# **DRAFT/PROPOSED**

# OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

## MEMORANDUM

July 14, 2022

TO:	Phillip Fielder, P.E., Chief Engineer
THROUGH:	Rick Groshong, Compliance & Enforcement Manager
THROUGH:	Phil Martin, P.E., Existing Source Permits Section Manager
THROUGH:	Iftekhar Hossain, P.E., New Source Permit Section
FROM:	Jennie Doan, E.I., Engineering Section, Regional Office at Tulsa (ROAT)
SUBJECT:	Evaluation of Permit Application No. <b>2020-0438-TVR2</b> Mertz Manufacturing, Inc. Mertz Metal Fabrication (SIC 3533/NAICS 333132) AQD Facility ID: 3553 Latitude 36.72204°, Longitude -97.10296° Section 21, Township 26N, Range 2E; Ponca City, Kay County Physical Address: 1701 North Waverly, Ponca City, OK 74601

## SECTION I.INTRODUCTION

Mertz Manufacturing, Inc. (Mertz) has submitted an application for a Part 70 Operating Permit Renewal for the Mertz Metal Fabrication facility in Kay County. The facility is currently operating under Permit No. 2014-0014-TVR (M-1) issued October 18, 2018.

The facility is not a PSD major stationary source. This facility is a major source of VOC and HAP.

## SECTION II.FACILITY DESCRIPTION

All products are built from raw materials to a finished product at the facility. The manufacturing process is described as follows. Manufacturing processes are performed in two (2) adjacent locations. They are 1701 N. Waverly and 2400 N. Waverly. The flow of work process is performed in buildings at 1701 and 2400 North Waverly Avenue.

## I. General

The current approximation for the hours of operation for manufacturing and surface preparation activities are assumed to occur 24 hours per day, 5 days per week, 52 weeks per year or approximately 6,240 hours per year (hpy).

The surface coating operation is limited by manufacturing and surface preparation activities; and is currently operating two 10-hour shifts, 5 days per week, 52 weeks per year or approximately 5,200 hpy.

## II. Fabrication (1701 N. Waverly)

<u>Cutting, Pressing, Rolling and Forming</u>: Vehicle body and various components are fabricated from raw steel plate and steel stock. Although aluminum is sometimes used it is not a significant material used in the fabrication of Mertz products. The fabrication process occurs in the shop building where the parts are manufactured. The A-36 raw steel is shaped using various methods with various tools including cutting, pressing, rolling and forming, shearing, sawing, torching, breaking, drilling plasma (i.e., burn table and Prodevco) and laser cutting (Trumpf and Bystar). Following completion of these activities, the parts are then moved to the machining and or welding areas of the plant.

<u>Machining</u>: Vehicle body and various components are machined and prepared for welding. The machining occurs in the machine shop portion of the main building. The machine shop mills, lathes, and grinders are used to form the finished shape of the metal parts. Various lubricants and water with negligible emissions are used during this process. The parts are then moved to the welding area.

<u>Welding</u>: These steel parts are welded together using primarily the SMAW process to form the vehicle body or its various components. The units receive a thorough inspection and all excess welds are ground and smoothed with abrasive wheel grinders. Any components requiring stress relief are treated in a stress relief furnace heated by a 2.0 MMBTUH natural gas-fired heater. The units and parts are then transported to the blasting area. In late 2018, additional capacity for MIG welding was established in a building at 2400 North Waverly next to the Surface coating operations. A new emission group, EUG 5, Fab 5 Weld shop was created.

## III. Surface Preparation (2400 N. Waverly)

<u>Blasting</u>: Parts and equipment are moved into either the steel shot blast bays or the coal slag blast tent for removing rust, grit, or residue that may affect the painting operation. Compressed air is used to clean the surfaces and blow residual dust or blasting media out of cracks or crevices between components. Transfer efficiency in the blast bays is 60% and filter efficiency is 99%. The coal slag blast tent (used only for special applications such as refurbishment of used equipment) is an open facility and does not have a fabric filtration system. Units are then moved to the beginning of the finishing line. The steel shot abrasive blasting is performed in two blast booths or a conveyorized blast booth (small parts) prior to surface coating.

#### IV. Surface Coating (2400 N. Waverly)

After surface preparation, the manufactured units are cleaned and transferred to one of two large drive-through paint booths or to the conveyorized paint booth (small parts) for final priming, painting, and drying.

<u>*Prime Coat Application*</u>: Once the vehicle bodies and various parts are clean and dry, they are brought into one or more of three 20' x 60' paint booths or the 10' x 6' small part conveyor paint booth for application of the prime coat. There are two paint lines (2 painters and 2 guns) using compliant spray guns in each of the paint booths and one in the conveyor booth. All prime and

surface coat applications are performed sequentially in these booths. Mertz currently uses alkyd and non-alkyd primers particularly suited to customer needs and specifications. A synthetic enamel reducer is mixed with some primers to improve the primer flow characteristics (see "as applied" calculations listed below). Acrylic lacquer thinner is used to clean the paint guns before and after the application of the primer coat and each surface coat. After application of the prime coat the units and parts are dried and cured in the paint booths with the assistance of a recirculating air make-up system consisting of a 2.5 MMBTUH natural gas-fired furnace designed to provide an 80° F temperature rise above 0° F during the spraying operation and maintain approximately 140° F above 0° F during the cure cycle.

<u>Surface Coat Application</u>: After the priming process is complete and all vehicle bodies and or parts are dried and cured, the surface coat application process continues within the same paint booth. The application, curing, and drying process is the same as described for the primer process. Mertz currently uses various brands of paint which are usually mixed with acrylic enamel reducers, catalysts and/or accelerators to improve the paint flow and curing characteristics (see "as applied" calculations listed below).

# V. Assembly and Final Production

<u>Assembly</u>: After the surface application process is complete, the vehicle bodies and parts are moved out of the paint booths into the assembly area at the north end of the facility. All individual parts and components are attached to the main body of the vehicles.

*Final Production*: The final production step involves aerosol can or conventional spray gun touchup of any nicks or scratches created during assembly, cleaning of the vehicle body and parts, inspection, and any detailing specified by the purchaser. After this process is complete, the finished products are either shipped to the customer immediately or stored outside for future shipment.

# VI. Clean Up

<u>Equipment Clean Up</u>: The spray guns and any other equipment are cleaned with acrylic lacquer thinner. Thinner usage is approximately 1,400 gallons/month. Approximately 50% of the thinners are recycled and used paints and residual thinners are disposed of by a third-party waste disposal transporter. Both hazardous and non-hazardous wastes are transported each month to an approved disposal facility.

# SECTION III. PERMIT HISTORY

A history of the permitting actions that have occurred since issuance of the last Title V renewal is summarized in the table below.

Permits	Date Issued	Description
2014-0014-TVR (M-1)	10/18/2018	Significant Modification of the Title V operating permit to increase their facility-wide VOC emission cap from 106 TPY to 194 TPY
2014-0014-TVR	05/19/2016	1 <sup>st</sup> Title V Renewal

# SECTION IV. REQUESTED CHANGES

In the renewal, the following changes were requested as part of the application:

- 1. Update process description:
  - a. General The surface coating operation's limit increase from two 8-hour shifts, 5 days per week, 52 weeks/year (4,160 hpy) to two 10-hour shifts, 5 days per week, 52 weeks per year (5,200 hpy). Facility does not request emission limits increase.
  - b. Fabrication part of MIG welding is moved to 2400 North Waverly site (listed as EUG5).
  - c. Surface Preparation "The steel shot abrasive blasting is performed in two blast booths or a conveyorized blast booth (small parts) prior to surface coating."
  - d. Surface Coating "After surface preparation, the manufactured units are cleaned and transferred to one of two large drive-through paint booths or to the conveyorized pain booth (small parts) for final priming, painting, and drying."
- 2. Expansion of welding operations to include additional MIG welding. Emissions from this project is defined as EUG5. There is no equipment added to this facility due to this expansion. The expansion is splitting welding operation in EUG 3 to new area, which listed as EUG 5.
- 3. Tanks emissions have been updated per the new criteria under AP-42. No changes to permit limits are being requested.
- 4. The permit contained a requirement to calculate HAP emissions on a monthly and 12-month rolling total. Since the facility is a major HAP source and the permit contain no HAP limits this requirement is not needed and has been removed.

# SECTION V. EQUIPMENT

# EUG 1. Facility Buildings (1701 N. Waverly)

The facility building at 1701 N. Waverly consists of three contiguous buildings totaling 165,000 square feet. The South end of the first corridor of the main building houses the Machine Shop. Next to it are the Receiving, Inventory and Shipping Departments. Layout (where the cutting, pressing, rolling and forming of the metal takes place) is situated in the front corridor of the back half of the main building. Both Weld Shops comprise the back corridor of the back half of the main building.

Three above-ground tanks are located at the south end of the facility. Each tank holds 750 gallons of either diesel fuel (2) or gasoline (1) for fueling vehicles. One 900-gallon tank containing argon liquid for welding is located outside on the Southeast side of the building.

