State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN157040003-24

December 5, 2024

Randy Means
Swanson Industries, Inc.
610 Industrial Road
Helper, UT 84526
rmeans@swansonindustries.com

Dear Randy Means:

Re: Intent to Approve: Modification to Approval Order DAQE-AN157040002-22 to Revise the Baghouse Pressure Drop Range and Add Solvent Parts Washers and a Cleaner
Project Number: N157040003

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:jg

cc: Southeastern Utah District Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN157040003-24
Modification to Approval Order DAQE-AN157040002-22 to Revise the Baghouse Pressure Drop Range and Add Solvent Parts Washers and a Cleaner

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

Issued to
Swanson Industries, Inc. - Mining Equipment Restoration

Issued On
December 5, 2024

New Source Review Section Manager
Alan D. Humpherys

TABLE OF CONTENTS

GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Swanson Industries, Inc.

Source Name
Swanson Industries, Inc. - Mining Equipment Restoration

Mailing Address
610 Industrial Road
Helper, UT 84526

Physical Address
610 Industrial Road
Helper, UT 84526

Source Contact
Name: Randy Means
Phone: (304) 284-5123
Email: rmeans@swansonindustries.com

UTM Coordinates
512,029 m Easting
4,392,111 m Northing
Datum NAD83
UTM Zone 12

SIC code 3053 (Gaskets, Packing, & Sealing Devices)

SOURCE INFORMATION

General Description
Swanson Industries, Inc. (Swanson) operates a mining equipment repair and maintenance facility located in Helper, Carbon County. The repair and maintenance operations are conducted in two (2) shop buildings: the rebuild shop and the jack shop. The activities taking place are abrasive blasting and grinding; parts cleaning, painting, and coating; fuel combustion; and welding and cutting, including a laser cladding process. Natural gas is used to operate space and water heaters for the facility.

NSR Classification
Minor Modification at Minor Source

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

Applicable Federal Standards
MACT (Part 63), A: General Provisions
MACT (Part 63), XXXXXX: National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

Project Description
Swanson has requested to revise the pressure drop range from between 3 and 8 inches of water column to between 0.5 and 6 inches of water column. The change in pressure drop range is not expected to affect emissions from the baghouse.

The source has also requested to add six (6) solvent parts washers. The parts washers are rated at 15, 25, and 32 gallons, two (2) each.

In addition to the modification mentioned above, the source has also requested to add a small ultrasonic cleaner. The cleaner is conservatively estimated to use one (1) gallon of non-HAP VOC-containing acid.

VOC and HAP emission increases from the parts washers and the ultrasonic cleaner are estimated, and the site-wide PTEs are updated.

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	0	687.00
Carbon Monoxide	0	0.71
Nitrogen Oxides	0	1.74
Particulate Matter - PM_{10}	0	4.72
Particulate Matter - $PM_{2.5}$	0	0.72
Sulfur Dioxide	0	0.08
Volatile Organic Compounds	2.02	6.82

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Benzene (Including Benzene From Gasoline) (CAS #71432)		1660
Chromium Compounds (CAS #CMJ500)	10	40
Cumene (CAS #98828)		3960
Ethyl Benzene (CAS #100414)		3960
Manganese (TSP) (CAS #7439965)	0	40
Naphthalene (CAS #91203)		3960
Nickel (CAS #7440020)	2	40
Toluene (CAS #108883)	3960	4240
Xylenes (Isomers And Mixture) (CAS #1330207)	3960	10260
	Change (TPY)	**Total (TPY)**
Total HAPs	1.98	5.32

***The source chooses to limit total HAP emission increases by 1.98 tpy and total HAP emissions at 5.32 tpy.**

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 Emery County Progress on December 11, 2024. 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	**Swanson Industries** Coal Mining Equipment Repair and Maintenance
II.A.2	**Outdoor Abrasive Blasting Process**
II.A.3	**Spray Booths** Two (2) Paint Booths Control: Particulate Filters
II.A.4	**Electric Arc Welders** Control: Baghouse
II.A.5	**Laser Cladding Device** Control: Baghouse
II.A.6	**Various Heaters and Boilers** Rating: <5 MMBtu/hr each Fuel: Natural Gas Included for information purposes only
II.A.7	**Parts Washers - new equipment** Six (6) parts washers Two (2) with 15-gallon capacity each Two (2) with 25-gallon capacity each Two (2) with 32-gallon capacity each
II.A.8	**Ultrasonic Cleaner - new equipment**

