State of Utah

SPENCER J. COX
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Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN116740002-21

July 29, 2021

Donovan Johnson
SkyWest Airlines
1129 North 3950 West
Salt Lake City, UT 84116
DoJohnson@skywest.com

Dear Mr. Johnson:

Re: Intent to Approve:
Minor Modification to DAQE-AN0116740001-10 to Add Equipment
Project Number: N116740002

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Mr. Enqiang He,** as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Enqiang He, can be reached at (801) 556-1580 or ehe@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:EH:sb

cc: Salt Lake Valley Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN116740002-21
Minor Modification to DAQE-AN0116740001-10 to Add Equipment

Prepared By
Mr. Enqiang He, Engineer
(801) 556-1580
ehe@utah.gov

Issued to
SkyWest Airlines- Aircraft Repair and Maintenance Operations Facility

Issued On
July 29, 2021

New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
SkyWest Airlines

Source Name
SkyWest Airlines - Aircraft Repair and Maintenance Operations Facility

Mailing Address
1129 North 3950 West
Salt Lake City, UT 84116

Physical Address
1129 North 3950 West
Salt Lake City, UT 84116

Source Contact
Name Donovan Johnson
Phone (801) 258-4319
Email DoJohnson@skywest.com

UTM Coordinates
416,950 m Easting
4,516,115 m Northing
Datum NAD83
UTM Zone 12

SIC code 4512 (Air Transportation, Scheduled)

SOURCE INFORMATION

General Description
SkyWest Airlines (SkyWest) operates an aircraft repair and maintenance facility in Salt Lake County, UT. Aircrafts and aircraft parts are brought on-site to be cleaned, repaired, and repainted. Processes conducted on site include spray painting, sand and bead blasting, welding, parts washing, natural gas combustion, emergency generator and pump engines, and other miscellaneous aircraft repair activities.

NSR Classification
Minor Modification at Minor Source

Source Classification
Located in Salt Lake City CO Maintenance Area, Northern Wasatch Front O3 NAA, Salt Lake City UT $PM_{2.5}$ NAA, Salt Lake County SO_2 NAA
Salt Lake County
Airs Source Size: B

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
MACT (Part 63), A: General Provisions
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Project Description
The source has requested a minor modification to AO DAQE-AN0116740001-10, dated March 17, 2010, to update on-site equipment. Proposed changes include: removing two (2) boilers (permitted as II.A.4), adding nine (9) boilers and one (1) air heater, each rated under 5 MMBtu. Additionally, they are adding one (1) paint booth, one (1) sand blast room, one (1) bead blast room, one (1) parts washer, one (1) welding operation, one (1) 110 kW (148 hp) emergency generator, and four (4) emergency fire pumps rated at 460 hp each. The potential to emit was updated to reflect the new equipment as well as the updated paint usage.

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		6360.00
Carbon Monoxide	3.35	4.46
Nitrogen Oxides	2.21	5.32
Particulate Matter - PM_{10}	0.11	0.41
Particulate Matter - $PM_{2.5}$		0.41
Sulfur Dioxide		0.04
Volatile Organic Compounds	-13.99	1.81

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Generic HAPs (CAS #GHAPS)	-3520	280
	Change (TPY)	**Total (TPY)**
Total HAPs	-5.04	0.14

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on August 1, 2021. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

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

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	**Aircraft Repair and Maintenance Facility**
II.A.2	**One (1) Sand Blast Room** Controls: Filters
II.A.3	**One (1) Bead Blast Cabinet** Controls: Filters
II.A.4	**One (1) Emergency Generator Engine** Rating: 148 HP Fuel: Diesel Manufacture Date: December 2005 NSPS applicability: Subpart IIII MACT applicability: Subpart ZZZZ
II.A.5	**Four (4) Emergency Fire Pumps Engines** Rating: 460 hp each Fuel: Diesel Manufacture Date: April 2001 MACT applicability: Subpart ZZZZ
II.A.6	**One (1) Parts Washer**
II.A.7	**Welding Equipment** Controls: Fume hood with filters
II.A.8	**Two (2) Paint Booths (one new paint booth)** Controls: Arrester Filter
II.A.9	**Various Boilers, Heaters, and Oven** Fuel: Natural Gas Rating: < 5MMBtu/hr each Included for informational purposes
II.A.10	**Miscellaneous Mobile Support Equipment** Including Cherry-pickers and aircraft tugs