EUG	Description	Capacity, gal	<b>Construction Date</b>
	Diesel Tank	750	1995
1	Diesel Tank	750	1995
1	Gasoline Tank	750	1995
	Argon Liquid	900	1995

EUG 2. Fabrication (1701 N. Waverly)

Point	Description	E	Date
ID	Description	Equipment	Installed
		CNC Plasma/Oxygen-Acetylene Cutting	1998 2002
	Cutting Drassing Dolling	CNC Turret Punch w/Plasma Cutter	1988 2005
		CNC 1250 Ton Press	1966 1999
		CNC Faccin Rolls	1999
		400 Ton Press	1966 1999
		Metal Saw	1990 2006
	C the Design D III	Metal Shearer	1963 1979
F-1		Roll Machine	1964 1999
	and Forming	PCR42 Steel Processing Robotic System	2014
		Bystar L425-65 Laser System	2015
		Trumpf TruLaser 3030 4000 Watt	2012
		Plasma Dual HPR260XD 3 Oxyfuel Torches	2011
		Kentex SYS w/Miller AC/DC 1000	2014
		Bender CRC with Touch Screen Control	
		Piranha 90 Ton Ironworker	1956
	-	A100E Horizontal Machining Center	1978 2007
		CNC Horizontal Mills	1978 2007
		CNC Lathes	1988 2001
		CNC Vertical Mills	1962 1998
F-2	Machining	Conventional Mills	1962 1998
Γ-2	Machining	Engine Lathes	1962 1998
		Surface Grinder	1966
		Mori Seiki/NLX4000BY/1500 ChipBlaster	2012
		MHL-2P Adjustable Position Rollover (3)	2012
		Modular Fixturing	1960 2007
		Sub Arc Welding	1995
		MIG Welding	1969 2008
F-3	Welding	TIG Welding	2006
1-3	weiding	Stress Relieving furnace	1996
		Lincoln Sub Arc System with Side Beam and Rollers	2012
		Plymovent Air Purifier Systems (12)	2012

#### EUG 3. Surface Preparation (2400 N. Waverly)

Point ID	Description	Equipment	<b>Date Installed</b>
SP-1	Abrasive Blasting	Shot Blasting Equipment	2012

Blasting operations inside the 2400 N. Waverly building are conducted in two 20' wide x 20' high x 80' deep AFC finishing system blast booths designed for end-to-end ventilation and equipped with an abrasive recovery system. Duct collection equipment consists of a Camfil Farr dust collector capable of providing 50 fpm (up to 20,000 cfm) of airflow through the blast booth and is equipped with high efficiency cartridge filters.

Each blast booth uses Schmidt 6.5 cu. ft. blast machines. HG-25 steel grit (Mohawk Materials) blasting media is used and recycled.

A combination blasting and surface coating conveyor system is used for small parts. The blasting portion of the system consists of an 18' wide x 10' high x 21' deep conveyorized blast booth

designed for end-to-end ventilation and is also equipped with an abrasive recovery system.

## **EUG 4. Surface Coating**

Point ID	Description	Equipment	Date Installed
B-1, B-2, B-3, B-4	Spray painting	Spray Guns and Paint Booths	2012

Mertz is using a total of 25 Graco, general metal Air-Pro Model 288946 compliant spray guns to operate two paint lines (two spray guns with two painters) in each of the three paint booths and the conveyor booth (Point ID: B-1, B-2, B-3 and B-4). The compliant spray guns used have a spraying efficiency in excess of 85% due to painting large, flat surfaces. However, Mertz is using 75% spray efficiency as a safety factor to calculate the PM emissions. The spray guns have a maximum application rate of 16-20 ounces per minute each.

(Point ID: B-1 and B-2) Air Finishing System paint booths number 1 and 2 are equipped with two 34" diameter, 6 blade exhaust fans operating at 40,000 CFM @  $\frac{1}{2}$  S.P. Each exhaust fan is powered by a Dayton 3-hp 230 VAC motor. Exhaust ducts are 34" diameter.

(Point ID: B-3) Air Finishing System paint booth number 3 is equipped with six 34" diameter, 6 blade exhaust fans operating at 72,000 CFM @  $\frac{1}{2}$  S.P. This exhaust fan is powered by a Dayton 3-hp 460 VAC motor. Exhaust ducts are 34" diameter.

(Point ID: B-4) Air Finishing System Quadraft conveyor paint booth is equipped with two 25.5", 6 blade exhaust fans, providing a total of 12,600 CFM @  $\frac{1}{2}$  S.P. Each fan is powered by Dayton 2-hp 230 VAC motor. Each fan has a 25.5" diameter duct.

Air Flow Technology VA3 paint booth filters with an average of 99.35% removal efficiency or Filtration Group EM-EC-XXL filters with an average removal efficiency of 99.86% are used. The recommended vendor range of operation of each type of filter is 0 to 1 inch of water column (0.36 psi). All filters are changed when the operating pressure is midway of the recommended operating pressure. Dwyer Mark II Manometers are used in each paint booth. Operating range is 0 to 1 inch of water column (0.036 psi) and filters are changed at approximately 0.5 inches (0.018 psi).

# EUG 5. New Welding Operation

This emission unit group is transferred portion of existing welding operation to a new building. This is not an additional capacity. The relative amounts of welding emissions are 60% at EUG 3 and 40% at EUG 5.

Source	Equipment	Date Installed
	Sub Arc Welding	1995
	MIG Welding	1969 2008
Welding	TIG Welding	2006
	Stress Relieving furnace	1996
	Lincoln Sub Arc System with Side Beam and	2012

Source	Equipment	Date Installed
	Rollers	
	Plymovent Air Purifier Systems (12)	2012

# SECTION VI. EMISSIONS

## **EUG 1. Facility Building(s)**

Negligible fugitive dust emissions are anticipated since the facility is paved and kept (visually) clean as per a spill prevention control & countermeasure plan and a storm water pollution prevention plan for the 1701 N. Waverly facility. Combustion emissions from the natural gas-fired heaters are considered negligible due to 2.0 MMBTUH and 2.6 MMBTUH ratings. Fueling operations are a source of insignificant emissions. Paint sludge storage is a source of insignificant emissions at both facilities. Gasoline tank's emissions estimations are based on AP-42 (6/20), Section 7.1.

G	Annual	Emission Factor <sup>1</sup>	VOC En	nissions
Source	Throughput	(lb/10 <sup>3</sup> gal)	lb/hr	TPY
Diesel fueling	6,908 gallons	0.03		< 0.01
Gasoline fueling	2,597 gallons	12		0.02
TOTAL				0.03

AP-42 (6/08), Section 5.2, emissions doubled to take into account loading into storage tank and then into vehicles.

Course	Throughput	Working Loss	<b>Breathing Loss</b>	<b>Total Emissions</b>
Source	gal/yr	lb/yr	lb/yr	TPY
750-gal Gasoline Tank <sup>1</sup>	2,000	4.40	10.5	7.45E-03

Equipped with submerged-fill pipe

## **EUG 2. Fabrication**

EUG 2 is comprised of three (3) types of emission units: F-1 (Cutting, Pressing, Rolling, and Forming), F-2 (Machining), and F-3 (Welding). HAP emissions from Layout (i.e., cutting, pressing, rolling and forming) and Machining activities are based on MSDS constituent content.

# Cutting, Pressing, Rolling, and Forming (F-1)

Cutting operations are performed using an Ultra HD CNC Plasma Cutter, a Bystar L425-65 Laser system and a Trumpf TruLaser system. All three systems are equipped with downdraft table systems connected to collection systems where the particulates are ultimately collected in 55 gallon drums for reclamation by a metal recycling company. Each system utilizes Donaldson Ultra-Web high efficiency fiber filters or Donaldson PowerCore TG Filter Pack with a MERV 13 efficiency rating capable of filtering greater than 90% of particles of 3 to 10 microns.

Based on collecting drum, the applicant has estimated that the plasma cutter generates

approximately 300 lbs of cutting dust per month or 1.8 TPY, and the combined laser systems generate approximately 75 lbs of dust per month or 0.45 TPY. However, it is unclear how this mass of dust loss per month was derived and if PM<sub>10/2.5</sub> is included in this estimate. Therefore, for permitting purposes, emission factors based on AP-12 Chapter 12 document, "Emissions of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel" are used to estimate emissions from laser and plasma cutting.

Source	Plasma	Laser (x2)
Cutting Type	Dry	Dry
Material Cut, lb/hr	$2,055^{1}$	$2,055^{1}$
Control Device	MERV 13 Filtration	MERV 13 Filtration
PM Control Efficiency	90.0%	90.0%
NOx Control Efficiency	None	None
	<b>Emission Factor(s)</b>	
NOx (liters/min)	4.95 <sup>2</sup> (6.6 grams/min)	
PM <sub>10/2.5</sub> (grams/min)	$23.0^2$ (3.04 lb/hr)	$23.0^{2}$

1 Throughputs for material cut are based on steel plate (96" x 402" x 3/8") with weight of 4,110 lb, and it requires approximately 2 hours to cut. This estimation is used for both plasma and laser cutting.

2 Average of the minimum and maximum values from the source data.

ТРУ	11 /1	
111	lb/hr	TPY
1.33	0.87	3.82
2.66		
3.99	0.87	3.82
1	2.66 <b>3.99</b>	2.66

Uncontrolled PM from each unit is estimated to be approximately 3.04 lb/hr and 13.31 TPY.

# Machining (F-2)

The MFHAP emitted by machining operations consist of large particles or metal shavings that are so large they immediately fall to the floor. Since the machining operations at this facility use lubricants and cutting oils, it is assumed that the oil entrains any fine particles that are generated from machining. These "wet" machining operations are claimed to not generate any MFHAP or PM emissions during operation.

