



**TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 97040**

**I. INTRODUCTION**

This Class II permit is issued to Schuff Steel Company, the Permittee, for the continued operation of a fabricated steel building component manufacturing facility. Permit No. 97040 renews and supersedes Permit No. 70280.

**A. Company Information**

Facility Name: Schuff Steel – Flagstaff

Mailing / Facility Address: 5055 Ken Morey Drive, Bellemont, AZ 86015

**B. Attainment Classification**

The facility is located in Coconino County, which is in an attainment or unclassifiable area for all criteria pollutants.

**II. FACILITY DESCRIPTION**

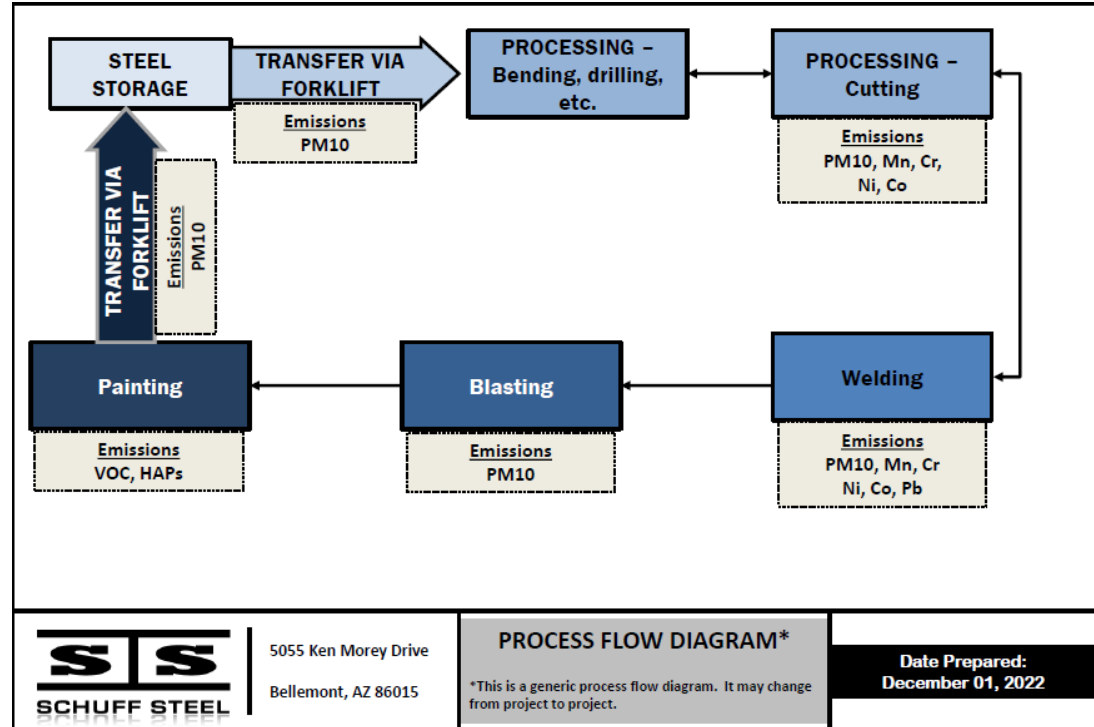
**A. Process Description**

The facility manufactures components for structural steel buildings. The operations utilized in the manufacturing processes include forming, shaping, cutting, welding, abrasive blasting and spray coating of metal.

**B. Control Devices**

The facility operates a non-regulated small dust collector in conjunction with the plasma cutting operation. This dust collector discharges inside the building. A paint booth is utilized to control overspray from painting operations.

**C. Process Flow Diagram**



### III. COMPLIANCE HISTORY

There have been four full facility inspections, one partial facility inspection and seven annual compliance certification report reviews conducted for this facility since the issuance of Permit No. 70280. A deficiency was documented during a partial or full inspection as described below:

#### Case No. 185199

A Notice of Opportunity (NOC) was issued to the facility on August 13, 2019.

During the inspection, ADEQ observed that multiple filters in the spray booth were missing. However, the facility corrected the deficiencies and the NOC was closed on August 26, 2019.