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**The Aircraft Repair and Maintenance Operations Facility shall be subject to the following:**
II.B.1.a	The owner/operator shall ensure that visible emissions on-site do not exceed the following opacity limits: A. Diesel-fired generator and fire pump engines - 20% B. Equipment/processes controlled with filters - 10% C. Natural gas combustion equipment - 10% D. All other emission points - 20%. [R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b	The owner/operator shall only use natural gas as fuel in boilers, heaters, and oven on site. [R307-401-8]
II.B.2	**VOC and HAP Limitations**
II.B.2.a	The owner/operator shall comply with all applicable requirements of R307-325 through R307-361 for VOC sources located in an ozone nonattainment area. [R307-401-8]
II.B.2.b	The owner/operator shall route all exhaust air from the paint spray booths through the paint arrester particulate filters before being vented to the atmosphere. [R307-401-8]
II.B.2.c	The VOC content of the paint as used in the booths shall not exceed the limits for each type of coating activities listed in R307-355-5. High solids low VOC content paints shall not be thinned or otherwise reduced beyond manufacturer's recommendations. [R307-401-8]
II.B.2.c.1	To demonstrate compliance with the VOC content limits, the owner/operator shall keep the manufacturer's Safety Data Sheets (SDS) on site for as long as the paint booths are in operation. [R307-401-8]
II.B.2.d	The owner/operator shall not emit more than the following from evaporative sources (painting, printing, coating, and/or cleaning) on site: 1.43 tons of VOCs per rolling 12-month period 0.02 tons of all HAPs combined per rolling 12-month period. [R307-401-8]

II.B.2.d.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.2.d.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.2.d.3	The owner/operator shall keep records each month of the following: A. 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]
II.B.3	**Emergency Engine Requirements**
II.B.3.a	The owner/operator shall install and operate emergency generator and pump engines that are certified to meet the following standards in g/hp-hr: A. For the emergency generator engine rated at 148 hp: NMHC + NO_x = 4.9; CO = 3.7, and PM = 0.22 B. For the emergency pump engines rated at 460 hp each: NMHC + NO_x = 4.8; CO = 2.6, and PM = 0.15. [R307-401-8]
II.B.3.a.1	To demonstrate compliance with the emission rates, the owner/operator shall keep a record of the manufacturer's certification of the emission rates. The record shall be kept for the life of the equipment. [R307-401-8]

II.B.3.b	The owner/operator shall comply with the following testing requirements for the emergency generator engine and each emergency fire pump engine on site: A. Test no more than one (1) engine at a time B. Conduct no more than one (1) engine test per hour C. Test each engine for no more than 30 minutes per test D. Test each engine no more than once per month E. Conduct engine testing only between 11 am and 1 pm There is no time limit on the use of the engines during emergencies. [R307-401-8, R307-410-4]
II.B.3.b.1	The owner/operator shall record testing operations of the emergency generator engine and each emergency fire pump engine and shall keep the records in a log. The records shall include the following: A. The date the engine was used B. The start and end times for each engine test and the duration of testing operation in minutes C. The reason for the engine usage. [R307-401-8]
II.B.3.b.2	The owner/operator shall install a non-resettable hour meter for each emergency engine. [40 CFR 60 Subpart ZZZZ, R307-401-8]
II.B.3.c	The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur diesel (ULSD), which has a sulfur content of 15 ppm or less. [R307-401-8]
II.B.3.c.1	To demonstrate compliance with the ULSD fuel requirement, the owner/operator shall maintain records of diesel fuel purchase invoices or obtain certification of sulfur content from the diesel fuel supplier. The diesel fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements. [R307-401-8]
II.B.4	**Welding, Sand and Bead Blasting Operation Requirements**
II.B.4.a	The owner/operator shall route all exhaust air streams from the welding, sand and bead blasting operations through filters before being vented to the atmosphere. The owner/operator shall maintain and replace the filters according to the manufacturer's recommendations. [R307-401-8]

PERMIT HISTORY

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

Supersedes	AO DAQE-AN0116740001-10 dated March 17, 2010
Is Derived From	NOI dated October 15, 2019
Incorporates	Additional Information dated August 19, 2020
Incorporates	Additional Information dated September 1, 2020
Incorporates	DAQE-MN116740002-21 dated June 29, 2021

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 sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	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_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	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	Utah Administrative Code
VOC	Volatile organic compounds