All grinding and milling operations are performed using machining oils: Castrol 9904 and Castrol MB-20. These oils contain no VOCs and the particulates from the operation remain in the lubricant which is collected, stored in 55-gallon drums and disposed of as non-hazardous used oil.

## Welding (F-3)

## Argon Gas Welding

PM emissions from welding activities are based AP-42 (1/95), Table 12.19-1 and 200,000 lbs/yr welding rods (20% MOS plus an anticipated growth factor over the next three years of 25%).

The electrode types used are E7018 and 110-18 M. AP-42 presented a slightly higher factors for electrode type E7018 (18.4 verses 16.4), which is used to calculate potential emissions. HAP

CAS #	Pollutant	Emissions Factor	Electrode Consumed	Annual Emissions
CAS#	ronutant	10 <sup>-1</sup> lb/10 <sup>3</sup> lb of Electrode Consumed	lb/yr	TPY
	PM	18.4		0.18
7440-47-3	Chromium	10.00		0.10
7738-94-5	Chromium (VI)	0.50	200,000	0.01
7439-96-5	Manganese	5.00		0.05
7440-02-0	Nickel	3.00		0.03

emissions from argon gas welding activities for each HAP constituent are based on the maximum number wt. % provided for in the MSDS appropriate for the welding electrodes used.

#### Aluminum Welding

PM emissions from welding activities are based on AP-42 (1/95), Table 12.19-1 and 66,700 lbs/yr of welding rods (20% MOS plus an anticipated growth factor over the next three years of 25%).

The electrode type used are ER4043. HAP emissions from argon gas welding activities for each HAP constituent are based on the maximum number wt. % provided for in the MSDS appropriate for the welding electrode used.

CAS #	Pollutant	Emissions Factor	Electrode Consumed	Annual Emissions
CAS#	Fonutant	10 <sup>-1</sup> lb/10 <sup>3</sup> lb of Electrode Consumed	lb/yr	ТРҮ
	PM	24.1		0.08
7440-47-3	Chromium	0.5		0.002
7738-94-5	Chromium (VI)	0.5	66,700	0.002
7439-96-5	Manganese	0.5		0.002
7440-02-0	Nickel	0.5		0.002

The building housing the welding and cutting operations are equipped with twelve free standing Plymovent air filtration units that filter and collect particulate dust from all sources that has escaped into the building. Approximately 75 lbs of dust per month or 0.45 TPY is collected.

#### **EUG 3. Surface Preparation**

The coal slag blast tent (used only for special applications such as refurbishment of used equipment) is an open facility and does not have a fabric filtration system.

Steel shot blasting operations are conducted in two (2) 20' wide x 20' high x 80' deep AFC finishing system blast booths designed for end-to-end ventilation and equipped with an abrasive recovery system. Duct collection equipment consists of a Camfil Farr dust collector capable of providing 50 fpm (up to 20,000 cfm) of airflow through the blast booth and is equipped with high efficiency cartridge filters. Each blast booth uses Schmidt 6.5 cu. ft. blast machines. HG-25 steel grit (Mohawk Materials) blasting media is used and recycled.

Annual throughputs are based on the facility's approximation for the hours of operation for surface preparation activities, which are assumed to occur approximately 6,240 hours per year (hpy).

PM <sub>10</sub> Emissions											
Source	Throughput (lb/yr)	PM10 Emission Factor	Control Efficiency	PTE (lb/hr)	PTE (TPY)						
Steel Shot Blasting in Blast Bay	5,011,200	0.0021 lb/ton	99.99%	0.001	0.001						
Blasting (Black Beauty Shot)	505,600			0	0						
Blast Tent (with curtain)	505,600	0.69 lb/1,000 lb	0%	0.080	0.348						
Disc Sanding	3,000 discs	Negligible									
TOTAL				0.081	0.35						

Black Beauty consists of crushed slag from coal-fired utility boilers, is a commonly used slag. Slags have the advantage of low silica content, but have been documented to release other contaminants, including hazardous air pollutants (HAP), into the air.

Emission of HAPs from the Black Beauty Abrasive material is estimated using the particulate emissions and assuming that all HAP emissions from abrasive blasting will be in the form of particulate matter. Therefore, the estimated particulate matter emissions are multiplied by the percent weight of the HAP from the MSDS. The facility did not provide an SDS at the time the permit was developed. Therefore, for permitting purposes, the SDS from the manufacture site was accessed (https://www.blackbeautyabrasives.com) in order to obtain the weight % of the HAP constituents. Total HAP is estimated to be 8.33E-05 TPY.

Black Beauty Abrasive's HAP									
CAS #	Pollutant	Percent by Weight							
7440-43-9	Cadmium	0.001							
7440-41-7	Beryllium	0.0005							
7439-96-5	Manganese	0.05							

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# EUG #4 (Surface Coating)

Please refer to the statement of basis in the memorandum of Permit No. 2014-0014-TV (M-1) for the specific products used in the potential emission analysis. The pertinent assumptions from the calculation, excluding the product and product details, are presented below.

## **VOC Emissions**

The fraction of VOC in original paint mixtures or thinners is based on constituent content shown in MSDS sheets. VOC emissions are based on the assumption that all VOC in the original paint and solvent are released into the atmosphere without subsequent control.

Paint emissions are based on the actual product usage in 2014 (44,109 gpy) and 4,176 hours. Potential to emit is based on scaled-up operations ratio which is then extrapolated to 8,760 hpy. The Specific Conditions set a maximum VOC limit of 194 TPY (rather than a production limit) to anticipate future growth.

VOC Emissio	ns					
Primer and Painting Process	Density lb/gal	Coating Gallons	Coating TPY	VOC Wt. %	VOC TPY	PTE VOC (TPY)
Thinners and Reducers						
MEK Thinner (1000552)	6.72	300	1.01	100	1.01	2.12
Reducer, 21092 (1000574)	7.21	720	2.60	100	2.60	5.44
HAP-free Thinner (1000820)	6.67	12,283	40.96	60	24.58	51.56
Thinner, Amercoat 65 (1000837)	7.26	38	0.14	100	0.14	0.29
Thinner, JR505 (1000890)	6.51	151	0.49	100	0.49	1.03
Thinner, Amercoat 900 (1000904)	9.02	18	0.08	100	0.08	0.17
GTA 415 (Thinner) (1000928)	7.26	75	0.27	100	0.27	0.57
GTA 007 (Thinner)(1000929)	7.18	145	0.52	100	0.52	1.09
Polane Reducer-84 (530-K84) (1000933)	7.25	20	0.07	7.25	0.01	0.01
Reducer, Barsol XEL-6889 2301148 (1000935) A4557	7.26	3901	14.16	100	14.16	29.70
Accelerators			0	0	0	0
Accelerator, 99026 (1000551)	8.1	201	0.81	0	0.00	0.00
Accelerator, 99011 (1000575)	8.16	195	0.80	95	0.76	1.59
Accelerator, Urethane UA-11 (1000940) for use with 1000889 (1 oz/gal)	8.18	2	0.01	98.31	0.01	0.02
Catalysts						
Catalyst, Jones Blair 99955 (1000523)	9.01	2,078	9.36	25.73	2.41	5.05

VOC Emissi

VOC Emission	15				-	-
Primer and Painting Process	Density lb/gal	Coating Gallons	Coating TPY	VOC Wt. %	VOC TPY	PTE VOC (TPY)
Catalyst, 99953 (1000550)	12.73	1,563	9.95	29.12	2.90	6.08
Catalyst, 99951 (1000586)	9.4	1,045	4.91	10	0.49	1.03
Catalyst, Jones Blair 99959 (1000779)	10.32	21	0.11	18.95	0.02	0.04
CHEM-O-PON Hardener Red 99957 (1000937)	13.00	127	0.83	27.29	0.23	0.47
Primers						
Primer, 33304-001Chem-O-Pon (1000549) Grey	12.14	6,300	38.24	25.22	9.64	20.23
Primer, Amercoat 370 Light Buff 358 (1000721) (with Amercoat 370 Cure) + 1000837 Thinner	13.79	66	0.46	17.74	0.08	0.17
Primer, Amercoat 385 (1000914) 1:1 with Amercoat 385 Cure	11.31	232	1.31	23.43	0.31	0.64
Primer, Sealer Black Polane E65BC1 (1000931)	12.38	55	0.34	21.57	0.07	0.15
Primer Zinc, Amercoat 68HS (1000938) 1:1 with 385 Cure	10.77	30	0.16	29.9	0.05	0.10
Paints						
Paint, Thurmalox 8898 FlowServ Gray (1000262)	11.24	20	0.11	25.4	0.03	0.06
Paint, Clear Coat 45072 (1000516)	8.16	890	3.63	47.61	1.73	3.63
Paint, Semi-Gloss Black DTM SU12257 (1000536)	11.98	30	0.18	23.03	0.04	0.09
Paint, Gray JB#45570 (1000539)	9.06	910	4.12	42.9	1.77	3.71
Paint, Red 45184 (1000540)	8.69	5,817	25.27	45.41	11.48	24.08
Chem-O-Z, HS II 33910 (1000553)	13.6	4,236	28.80	16.84	4.85	10.18
Paint, Circuit Blue Amercoat 450HS (1000582)	10.99	20	0.11	27.79	0.03	0.06
Paint, Safety Yellow AHY3000 4730-032 (1000714)	9.05	12	0.05	39.85	0.02	0.05
Paint, PSX700 Carlsbad Canyon Beige (1000723) (includes PSX700 Cure) + 1000904 Thinner	10.06	110	0.55	0.43	0.00	0.00
Paint, JB-39549 Chem-O-Pon Mastic (1000778) "As Applied"	14.1	71	0.50	16.3	0.08	0.17
Paint, BJ Blue 45398 (1000797)	8.99	180	0.81	43.23	0.35	0.73
Paint, Red Spray Can (1000856) Aerosol Touch-Up	5.47	9	0.02	83.13	0.02	0.04
Paint, PTL Blue AHN-D50361 Acrylithane HS Enamel 45075(1000861)	8.2	20	0.08	47.54	0.04	0.08
Centrilift Blue, Ameron, PSX-700 FED STD 1050 Circuit (kit) (1000866)	10.77	121	0.65	0.57	0.00	0.01
Coating, Spray Booth Clear 89108 (1000886)	10.01	15	0.08	32.01	0.02	0.05
Coating, Spray Booth White 89108-01 (1000887)	10.01	165	0.83	32.01	0.26	0.55
Paint, AUE-370 C&J Silver (1000889)	9.37	478	2.24	43.3	0.97	2.03
Paint, CRC Yellow (Top Coat) CC0664 (1000899)	3.44	20	0.03	3.44	0.00	0.00

