

**DRAFT TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 103028**

**I. INTRODUCTION**

This Class II air quality synthetic minor permit is issued to Superior Industries, Inc., the Permittee, for the continued operation of the southwest division conveyor manufacturing facility. The facility is located at 9880 Superior Lane, Prescott Valley, Arizona 86314. This permit renews and supersedes Permit No. 77409.

The southwest division facility includes fabrication, assembly, and painting operations from raw steel. The facility has the potential to emit (PTE), without controls or operating limitations more than 100 tons per year (tpy) of volatile organic compounds (VOCs), 25 tpy of combined federal hazardous air pollutants (HAPs), and 10 tpy of a single federal HAP. In order to qualify for a Class II synthetic minor permit as allowed under Arizona Administrative Code (A.A.C.) R18-2-302.B.2, the facility has taken a facility-wide VOC emissions limitation of 90 tpy, a combined federal HAP emissions limitation of 22.5 tpy, and a single federal HAP emissions limitation of 9 tpy.

**A. Company Information**

Facility Name: Superior Industries Southwest Division  
Mailing Address/  
Facility Location: 9880 Superior Lane  
Prescott Valley, Yavapai County, Arizona 86314

**B. Attainment Classification**

The facility is located in Yavapai County, an area that is designated as attainment for all criteria pollutants.

**II. PROCESS DESCRIPTION**

**A. Conveyor Manufacturing Facility**

The southwest division facility purchases raw steel and processes it into components through cutting, welding, and assembly operations. The processed steel components are coated in paint booths using spray applications methods. Final assembled equipment is then transported off-site for use.

Emission sources at the facility include spray painting activities and natural gas combustion from ovens. While spray painting contributed to emissions of VOCs and HAPs, natural gas-fired ovens used for curing painted components emit combustion-related pollutants, including nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO).

**B. Air Pollution Control Devices**

The particulate matter emission, as mentioned above, are controlled using panel filter on each booth in accordance with manufacturer specifications. Only one spray gun shall be operated in each spray paint booth at any given time. Rated transfer efficiencies above seventy (70) percent are required for all spray paint stations.

### III. COMPLIANCE HISTORY

The facility has undergone three (3) physical inspections during the previous permit term. Inspections took place on February 6, 2020, March 30, 2022, and March 20, 2024. No deficiencies were noted during the course of these inspections. The southwest division facility has submitted five (5) annual compliance certifications for the current permit issued on October 25, 2019. No deficiencies were noted for the remaining compliance certifications filed. No air quality cases or violations were issued during the previous permit term.

### IV. EMISSIONS

The facility has the potential to emit more than the major source thresholds of VOCs, total HAPs, and a single HAP in excess of the major source threshold of 100 tpy, 25 tpy, and 10 tpy, respectively.

#### A. Spray Paint Booths

Particulate matter emissions from spray painting operations depend on several factors, including operating capacity, application rate, transfer efficiency, and U.S Environmental Protection Agency (U.S. EPA) AP-42 Appendix B, Table 3 for “Collection Efficiencies of Various Particulate Control Devices”. Calculations are based on fifty (50) percent use as a conservative assumption. VOC emissions are calculated based on the VOC content in the paint, the paint usage rate, and the panel filter in each station used as a control device.

#### B. Natural-Gas Fired Ovens

Combustion emissions from ovens are calculated using total heat input, operating hours, fuel consumption rate, and emission factors from U.S. EPA AP-42 Chapter 1.4, Tables 1-4 for “Natural Gas Combustion.”

Table 1 provides the facility’s potential to emit.

**Table 1: Potential to Emit (tpy)**

Pollutant	Previous PTE	Change in PTE	New PTE	Significant Thresholds	Major/Minor NSR triggered?
NO <sub>x</sub>	3.44	+0.00	3.44	40	No
PM	4.16	-0.45	3.71	-	No
PM <sub>10</sub>	4.48	-0.49	3.99	15	No
PM <sub>2.5</sub>	3.42	-0.31	3.11	5	No

CO	2.89	+0.00	2.89	100	No
SO <sub>2</sub>	0.02	+0.00	0.02	40	No
VOC	90	+0.00	90	40	No
Lead (Pb)	1.72E-05	+0.00	1.72E-05	0.6	No
HAPs (single)	9	+0.00	9	10	No
HAPs (combined)	22.5	+0.00	22.5	25	No

**V. MINOR NEW SOURCE REVIEW (NSR)**

This renewal permit will not result in any increase in emissions as seen in Table 1 above. As a result, this renewal permit does not trigger minor NSR.