### IV. EMISSIONS

The potential to emit (PTE) from the cutting operation was calculated using emission factors from EPA Section 313 (*Clarification & Guidance for the Metal and Fabrication Industry*). A 99% control efficiency was applied for the dust collector. The PTE from welding, blasting and unpaved roads was calculated using emission factors from AP-42 12.19 (*Electric Arc Welding*), AP-42 13.2.6.0 (*Abrasive Blasting*) and AP-42 13.2.2.1 (*Unpaved Roads*). The PTE from painting and parts washer process was calculated using Safety Data Sheets (SDS).

The facility's PTE is provided in Table 2 below:

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

Pollutant	PTE
VOC	14.67
PM <sub>10</sub>	5.33
PM <sub>2.5</sub>	3.66
HAPs	4.19

Emissions from combustion of fuel for torches is considered as de minimus and is not included in potential to emit under trivial activities as defined in A.A.C. R18-2-101.146(b).

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

Minor NSR was not triggered by this permit renewal because there is no increase in the PTE of any regulated air pollutant at an amount greater than or equal to the permitting exemption thresholds (PET) and, there are no new federal or state standard regulations applicable to the emission units in this renewal.

#### VI. APPLICABLE REGULATIONS

Table 3 identifies applicable regulations and verification as to why that standard applies. The table also contains a discussion of any regulations the emission units are exempt from.

**Table 2: Applicable Regulations**

Unit	Control Device	Rule	Verification
Abrasive Blasting Operations	Various Management Practices	40 CFR 63 Subpart XXXXXX	These standards are applicable to the abrasive blasting operations of fabricated structural metal manufacturing which use materials that contain Metal Fabrication and finishing HAP (MFHAP).
Metal Fabrication Operations (Cutting, Shaping, Forming, etc.)	Various Management Practices	40 CFR 63 Subpart XXXXXX	These standards are applicable to the machining operations of fabricated structural metal manufacturing which use materials that contain MFHAP.

Unit	Control Device	Rule	Verification
Welding Operations	Various Management Practices	40 CFR 63 Subpart XXXXXX	These standards are applicable to the welding operations of fabricated structural metal manufacturing which use materials that contain MFHAP.
Spray Coating Operations	VOC Content, Enclosures and Various Management Practices	A.A.C. R18-2-702; A.A.C. R-18-2-727	These standards are applicable to any operation of spray painting fabricated steel product.  The permit prohibits the use of coatings containing MFHAP, therefore the standards and management practices for control of MFHAP in spray painting section of 40 CFR 63 Subpart XXXXXX are not applicable.
Parts Washer, Fuel Burning Torches	Various Management Practices	A.A.C. R-18-2-730	This standard is applicable to unclassified sources.
Fugitive Dust Sources(Other than Fabrication of Structural Steel Product)	Water Trucks, Dust suppressants	A.A.C. R18-2 Article 6; A.A.C. R18-2-702	These standards are applicable to all fugitive dust sources at the facility not subject to 40 CFR 63 Subpart XXXXXX.
Abrasive Blasting (Other than Fabrication of Structural Steel Product)	Wet blasting; dust collecting equipment; Other approved methods	A.A.C. R-18-2-702; A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation not subject to 40 CFR 63 Subpart XXXXXX.

Unit	Control Device	Rule	Verification
Demolition/Renovation Operations	N/A	A.A.C. R18-2-1101.A.12	This standard is applicable to any asbestos related demolition or renovation operations.

## VII. PREVIOUS PERMIT REVISIONS AND CONDITIONS

### A. Previous Permit Revisions

Permit No. 70280 was issued on June 15, 2018 for the operation of this facility. No revisions were made to Permit No. 70280 during the previous permit term.

### B. Changes to Current Renewal

The following table addresses the changes made to the sections and conditions from Permit No. 70280.

**Table 4: Previous Permit Conditions**

Section No.	Determination			Comments
	Added	Revised	Deleted	
Att. "A"		X		General Provisions: Revised to represent the most recent template language.
Att. "B" Section I		X		Facility-Wide Requirements: Revised to represent the most recent template language.
Att. "C"		X		Equipment List: Revised to reflect the most recent equipment operating at the facility and to include equipment information provided.
Section VI			X	Mobile Sources: Removed.