# **VOC Emissions**

VOC Emission				TIOO		DIT
Primer and Painting Process	Density lb/gal	Coating Gallons	Coating TPY	VOC Wt. %	VOC TPY	PTE VOC (TPY)
Paint, Amercoat PSX 700 Safety Yellow 1979 (1000905) 4:1	10.04	113	0.57	4.14	0.02	0.05
with PX700-B-Cure)	10.01	115	0.57		0.02	0.05
Paint, Amercoat PSX 700 Pearl Gray Resin (1000906) 4:1	10.18	40	0.20	4.14	0.01	0.02
with PX700-B-Cure)	10.10	40	0.20	4.14	0.01	0.02
Paint, Pantone Blue 7455 PSX-700 (1000913) 4:1 with AT370-B Cure	10.18	20	0.10	4.31	0.00	0.01
Paint, PSX-700 Baker Blue (1000917) 4:1 with AT370-B Cure	10.18	20	0.10	4.31	0.00	0.01
Interzinc 22 (Parts A & B 3.1:1) with 10-15% GTA415 Thinner (1000925)	20.9	110	1.15	19.52	0.22	0.47
Intergard 269 (Parts A & B 4:1) with 10-15% GTA415 Thinner (1000926)	12.8	135	0.86	29.3	0.25	0.53
Intergard 475 HS ral9016 White (Parts A & B 3:1) with GTA007	17.5	351	3.07	9.83	0.30	0.63
< 20% (1000927)	17.5	551	5.07	9.85	0.50	0.05
Paint, V66V47 Polane Plus Catalyst (1000932)	9.67	14	0.07	2.65	0.00	0.00
Paint, Amercoat, 450H Carlsbad Canyon B (1000934)	10.77	34	0.18	22.1	0.04	0.08
Paint, Halliburton White 45071HS (1000939)	10.42	110	0.57	34.88	0.20	0.42
Paint, HS2 A2N-B52380 Royal Blue (1000955)	8.33	24	0.10	40.3	0.04	0.08
Acrylithanes						
Acrylithane, C CATL, JB#99931 (10000543)	9.01	1	0.00	25.73	0.00	0.00
Acrylithane, HS INTL TRK White 9219 (1000563)	10.37	60	0.31	34.8	0.11	0.23
Acrylithane, HS2 45090-31 Rose Met (1000715)	8.36	35	0.15	40.3	0.06	0.12
Acrylithane, HS2 Accelerator (1000811)	8.26	8	0.03	91.2	0.03	0.06
Acrylithane, HS Black 45569-001 (1000859)	8.33	100	0.42	46.34	0.19	0.40
Acrylithane, HS 45918-001 C&J Silver (1000877)	8.42	92	0.39	46.46	0.18	0.38
Acrylithane, HHN B50352 BWS Purple (1000878)	8.47	12	0.05	53.69	0.03	0.06
Acrylithane, 2.8 4760-009 CUDDD Rose Met (1000936)	8.87	140	0.62	53.3	0.33	0.69
Totals		44,109	204.59		84.53	177.31

# **VOC Emissions**

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Subchapter 37 VOC Limits											
Primer and Painting Process	Density lb/gal	VOC lb/gal	VOC ''As Applied'' lb/gal	Туре	Allowable VOC lb/gal	Meets Standards					
Primers											
Primer, 33304-001Chem-O-Pon (1000549) Grey	12.14	3.89	2.30	Epoxy	4.8	Y					
Primer, Amercoat 370 Light Buff 358 (1000721) (with Amercoat 370 Cure) 1000837 Thinner	13.79	4.41	3.17	Primer	4.8	Y					
Primer, Amercoat 385 (1000914) 1:1 with Amercoat 385 Cure	11.31	3.62	2.65	Epoxy	4.8	Y					
Primer, Sealer Black Polane E65BC1 (1000931)	12.38	3.96	3.43	Maint.	4.8	Y					
Primer Zinc, Amercoat 68HS (1000938) 1:1 with 385 Cure	10.77	3.45	3.22	Epoxy	4.8	Y					
Paints											
Paint, Thurmalox 8898 FlowServ Gray (1000262)	11.24	3.60	2.30	Maint.	4.8	Y					
Paint, Clear Coat 45072 (1000516)	8.16	2.61	4.09	Acrylic	6.0	Y					
Paint, Semi-Gloss Black DTM SU12257 (1000536)	11.98	3.83	2.50	Acrylic	6.0	Y					
Paint, Gray JB#45570 (1000539)	9.06	2.90	4.09	Acrylic	6.0	Y					
Paint, Red 45184 (1000540)	8.69	2.78	4.13	Acrylic	6.0	Y					
Chem-O-Z, HS II 33910 (1000553)	13.6	4.35	2.29	Epoxy	4.8	Y					
Paint, Circuit Blue Amercoat 450HS (1000582)	10.99	3.52	3.05	Maint.	4.8	Y					
Paint, Safety Yellow AHY3000 4730-032 (1000714)	9.05	2.90	3.74	Maint.	4.8	Y					
Paint, PSX700 Carlsbad Canyon Beige (1000723) (includes PSX700 Cure) 1000904 Thinner	10.06	3.22	0.95	Epoxy	4.8	Y					
Paint, JB-39549 Chem-O-Pon Mastic (1000778) "As Applied"	14.1	4.51	2.22	Epoxy	4.8	Y					
Paint, BJ Blue 45398 (1000797)	8.99	2.88	3.88	Acrylic	6.0	Y					
Paint, Red Spray Can (1000856) Aerosol Touch-Up	5.47	1.75	3.72	Maint.	4.8	Y					
Paint, PTL Blue AHN-D50361 Acrylithane HS Enamel 45075(1000861)	8.2	2.62	3.50	Maint.	4.8	Y					
Centrilift Blue, Ameron, PSX-700 FED STD 1050 Circuit (kit) (1000866)	10.77	3.45	0.05	Maint.	4.8	Y					
Coating, Spray Booth Clear 89108 (1000886)	10.01	15	3.20	Maint.	4.8	Y					
Coating, Spray Booth White 89108-01 (1000887)	10.01	165	3.20	Maint.	4.8	Y					
Paint, AUE-370 C&J Silver (1000889)	9.37	3.00	2.21	Maint.	4.8	Y					
Paint, CRC Yellow (Top Coat) CC0664 (1000899)	3.44	1.10	3.44	Maint.	4.8	Y					
Paint, Amercoat PSX 700 Safety Yellow 1979 (1000905) 4:1 with PX700-B-Cure)	10.04	3.21	1.31	Epoxy	4.8	Y					

# Subchapter 37 VOC Limits

Subchapter 37 VOC Limits										
Primer and Painting Process	Density lb/gal	VOC lb/gal	VOC ''As Applied'' lb/gal	Туре	Allowable VOC lb/gal	Meets Standards				
Paint, Amercoat PSX 700 Pearl Gray Resin (1000906) 4:1 with PX700-B-Cure)	10.18	3.26	1.32	Epoxy	4,8	Y				
Paint, Pantone Blue 7455 PSX-700 (1000913) 4:1 with AT370-B Cure	10.18	3.26	0.44	Epoxy	4.8	Y				
Paint, PSX-700 Baker Blue (1000917) 4:1 with AT370-B Cure	10.18	3.26	0.44	Epoxy	4.8	Y				
Interzinc 22 (Parts A & B 3.1:1) with 10-15% GTA415 Thinner (1000925)	20.9	6.69	4.49	Primer	4.8	Y				
Intergard 269 (Parts A & B 4:1) with 10-15% GTA415 Thinner (1000926)	12.8	4.10	4.21	Epoxy	4.8	Y				
Intergard 475 HS ral9016 White (Parts A & B 3:1) with GTA007 < 20% (1000927)	17.5	5.60	2.33	Epoxy	4.8	Y				
Paint, Amercoat, 450H Carlsbad Canyon B (1000934)	10.77	3.45	2.96	Maint.	4.8	Y				
Paint, Halliburton White 45071HS (1000939)	10.42	3.34	3.30	Maint.	4.8	Y				
Paint, HS2 A2N-B52380 Royal Blue (1000955)	8.33	2.67	3.36	Maint.	4.8	Y				
Acrylithanes						Y				
Acrylithane, HS INTL TRK White 9219 (1000563)	10.37	3.32	3.92	Acrylic	6.0	Y				
Acrylithane, HS2 45090-31 Rose Met (1000715)	8.36	2.68	3.77	Acrylic	6.0	Y				
Acrylithane, HS Black 45569-001 (1000859)	8.33	2.67	3.47	Maint.	4.8	Y				
Acrylithane, HS 45918-001 C&J Silver (1000877)	8.42	2.70	3.51	Maint.	4.8	Y				
Acrylithane, HHN B50352 BWS Purple (1000878)	8.47	2.71	3.99	Maint.	4.8	Y				
Acrylithane 2.8 4760-009 CUDDD Rose Met (1000936)	8.87	2.84	4.11	Maint.	4.8	Y				

# Subchapter 37 VOC Limits

# **Particulate Matter**

Paint particulate emissions estimations are based on the actual amounts of solids in the original paint mixtures, a 75% transfer efficiency, and a filter control efficiency of 98% as claimed by the manufacturer. The following table shows the estimated PM emissions for the facility. All estimated PM emissions are considered  $PM_{10}$ .