**VI. VOLUNTARILY ACCEPTED EMISSION LIMITATIONS AND STANDARDS**

The permit contains the following voluntary emission limitations and standards:

**A. Facility-Wide Emissions Cap**

1. The facility has accepted a voluntary VOC emissions cap such that the rolling 12-month total does not exceed ninety (90) tons.
2. The facility has accepted a voluntary HAPs emissions cap such that the rolling 12-month total does not exceed either of the following amounts:
  - a. Nine (9) tons of any single federal HAP; or
  - b. Twenty-two and a half (22.5) tons of any combination of federal HAP.

These conditions were incorporated to maintain synthetic minor classification since Permit No. 60320 issued in 2015.

**VII. APPLICABLE REGULATIONS**

Table 2 identifies applicable regulations and why such standards apply. The table also contains a discussion of any regulations that are exempted.

**Table 2: Applicable Regulations**

Unit	Control Device	A.A.C. / NSPS / NESHAP	Discussion
Spray Painting Operations	Electrostatic Application  Panel Filters	A.A.C. R18-2-702; A.A.C. R18-2-727	These standards are applicable to spray painting operations.  The facility is not subject to 40 CFR Part 63, subpart HHHHHH since the metal finishing HAP concentrations used for operations are below thresholds defined in the rule.
Ovens	N/A	A.A.C. R18-2-724	This standard is applicable to fossil-fuel fired industrial and commercial installations with less than 250 MMBtu per hour.
Fugitive Dust	Water Trucks, Dust Suppressants	A.A.C. R18-2 Article 6; A.A.C. R18-2-702	The standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet Blasting; Dust Collecting Equipment; Other Approved Methods	A.A.C. R18-2-702; A.A.C. R18-2-726	These standards are applicable to any abrasive blasting operation.
Demolition and Renovation	N/A	A.A.C. R18-2-1101.A.12	This standard is applicable to any asbestos related demolition or renovation operations.

**VIII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

Table 3 contains an inclusive but not an exhaustive list of the monitoring, recordkeeping and reporting requirements prescribed by the air quality permit. The table below is intended to provide insight to the public for how the facility is required to demonstrate compliance with the emission limits in the permit. Records are required be kept for a minimum of five (5) years as outlined in Section XIII of Attachment “A” of the permit.

**Table 3: Permit No. 103028**

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Spray Painting Operations	VOCs	90 tpy 20% Opacity Control 96% of the Overspray	Maintain records of the purchases, quantity of VOC-containing paint, any applicable safety data sheets;  Calculate and record monthly VOC emissions.		N/A
	HAPs (combined/ single)	9 tpy / 22.5 tpy	Maintain records of the purchases, quantity of HAP-containing paint, any applicable safety data sheets;  Calculate and record monthly HAP emissions.		N/A
Fugitive Dust	PM	40% Opacity	Conduct visible emissions when necessary.	Maintain records when necessary.	N/A
Abrasive Blasting	PM	20% Opacity	N/A	Record the date, duration and pollution control measures of any abrasive blasting project.	N/A

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Demolition/ Renovation	Asbestos	N/A	N/A	Maintain records of all asbestos related demolition or renovation projects including the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.	N/A

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**IX. ENVIRONMENTAL JUSTICE ANALYSIS**

The Environmental Protection Agency (EPA) defines Environmental Justice (EJ) to include the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and polices. The goal of completing an EJ assessment in permitting is to provide an opportunity for overburdened populations or communities to allow for meaningful participation in the permitting process. Overburdened is used to describe the minority, low-income, tribal and indigenous populations or communities that potentially experience disproportionate environmental harms and risks due to exposures or cumulative impacts or greater vulnerability to environmental hazards.

The renewal decreases in emissions and thus, it will not result in any additional impacts.

**X. LEARNING SITE EVALUTATION**

In accordance with ADEQ’s Environmental Permits and Approvals Near Learning Sites Policy, an evaluation was conducted to determine if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

This renewal will not result in an increase in emissions above permitting exemption thresholds and thus, it is exempt from a learning sites evaluation.

**XI. LIST OF ABBREVIATIONS**

A.A.C.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
AQD.....	Air Quality Division
A.R.S.....	Arizona Revised Statutes
BACT.....	Best Available Control Technology
CFR.....	Code of Federal Regulations
CO.....	Carbon Monoxide
EPA.....	Environmental Protection Agency
ft.....	Feet
g.....	Gram
HAP.....	Hazardous Air Pollutant
hp.....	Horsepower
hr.....	Hour
IC.....	Internal Combustion
kW.....	Kilowatt
NAAQS.....	National Ambient Air Quality Standard
NO <sub>x</sub> .....	Nitrogen Oxides
NSPS.....	New Source Performance Standards
Pb.....	Lead
PM.....	Particulate Matter
PM10.....	Particulate Matter less than 10 µm nominal aerodynamic diameter
PM2.5.....	Particulate Matter less than 2.5 µm nominal aerodynamic diameter

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PTE ..... Potential to Emit  
sec ..... Seconds  
TPY ..... Tons per Year  
VOC ..... Volatile Organic Compound  
yr ..... Year

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