaimed and/or controlled from each material	
	G.	The total amount of VOCs, the total amount of each HAP, and the total amount of all HAPs combined emitted from all materials (in tons).	
	[R307-	-401-8]	

## **PERMIT HISTORY**

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes	AO DAQE-817-01 dated October 4, 2001
Is Derived From	NOI dated August 27, 2024
Incorporates	Additional Information dated August 27, 2024
Incorporates	Additional Information dated August 29, 2024
Incorporates	Additional Information dated October 24, 2024
Incorporates	Additional Information dated October 31, 2024
Incorporates	Additional Information dated November 21, 2024
Incorporates	Additional Information dated December 16, 2024
Incorporates	Additional Information dated January 3, 2025
Incorporates	Additional Information dated February 24, 2025

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### ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify
CEM	sources by size/type)
CEM	Continuous emissions monitor
CENIS	Code of Foderal Decylations
CMS	Code of Federal Regulations
CMS	Continuous monovide
CO	Carbon Dioxide
$CO_2$	Carbon Dioxide Equivalent Title 40 of the Code of Federal Regulations Part 98
$CO_2c$	Subnart A. Table A-1
СОМ	Continuous opacity monitor
DAO/UDAO	Division of Air Quality
DAÕE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-
	12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
$PM_{10}$	Particulate matter less than 10 microns in size
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
$SO_2$	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	
	Tons per year
UAC	Tons per year Utah Administrative Code