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PM10	Emissions					
Primer and Painting Process	Density lb/gal	Coating Gallons	PM lb/gal	Proposed PM <sub>10</sub> lb/yr	Proposed PM <sub>10</sub> TPY	PTE PM <sub>10</sub> TPY
Thinners and Reducers						
MEK Thinner (1000552)	6.72	300	0.00	0.00	0.00	0.00
Reducer, 21092 (1000574)	7.21	720	0.00	0.00	0.00	0.00
HAP-free Thinner (1000820)	6.67	12,283	2.67	163.86	0.08	0.17
Thinner, Amercoat 65 (1000837)	7.26	38	0.00	0.00	0.00	0.00
Thinner JR505 (1000890)	6.51	151	0.00	0.00	0.00	0.00
Thinner, Amercoat 900 (1000904)	9.02	18	0.00	0.00	0.00	0.00
GTA 415 (Thinner) (1000928)	7.26	75	0.00	0.00	0.00	0.00
GTA 007 (Thinner)(1000929)	7.18	145	0.00	0.00	0.00	0.00
Polane Reducer-84 (530-K84) (1000933)	7.25	20	6.72	0.67	0.00	0.00
Reducer, Barsol XEL-6889 2301148 (1000935) A4557	7.26	3,901	0.00	0.00	0.00	0.00
Accelerators						
Accelerator, 99026 (1000551)	8.1	201	8.10	8.14	0.00	0.01
Accelerator, 99011 (1000575)	8.16	195	0.41	0.40	0.00	0.00
Accelerator, Urethane UA-11 (1000940) for use with 1000889 (1 oz/gal)	8.18	2	0.14	0.00	0.00	0.00
Catalysts					0.00	0.00
Catalyst, Jones Blair 99955 (1000523)	9.01	2,078	6.69	69.53	0.03	0.07
Catalyst, 99953 (1000550)	12.73	1,563	9.02	70.51	0.04	0.07
Catalyst, 99951 (1000586)	9.4	1,045	8.46	44.20	0.02	0.05
Catalyst, Jones Blair 99959 (1000779)	10.32	21	8.36	0.88	0.00	0.00
CHEM-O-PON Hardener Red 99957 (1000937)	13.00	127	9.45	6.00	0.00	0.01
Primers						
Primer, 33304-001Chem-O-Pon (1000549) Grey	12.14	6,300	9.08	285.97	0.14	0.30
Primer, Amercoat 370 Light Buff 358 (1000721) (with Amercoat 370 Cure) + 1000837 Thinner	13.79	66	11.34	3.74	0.00	0.00
Primer, Amercoat 385 (1000914) 1:1 with Amercoat 385 Cure	11.31	232	8.66	10.05	0.01	0.01

<b>PM</b> 10	Emissions					
Primer and Painting Process	Density lb/gal	Coating Gallons	PM lb/gal	Proposed PM <sub>10</sub> lb/yr	Proposed PM <sub>10</sub> TPY	PTE PM <sub>10</sub> TPY
Primer, Sealer Black Polane E65BC1 (1000931)	12.38	55	9.71	2.67	0.00	0.00
Primer Zinc, Amercoat 68HS (1000938) 1:1 with 385 Cure	10.77	30	7.55	1.13	0.00	0.00
Paints						
Paint, Thurmalox 8898 FlowServ Gray (1000262)	11.24	20	8.39	0.84	0.00	0.00
Paint, Clear Coat 45072 (1000516)	8.16	890	4.28	19.02	0.01	0.02
Paint, Semi-Gloss Black DTM SU12257 (1000536)	11.98	30	9.22	1.38	0.00	0.00
Paint, Gray JB#45570 (1000539)	9.06	910	5.17	23.54	0.01	0.02
Paint, Red 45184 (1000540)	8.69	5,817	4.74	137.98	0.07	0.14
Chem-O-Z, HS II 33910 (1000553)	13.6	4,236	11.31	239.54	0.12	0.25
Paint, Circuit Blue Amercoat 450HS (1000582)	10.99	20	7.94	0.79	0.00	0.00
Paint, Safety Yellow AHY3000 4730-032 (1000714)	9.05	12	5.44	0.33	0.00	0.00
Paint, PSX700 Carlsbad Canyon Beige (1000723) (includes PSX700 Cure) + 1000904 Thinner	10.06	110	10.02	5.51	0.00	0.01
Paint, JB-39549 Chem-O-Pon Mastic (1000778) "As Applied"	14.1	71	11.80	4.19	0.00	0.00
Paint, BJ Blue 45398 (1000797)	8.99	180	5.10	4.59	0.00	0.00
Paint, Red Spray Can (1000856) Aerosol Touch-Up	5.47	9	0.92	0.04	0.00	0.00
Paint, PTL Blue AHN-D50361 Acrylithane HS Enamel 45075(1000861)	8.2	20	4.30	0.43	0.00	0.00
Centrilift Blue, Ameron, PSX-700 FED STD 1050 Circuit (kit) (1000866)	10.77	121	10.71	6.48	0.00	0.01
Coating, Spray Booth Clear 89108 (1000886)	10.01	15	10.01	0.75	0.00	0.00
Coating, Spray Booth White 89108-01 (1000887)	10.01	165	10.01	8.26	0.00	0.01
Paint, AUE-370 C&J Silver (1000889)	9.37	478	5.31	12.70	0.01	0.01
Paint, CRC Yellow (Top Coat) CC0664 (1000899)	3.44	20	3.32	0.33	0.00	0.00
Paint, Amercoat PSX 700 Safety Yellow 1979 (1000905) 4:1 with PX700-B-Cure)	10.04	113	9.62	5.44	0.00	0.01
Paint, Amercoat PSX 700 Pearl Gray Resin (1000906) 4:1 with PX700-B-Cure)	10.18	40	9.76	1.95	0.00	0.00
Paint, Pantone Blue 7455 PSX-700 (1000913) 4:1 with AT370-B Cure	10.18	20	9.74	0.97	0.00	0.00
Paint, PSX-700 Baker Blue (1000917) 4:1 with AT370-B Cure	10.18	20	9.74	0.97	0.00	0.00
Interzinc 22 (Parts A & B 3.1:1) with 10-15% GTA415 Thinner (1000925)	20.9	110	16.82	9.25	0.00	0.01
Intergard 269 (Parts A & B 4:1) with 10-15% GTA415 Thinner (1000926)	12.8	135	9.05	6.11	0.00	0.01
Intergard 475 HS ral9016 White (Parts A & B 3:1) with GTA007	17.5	351	15.78	27.69	0.01	0.03

Primer and Painting Process	Density lb/gal	Coating Gallons	PM lb/gal	Proposed PM <sub>10</sub> lb/yr	Proposed PM <sub>10</sub> TPY	PTE PM <sub>10</sub> TPY
< 20% (1000927)						
Paint, V66V47 Polane Plus Catalyst (1000932)	9.67	14	9.41	0.66	0.00	0.00
Paint, Amercoat, 450H Carlsbad Canyon B (1000934)	10.77	34	8.39	1.43	0.00	0.00
Paint, Halliburton White 45071HS (1000939)	10.42	110	6.79	3.73	0.00	0.00
Paint, HS2 A2N-B52380 Royal Blue (1000955)		24	4.97	0.60	0.00	0.00
Acrylithanes						
Acrylithane, C CATL, JB#99931 (10000543)	9.01	1	6.69	0.03	0.00	0.00
Acrylithane, HS INTL TRK White 9219 (1000563)	10.37	60	6.76	2.03	0.00	0.00
Acrylithane, HS2 45090-31 Rose Met (1000715)	8.36	35	4.99	0.87	0.00	0.00
Acrylithane, HS2 Accelerator (1000811)	8.26	8	0.73	0.03	0.00	0.00
Acrylithane, HS Black 45569-001 (1000859)	8.33	100	4.47	2.23	0.00	0.00
Acrylithane, HS 45918-001 C&J Silver (1000877)	8.42	92	4.51	2.07	0.00	0.00
Acrylithane, HHN B50352 BWS Purple (1000878)	8.47	12	3.92	0.24	0.00	0.00
Acrylithane, 2.8 4760-009 CUDDD Rose Met (1000936)	8.87	140	4.14	2.90	0.00	0.00
Totals		44,109		1,203.67	0.60	1.26

PM<sub>10</sub> Emissions

#### **Organic HAP**

The following table presents a speciated analysis of the organic HAP (OHAP) found in the coatings (paints and primers) and solvents (accelerators and reducers) used at the facility. Paint emissions are based on the actual product usage in 2014 and 4,176 hours. Potential to emit is based on scaled-up operations ratio which is extrapolated to 8,760 hpy. Only coatings and solvents resulting in emissions greater than 0.01 TPY of any HAP are listed. Total OHAP emissions from surface coating is estimated to be 26.74 TPY, with the highest individual pollutant (xylene) estimated to be 7.44 TPY.