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	**Plantwide Requirements**
II.B.1.a	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from the mining equipment repair and maintenance shop to exceed 20% opacity. [R307-401-8]
II.B.1.a.1	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]

II.B.2	**VOC & HAP Requirements**
II.B.2.a	The owner/operator shall not emit more than the following from evaporative sources (painting, printing, coating, and/or cleaning) on site: 6.82 tons per rolling 12-month period of VOCs 2.12 tons per rolling 12-month period of toluene 5.13 tons per rolling 12-month period of xylene 0.83 tons per rolling 12-month period of benzene 1.98 tons per rolling 12-month period of ethyl benzene 1.98 tons per rolling 12-month period of naphthalene 1.98 tons per rolling 12-month period of cumene 5.32 tons per rolling 12-month period of all HAPs combined. [R307-401-8]
II.B.2.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.2.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.2.a.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.2.b	The owner/operator shall keep the parts washers and the ultrasonic cleaner closed when not in use. [R307-401-8]
II.B.3	**Outdoor Abrasive Blasting Process Requirements**
II.B.3.a	The owner/operator shall comply with all applicable requirements of R307-206, Emission Standards: Abrasive Blasting. [R307-206]

II.B.3.b	The owner/operator shall not exceed 40% opacity from the outdoor abrasive blasting process, except for an aggregate period of three (3) minutes in any one (1) hour. [R307-206-4]
II.B.3.c	The owner/operator shall not use more than 342 tons of abrasive blasting medium per rolling 12-month period in the abrasive blasting process. [R307-401-8]
II.B.3.c.1	The owner/operator shall: A. Determine the amount of abrasive blast medium used in the abrasive blasting booth with process scales and inventory records B. Record abrasive blast medium utilized in the abrasive blasting booth on a monthly basis C. Use the abrasive blast medium used in the abrasive blasting booth data to calculate a new 12-month total by the 20th day of each month using data from the previous 12 months D. Keep the records of abrasive blast medium used in the abrasive blasting booth for all periods the plant is in operation. [R307-401-8]
II.B.4	**Welding and Cladding Device Requirements**
II.B.4.a	The owner/operator shall control emissions from arc welding activities and laser cladding devices with a baghouse. [R307-401-8]
II.B.4.b	The owner/operator shall install a manometer or magnehelic pressure gauges to measure the static pressure differential across the baghouse. [R307-401-8]
II.B.4.c	The owner/operator shall maintain the static pressure differential of the baghouse between 0.5 and 6 inches of water column as measured on the pressure gauge. [R307-401-8]
II.B.4.c.1	The pressure gauge shall measure the static pressure differential in one-inch water column increments or less. [R307-401-8]
II.B.4.c.2	The owner/operator shall maintain the following records of the static pressure differentials. A. Unit identification B. Daily static pressure differential readings C. Date of reading. [R307-401-8]
II.B.4.d	At least once every 12 months, the owner/operator shall calibrate the baghouse pressure gauge in accordance with the manufacturer's instructions or replace the pressure gauge. [R307-401-8]
II.B.4.d.1	The owner/operator shall maintain records of the pressure gauge calibrations and replacements. [R307-401-8]
II.B.5	**Paint Booth Requirements**
II.B.5.a	The owner/operator shall not allow visible emissions from the paint booth to exceed 10% opacity. [R307-401-8]
II.B.5.b	The owner/operator shall use a particle arrestor filter to capture and control the particulate emissions from the painting activity. [R307-401-8]

II.B.5.c	The owner/operator shall install a particle arrestor filter that has a certified control efficiency of 95% or higher. [R307-401-8]
II.B.5.c.1	The owner/operator shall keep a record of the manufacturer's certification of the control efficiency. The record shall be kept for the life of the equipment. [R307-401-8]

PERMIT HISTORY

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

Supersedes	AO DAQE-AN157040002-22 dated March 31, 2022
Incorporates	NOI dated January 31, 2024
Incorporates	Additional information dated April 4, 2024
Incorporates	Additional information dated April 11, 2024
Incorporates	Additional information dated June 7, 2024
Incorporates	Additional information dated October 30, 2024

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