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

Table 5 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.

**Table 5: Permit No. 97040**

<b>Emission Unit</b>	<b>Pollutant</b>	<b>Emission Limit</b>	<b>Monitoring Requirements</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Requirements</b>
Abrasive Blasting	PM	20% Opacity	Conduct Method 22 determinations on a graduated frequency, starting daily, then scaling back to weekly, monthly and quarterly on a prescribed schedule.	Keep a record of the date and result of every visual determination and a description of any corrective action taken.	The date of every visual determination of fugitive emissions which resulted in detection of visible emissions; and a description of the corrective actions taken subsequent to the detection of visible emissions; and the date and results of the follow-up visual determination performed after the corrective actions.
Welding	PM	20% Opacity	Based on Tier 1, Tier 2 or Tier 3 emission opacity, conduct Method 9 or Method 22 determinations on a graduated frequency, starting daily, then scaling back to weekly, monthly and quarterly on a prescribed schedule.	Keep a record of the date and result of every visual determination and a description of any corrective action taken.	The date of every visual determination of fugitive emissions which resulted in detection of visible emissions; and a description of the corrective actions taken subsequent to the detection of visible emissions; <i>and the</i> date and results of the follow-up visual determination performed after the corrective actions.

Emission Unit	Pollutant	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Spray Painting	VOCs	20% Opacity  Control 96% of the Overspray	Once per month, conduct visible emissions monitoring from the paint booth exhaust and perform a monthly inspection of the paint booth filters and proper operation of the booth.	Maintain records of the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray-painting project.	
Periodic Activities				Record the date, duration and pollution control measures of any abrasive blasting project not subject to 40 CFR 63 Subpart XXXXXX.	
Demolition/ Renovation	Asbestos			Maintain records of all asbestos related demolition or renovation projects including the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents	
Mobile Sources				Keep records of all emission related maintenance performed on the mobile sources	
Fugitive Dust	PM	40% Opacity	Conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	

## IX. ENVIRONMENTAL JUSTICE ANALYSIS

The EPA (Environmental Protection Agency) 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 permit does not allow or permit any increases in emissions and thus, it will not result in any additional impacts.

## X. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AERMOD	AMS/EPA Regulatory Model
AERMET	AERMOD Meteorological Preprocessor
AMS	American Meteorological Society
AQD	Air Quality Division
AQRV	Air Quality Related Values
ARM	Ambient Ratio Method
A.R.S.	Arizona Revised Statutes
BACT	Best Available Control Technology
Btu/ft <sup>3</sup>	British Thermal Units per Cubic Foot
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent basis
EPA	Environmental Protection Agency
EJ	Environmental Justice
FERC	Federal Energy Regulatory Commission
FLM	Federal Land Manager
°F	degrees Fahrenheit
ft	Feet
g	Gram
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutant
HHV	Higher Heating Value
hp	Horsepower
hr	Hour
IC	Internal Combustion
kW	Kilowatt
MFHAP	Metal Fabrication and finishing HAP



MW	Megawatts
MSDS	Material Safety Data Sheet
NAAQS	National Ambient Air Quality Standard
NOC	Notice of Opportunity
NO <sub>x</sub>	Nitrogen Oxides
NO <sub>2</sub>	Nitrogen Dioxide
N <sub>2</sub> O	Nitrous Oxide
NSPS	New Source Performance Standards
O <sub>3</sub>	Ozone
Pb	Lead
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 µm nominal aerodynamic diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 µm nominal aerodynamic diameter
PSD	Prevention of Significant Deterioration
psia	Pounds per square Inch (absolute)
PTE	Potential to Emit
PET	Permitting Exemption Thresholds
sec	Seconds
SF <sub>6</sub>	Sulfur Hexafluoride
SIA	Significant Impact Area
SIL	Significant Impact Level
SO <sub>2</sub>	Sulfur Dioxide Significant Impact Levels
TPY	Tons per Year
VOC	Volatile Organic Compound
yr	Year