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Primer and Painting Process	Gal	lb	ТРУ	PTE TPY OHAP	Ethyl- benzene	ТРҮ	Napht halene	TPY	Methyl Isobutyl Ketone	ТРҮ	Toluene	ТРҮ	Xylene	ТРҮ
Thinners and Reducers														
Reducer, 21092 (1000574)	720	5191	2.60	2.94	3.9%	0.10		0.00	25.6%	0.66		0.00	24.5%	0.64
Thinner, Amercoat 65 (1000837)	38	276	0.14	0.29		0.00		0.00		0.00		0.00	100.0%	0.14
Thinner, JR505 (1000890)	151	983	0.49	0.21		0.00		0.00		0.00	20.0%	0.10		0.00
GTA 415 (Thinner) (1000928)	75	545	0.27	0.46	15.0%	0.04		0.00		0.00		0.00	65.0%	0.18
GTA 007 (Thinner)(1000929)	145	1041	0.52	1.09	15.0%	0.08		0.00		0.00		0.00	85.0%	0.44

## **OHAP Emissions (Tons)**

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Primer and Painting Process	Gal	lb	ТРҮ	PTE TPY OHAP	Ethyl- benzene	ТРҮ	Napht halene	ТРҮ	Methyl Isobutyl Ketone	ТРҮ	Toluene	ТРҮ	Xylene	ТРҮ
Polane Reducer-84 (530-K84) (1000933)	20	145	0.07	0.03		0.00		0.00		0.00	20.0%	0.01		0.00
Reducer, Barsol XEL-6889 2301148 (1000935) A4557	3,901	28,321	14.16	7.56	5.1%	0.72		0.00		0.00		0.00	20.4%	2.88
Catalysts														
Catalyst, 99953 (1000550)	1,563	19,897	9.95	1.25	1.0%	0.10		0.00		0.00		0.00	5.0%	0.50
Catalyst, Jones Blair 99959 (1000779)	21	217	0.11	0.08	5.0%	0.01		0.00		0.00		0.00	30.0%	0.03
CHEM-O-PON Hardener Red 99957 (1000937)	127	1,651	0.83	0.19	1.0%	0.01		0.00	7.5%	0.06		0.00	2.5%	0.02
Primers														
Primer, 33304-001Chem-O-Pon (1000549) Grey	6,300	76,482	38.24	8.82	1.0%	0.38		0.00	5.0%	1.91		0.00	5.0%	1.91
Primer, Amercoat 370 Light Buff 358 (1000721) (with Amercoat 370 Cure) + 1000837 Thinner	66	910	0.46	0.03	1.0%	0.00		0.00				0.00	2.5%	0.01
Primer, Amercoat 385 (1000914) 1:1 with Amercoat 385 Cure	232	2,624	1.31	0.06	1.0%	0.01	1%	0.01		0.00		0.00	1.0%	0.01
Primer Zinc, Amercoat 68HS (1000938) 1:1 with 385 Cure	30	323	0.16	0.06	2.5%	0.00	1%	0.00		0.00		0.00	15.0%	0.02
Paints														
Paint, Clear Coat 45072 (1000516)	890	7,262	3.63	0.43	0.8%	0.03		0.00		0.00		0.00	4.9%	0.18
Paint, Gray JB#45570 (1000539)	910	8,245	4.12	0.13	0.5%	0.02		0.00		0.00		0.00	1.1%	0.04
Paint, Red 45184 (1000540)	5,817	50,550	25.27	0.27	0.5%	0.13		0.00		0.00		0.00		0.00
Chem-O-Z, HS II 33910 (1000553)	4,236	57,610	28.80	1.21	2.0%	0.58		0.00		0.00		0.00		0.00
Paint, JB-39549 Chem-O-Pon Mastic (1000778) "As Applied"	71	1,001	0.50	0.15		0.00		0.00	9.0%	0.04	3.1%	0.02	2.6%	0.01
Paint, BJ Blue 45398 (1000797)	180	1,618	0.81	0.02	1.0%	0.01		0.00		0.00		0.00		0.00
Paint, AUE-370 C&J Silver (1000889)	478	4,479	2.24	0.05		0.00		0.00		0.00		0.00	1.0%	0.02
Interzinc 22 (Parts A & B 3.1:1) with 10-15% GTA415 Thinner (1000925)	110	2,299	1.15	0.24	5.0%	0.06		0.00		0.00		0.00	5.0%	0.06
Intergard 269 (Parts A & B 4:1) with 10-15% GTA415 Thinner (1000926)	135	1,728	0.86	0.36	5.0%	0.04		0.00		0.00		0.00	15.0%	0.13
Intergard 475 HS ral9016 White (Parts A & B 3:1) with GTA007 < 20% (1000927)	351	6,143	3.07	0.64	5.0%	0.15		0.00		0.00		0.00	5.0%	0.15
Acrylithanes														
Acrylithane, HS Black 45569-001 (1000859)	100	833	0.42	0.05	1.0%	0.00		0.00		0.00	1	0.00	5.0%	0.02
Acrylithane, HS 45918-001 C&J Silver (1000877)	92	775	0.39	0.03	1.0%	0.00		0.00		0.00		0.00	2.5%	0.01
Acrylithane, 2.8 4760-009 CUDDD Rose Met (1000936)	140	1,242	0.62	0.05	1.0%	0.01		0.00		0.00		0.00	2.5%	0.02
		409,253	204.6	26.74		2.50		0.01		2.68		0.13		7.44

**OHAP Emissions (Tons)** 

#### DRAFT/PROPOSED

#### **Facility-Wide Summary**

## **Criteria Pollutants**

Since emissions of VOC exceed 100 TPY, the facility is considered to be a major source for this pollutant. The facility is a syntheticminor source of PM, since the facility-wide emissions would exceed major source threshold without the use of particulate control equipment. For permitting purposes, in cases where it is not specified in the memorandum,  $PM_{2.5}$  is assumed to be equal to  $PM_{10}$ . Any increases are associated with a more complete list of facility activities.

EU ID	Description	N	Ox	C	0	V	C	S	<b>O</b> <sub>2</sub>	P	'M	P	M <sub>10</sub>	P	M <sub>2.5</sub>
EUID	Description	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TK-1	Gasoline Tank						< 0.01								
F-1	Plasma Cutter	0.87	3.82							0.30	1.33	0.30	1.33	0.30	1.33
F-1	Laser Cutter (x2)									0.60	2.66	0.60	2.66	0.60	2.66
F-2	Machining									0.00	0.00	0.00	0.00	0.00	0.00
F-3	Argon Welding										0.18		0.18		0.18
F-3	Aluminum Welding										0.08		0.08		0.08
B-1	Surface Coating Booth #1														5.00
B-2	Surface Coating Booth #2					186.54	194.00			5.00	5.00	5.00	5.00	5.00	
B-3	Surface Coating Booth #3					160.54	194.00			5.00	5.00	5.00		5.00	
B-4	Surface Coating Booth #4														
BT-1	Blast Tent (Black Beauty Grit) <sup>1</sup>									0.16	0.70	0.08	0.35	0.08	0.35
BB-1	Blasting Booths (Steel Shot) <sup>1</sup>									0.002	0.002	0.001	0.001	0.001	0.001
IA	Insignificant Activities	0.45	1.98	0.38	1.66	0.02	0.14	0.00	< 0.01	0.03	0.13	0.03	0.13	0.03	0.13
	Total	1.32	5.8	0.38	1.66	186.56	194.14	0	<0.01	6.09	10.08	6.01	9.73	6.01	9.73
	Previous Permit Limits						194.0						5.00		
	Difference	1.32	5.8	0.38	1.66	186.56	0.14	0	0.01	6.09	10.08	6.01	4.73	6.01	9.73

<sup>1</sup> Assumptions: PM<sub>2.5</sub> emissions are the same as PM<sub>10</sub>, and PM is the sum of PM<sub>10</sub> and PM<sub>2.5</sub>.

# Hazardous Air Pollutants (HAPs)

Total HAP emissions is estimated to be 27.16 TPY, with the highest individual pollutant (xylene) estimated to be 7.44 TPY.

CAS #	HAPs	НАР	PTE HAP Emissions TPY	2014 HAP Emissions TPY	
Machining Oils and Coolants					
Hpertherm Plasma Coolant	None	Ν			
Coolant, 9904 Castrol	None	Ν			
Coolant, Castrol MB-20	None	Ν			
<b>Total Machining Oil &amp; Coolant</b>					
Argon Gas Welding					
7440-47-3	Chromium	Y	0.251	0.120	
7738-94-5	Chromium (VI)	Y	0.013	0.006	
7439-96-5	Manganese	Y	0.125	0.060	
7440-02-0	Nickel	Y	0.075	0.036	
14808-60-7	Quartz	Y	0.125	0.060	
Total Argon Gas Welding			0.589	0.282	
Aluminum Welding					
7440-41-7	Beryllium	Y	0.000	0.00	
7440-47-3	Chromium	Y	0.004	0.00	
7738-94-5	Chromium (VI)	Y	0.002	0.00	
7439-95-4	Magnesium	Y	0.020	0.02	
7439-92-1	Lead	Y	0.020	0.02	
7439-96-5	Manganese	Y	0.020	0.02	
7440-02-0	Nickel	Y	0.002	0.00	
Total Aluminum Welding			0.068	0.06	
Primer and Painting Process					
100-41-4	Ethylbenzene	Y	5.24	2.5	
108-10-1	Methyl isobutyl ketone	Y	5.62	2.68	
91-20-3	Naphthalene	Y	0.02	0.01	
108-88-3	Toluene	Y	0.27	0.13	
1330-20-7	Xylene	Y	15.61	7.44	
Total Primer and Painting			26.49	12.76	
Abrasive Blasting					
14808-60-7	Ouartz-crystalline silica	Y	0	0	
7440-43-9	Cadmium	Y	0	0	
7440-41-7	Beryllium	Y	< 0.01	0	
7439-96-5	Manganese	Y		0	
Total Abrasive Blasting			<0.01	0	
Maximum Single HAP Emission	Xylene	Y	15.61	7.44	
Total Combined HAP Emission	Аукис	1	27.16	13.10	

# **HAP Summary of Processes**

Potential emissions of individual HAP does not exceed 10 TPY but the combined HAP is greater than 25 TPY, the facility will continue to be considered a major source of HAP emissions.

## SECTION VII.INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the construction permit application are duplicated below. Appropriate recordkeeping of activities indicated below with "\*" is specified in the Specific Conditions (hours, quantity, or capacity). Any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

1. Space heaters, boilers, process heaters and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas).

Equipment	Fuel	Rating (MMBTUH)
Heater	NG	2.0
Heater	NG	2.6

The various combustion sources listed in this group have similar emission factors and are treated as a single entity (for emission estimation purposes) with combined heat input of 4.6 MMBTUH. Emissions are estimated based on emission factors from Tables 1.4-1 and 2 of AP-42 (7/98), fuel heating value of 1,020 BTU/SCF, Continuous operation, or 8,760 hours per year.

Pollutant	Emission Factor	Units	Emissions			
Ponutant	Fonutant Emission Factor		lb/hr	TPY		
NO <sub>X</sub>	100	lb/MMSCF	0.45	1.98		
CO	84	lb/MMSCF	0.38	1.66		
VOC	5.5	lb/MMSCF	0.02	0.11		
SO <sub>2</sub>	0.6	lb/MMSCF	< 0.01	0.01		
PM10	7.6	lb/MMSCF	0.03	0.15		

- 2. \* Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature.
- 3. \*Emissions from fuel storage/dispensing equipment operated solely for facility-owned vehicles if fuel throughput is not more than 2,175 gallons per day (gpd), averaged over a 30-day period.

Fueling operations (diesel and gasoline) are conducted for this purpose and below the indicated fuel throughput. Recordkeeping will be required in the Specific Conditions.

	VOC Emissions							
EU ID	Course	Hours of	Annual	Emission Factor <sup>1</sup>	Emissions			
	Source	Operation	Throughput	(lb/10 <sup>3</sup> gal)	lb/hr	TPY		
DF-1	Diesel fueling	N/A	6,908 gallons	0.03		< 0.01		
GF-1	Gasoline fueling	1N/A	2,597 gallons	12		0.02		

- **TOTAL** 0.03
- <sup>1</sup> AP-42 (6/08), Section 5.2, emissions doubled to take into account loading into storage tank and then into vehicles.
- 4. \*Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia.

The diesel tank is considered an insignificant activity while gasoline tank is not due to it being subject to applicable requirements under 37-15(b). Each activity listed in the insignificant activities list has been previously determined to contribute 5 TPY or less. For permitting purposes, the contribution of emissions from the diesel tank will be represented as 5 TPY VOC in the facility-wide emissions summary table.

5. \*Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant. Paint sludge storage is a source of insignificant emissions at both buildings. For permitting purposes, the contribution of emissions from paint sludge storage will be represented as 5 TPY VOC in the facility-wide emissions summary table. Facility is required to keep records.

# SECTION VIII.OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions)[Applicable]

Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable] This Subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable] Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in "attainment" of these standards.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable] Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for the past years.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable] <u>Part 5</u> includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and that exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

1. 5 TPY of any one criteria pollutant

2. 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAP or 20% of any

threshold less than 10 TPY for a HAP that the EPA may establish by rule

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the previous permit, or are developed from the applicable requirements.

OAC 252:100-9 (Excess Emissions Reporting Requirements) [Applicable] Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible, but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emissions event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess event describing the extent of the event and the actions taken by the owner or operator in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emissions event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (Open Burning)

Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

#### OAC 252:100-19 (Particulate Matter (PM))

<u>Section 19-4</u> regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy.

The following table lists all equipment items, their individual limits, and expected emissions. All fuel burning equipment is in compliance with the particulate matter emission limits contained in Appendix C.

EU-Point	Maximum	Appendix C	Potential
	Heat Input	Emission Limit	Emission Rate
	(MMBTUH)	(lb/MMBTU)	(lb/MMBTU)
Insignificant Activity(s)	4.6*	0.60*	0.0076

\* Represents the combined heat input from all units. The heat input value for each combustion equipment contained in the insignificant activity list have an individual heat input of less than 10 MMBTUH; thus each individually having an Appendix C limit of 0.60 lb/MMBTU. All the insignificant combustion equipment are natural gasfired.

<u>Section 19-12</u> limits particulate emissions from emission points in an industrial process and directfired fuel-burning equipment based on process weight rate, as specified in Appendix G. As shown on the following table, all emission units are in compliance with Subchapter 19. Continuous compliance with the Appendix G emission limit is ensured by requiring particulate control during all coating operations and performing periodic monitoring which has been incorporated into the specific conditions of the permit.

# [Applicable]

Description	Process Rate (TPH)	Appendix G Emission Limit (lb/hr)	Potential Emission Rate (lb/hr)
Plasma Cutter	1.03	4.18	0.30
Laser Cutter *	1.03	4.18	0.60
Surface Coating Booth #1	0.02	0.30	0.29
Surface Coating Booth #2	0.02	0.30	0.29
Surface Coating Booth #3	0.02	0.30	0.29
Surface Coating Booth #4	0.02	0.30	0.29
Blasting	0.40	1.99	0.08
Argon Welding	0.40	2.22	0.09
Aluminum Welding	0.40	2.22	0.18

NOTE: Process rate in 2014 = 1,392 TPY. Estimated in 5 years (20% increase) = 1,670 TPY/381 lb/hr. P = 1,670Tons / 4,176 hours = 0.40 Tons/hr. (For welding operations and blasting operations) \*Per Unit

#### OAC 252:100-25 (Visible Emissions and Particulates)

No discharge of greater than 20% opacity is allowed except for short-term occurrences that consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas there is very little possibility of exceeding these standards. Proper combustion practices for the equipment that uses gasoline and diesel should be adequate to ensure compliance with this subchapter. The permit requires maintenance of the paint booth filters to ensure compliance with the opacity standard.

#### OAC 252:100-29 (Fugitive Dust)

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originated in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or to interfere with the maintenance of air quality standards. Under normal operating conditions, this facility has potential to violate this requirement; therefore it is necessary to require specific precautions to be taken.

## OAC 252:100-31 (Sulfur Oxides)

[Part 5 Applicable] Part 2 limits the ambient air concentration of hydrogen sulfide (H<sub>2</sub>S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283  $\mu$ g/m<sup>3</sup>. Fuelburning equipment fired with commercial natural gas will not have the potential to exceed the H<sub>2</sub>S ambient air concentration limit. The other processes at this facility do not produce substantial amounts of H<sub>2</sub>S.

Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972. For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. The permit requires the use of pipeline-grade natural gas for all fuel-burning equipment to ensure compliance with Subchapter 31. "Pipeline natural gas" is defined in Part 72 as having 0.5 grains TRS/100-SCF, which corresponds to a fuel sulfur content below the fuel sulfur

#### [Applicable]

content derived from the standard. The permit requires the use of commercial pipeline grade natural gas in order to demonstrate compliance with the standard.

## OAC 252:100-33 (Nitrogen Oxides)

[Not Applicable] This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.20 lb-NOx per MMBTU heat input, three-hour average. There is no equipment that exceeds the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable] This subchapter affects gray iron cupolas, blast furnaces, basic oxygen furnaces, petroleum catalytic cracking units, and petroleum catalytic reforming units. There are no affected sources.

## OAC 252:100-37 (Volatile Organic Compounds)

Part 3 concerns the control of volatile organic compounds in storage and loading operations. Section 37-15(a) requires that all storage tanks with capacity greater than 40,000 gallons and storing a VOC with a vapor pressure greater than 1.5 psia shall be pressure vessels or shall be equipped with one of the identified vapor-loss control devices. The facility has no tanks at or above the threshold capacity.

Section 37-15(b) requires storage tanks with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia, to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The diesel fuel tank is storing a VOC with a vapor pressure less than 1.5 psia and is not subject to the requirements of 37-15(b). 750-gal gasoline tank is equipped with a submerged-fill pipe which satisfies the requirements of 37-15(b).

Part 3 requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the tank or trailer with a capacity greater than 200 gallons. This facility does not fill tank trucks or trailers with a capacity greater than 200 gallons. Therefore, this requirement is not applicable. Part 5 concerns the control of VOCs in coating operations.

Section 37-25 requires the owner or operator of any coating line or coating operation with VOC emissions shall use coatings that as applied contain VOCs in excess of the amounts listed in the table. Emissions from the clean-up with VOCs of any article, machine, or equipment used in applying coatings shall be counted in determining compliance with this rule. OAC 252:100-37-25(a), coating type limits are expressed in pounds (lbs) of VOC per gallon of coating-as applied, excluding the volume of any water and exempt organic compounds.

All coatings at the facility are subject to VOC limitations contained in Section 37-25. The permit requires all coatings to comply with the VOC limitations, including solvents used to cleanup any article, machine, or equipment used in applying coatings.

Coating Type	Definition	Limitation (lb-VOC/gal)
Alkyd primer	A chemical coating composed primarily of alkyd applied to a surface to provide a firm bond between the substrate and	4.8
	any additional coating	

# Coating Type Limits (As Applied) from OAC 252:100-37-25

Coating Type	Definition	Limitation (lb-VOC/gal)
Vinyl	A chemical coating containing plasticized or unplasticized polymers and co-polymers of vinyl acetate, vinyl chloride, polyvinyl alcohols or their condensation products. The primary mode of cure is solvent evaporation.	6.0
Nitrocellulose lacquer (NC lacquer)	A chemical coating containing nitrocellulose and suitable resinous modifiers. The primary mode of cure is solvent evaporation.	6.4
Acrylics	A chemical coating containing polymers or co-polymers of acrylic or substitute acrylic acid in combination with resinous modifiers. The primary mode of cure is solvent evaporation.	6.0
Epoxies	A chemical coating containing epoxy groups and suitable chemical cross-linking agents. The primary mode of cure involves a chemical reaction between the epoxy and the cross-linking agent.	4.8
Maintenance finishes	A chemical coating that protects a given substrate from adverse chemical or physical conditions.	4.8
Custom products finish	A proprietary chemical coating designed for a specific customer and use.	6.5

<u>Section 37-27</u> controls emissions of VOCs from aerospace industry coating operations effective September 15, 2020. Except as noted in OAC 252:100-37-27(a)(2) through (4), this Section applies to existing or new aerospace vehicle and component coating operations at aerospace manufacturing, rework, or repair facilities. This facility is not considered an existing or new aerospace vehicle and component coating operations at aerospace manufacturing, rework, or repair facilities. Therefore, the requirements of 37-27 do not apply to Mertz.

<u>Part 7</u> requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The fuel-burning equipment are affected under this requirement.

OAC 252:100-39 (VOC in Nonattainment & Former Nonattainment Areas) [Not Applicable] In addition to any application of the requirements contained in 252:100-37, the additional requirements contained in Subchapter 39 shall be required of existing and new facilities located in Tulsa and Oklahoma Counties. This facility is in Kay County. This subchapter is not applicable.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable] This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC shall be retained, unless a modification is approved by the Director. Because no AOC has been designated, there are no specific requirements for this facility at this time.

#### **DRAFT/PROPOSED**

## OAC 252:100-43 (Testing, Monitoring, and Recordkeeping)

This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Each emissions unit must be evaluated for periodic testing in accordance with the Periodic Testing Standardization guidance issued December 1, 2011, on a pollutant by pollutant basis. Periodic testing requirements are not required for an emission unit that is subject to an applicable requirement that already requires periodic testing, continuous emission monitoring (CEM), or predictive emission monitoring (PEMS). A statement of basis for each emission unit is outlined below.

EU ID	Pollutant	ТРҮ	Current Monitoring	Periodic Testing (Y/N)
	VOC	194.01	Y	Ν
EUG 3	Organic HAPs	26.49	Y	Ν
	PM	5.0	Y	Ν

Emissions of VOC and Organic HAP from the coating booths can be verified through mass balance (where the mass of organic HAP and VOC emitted per unit volume of coating as applied for each coating formulation used is calculated on a monthly basis as required by 40 CFR Part 63, Subpart MMMM). Emissions of PM from the coating booths can be verified via mass balance, by monitoring the control device (filtration system) and operating it in accordance within manufacturer's recommendations. Mertz utilizes filters certified by the filter manufacturer or distributor which serves as a surrogate to site-testing. Periodic testing is not recommended for the coating booths since emissions can be verified using the information supplied by the manufacture and chemical amounts from the distributor of the raw materials used.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:
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OAC 252:100-7	Minor Facilities	not in source category
OAC 252:100-11	Alternative Emissions Reduction	not eligible
OAC 252:100-15	Mobile (Motor Vehicle) Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit

OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Elevators	not in source category
OAC 252:100-39	Nonattainment Areas	not in affected county
OAC 252:100-47	Municipal Solid Waste Landfills	not in source category

# SECTION IX.FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Not Applicable]

PSD does not apply at this time. Final total emissions are less than the threshold of 250 TPY of any single regulated pollutant. This facility is not one of the listed stationary sources with an emission threshold of 100 TPY.

# NSPS, 40 CFR Part 60

[Not Applicable]

<u>Subpart Kb.</u> Volatile Organic Liquid (VOL) Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This subpart affects VOL storage tanks with a capacity above 19,813 gallons. Volatile organic liquid (VOL) means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR §51.100) into the atmosphere. The gasoline and diesel fuel tanks are below the threshold capacity of the rule.

<u>Subpart EE</u>, Surface Coating of Metal Furniture. This facility does not have a metal furniture coating operation.

<u>Subpart MM</u>, Automobile and Light Duty Truck Surface Coating Operations. This facility is not an automobile or light duty truck assembly plant.

<u>Subpart QQ</u>, Graphic Arts Industry: Publication Rotogravure Printing. This facility does not have a publication rotogravure printing press.

<u>Subpart RR</u>, Pressure Sensitive Tape and Label Surface Coating Operations. This facility does not have a coating line used in the manufacture of pressure-sensitive tape and labels.

<u>Subpart SS</u>, Industrial Surface Coating: Large Appliances. This facility does not have a large appliance surface coating line.

<u>Subpart TT</u>, Metal Coil Surface Coating. This facility does not have a metal coil surface coating operation.

<u>Subpart WW</u>, Beverage Can Surface Coating Industry. This facility does not have a beverage can surface coating line.

<u>Subpart FFF</u>, Flexible Vinyl and Urethane Coating and Printing. This facility does not have a rotogravure printing line.

Subpart SSS, Magnetic Tape Coating Facilities. This facility does not coat magnetic tape.

<u>Subpart TTT</u>, Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines. This facility does not apply coatings to plastic parts for use in the manufacture of business machines.

<u>Subpart VVV</u>, Polymeric Coating of Supporting Substrates Facilities. This facility does not have a web coating operation.

<u>Subpart IIII</u>, Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). There are no stationary CI-ICE at this facility.

Subpart JJJJ, Stationary Spark Ignition (SI) ICE. There are no stationary SI-ICE at this facility.

NESHAP, 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride. Benzene is only present in lesser amounts in gasoline and diesel stored at the facility.

## NESHAP, 40 CFR Part 63

<u>Subpart T</u>, Halogenated Solvent Cleaners, applies to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The facility has no affected equipment under this regulation. Subpart T is not applicable to this facility. <u>Subpart IIII</u>, Surface Coating of Automobiles and Light-Duty Trucks. This facility does not surface coat new automobile or new light duty truck bodies or body parts.

<u>Subpart MMMM</u>, Surface Coating of Miscellaneous Metal Parts and Products, was promulgated on August 29, 2003. An affected facility is one that uses at least 250 gallons per year of coatings that contain HAP, and is either major or located at a source that is major, as defined in 40 CFR 63.2. This subpart does not apply to coatings used in volumes of less than 189 liters (50 gal) per year, provided that the total volume of coatings exempt under this paragraph does not exceed 946 liters (250 gal) per year at the facility.

This facility is considered an existing source which became a major source in June 2007 and became subject to this subpart. This subpart affects all coating operations and storage containers and mixing vessels for coatings, thinners, cleaners, and wastes. Existing sources are required to limit HAP emissions from general use coatings to 2.60 lb/gallon of solids, high performance coatings to 27.54 lb/gallon of solids, magnet wire coatings to 1.00 lb/gallon of solids, and rubber-to-metal coatings to 37.70 lb/gallon of solids. All applicable requirements have been incorporated into the permit.

<u>Subpart NNNN</u>, Surface Coating of Large Appliances. This facility does not apply coatings to large appliance parts or products.

<u>Subpart OOOO</u>, Printing, Coating, and Dyeing of Fabrics and Other Textiles. This facility does not print, coat, slash, dye, or finish fabric and other textiles.

<u>Subpart PPPP</u>, Surface Coating of Plastic Parts and Products. This facility does not coat plastic parts and products as defined under this subpart.

Subpart SSSS, Surface Coating of Metal Coil. This facility does not have a coil coating line.

<u>Subpart ZZZZ</u>, Reciprocating Internal Combustion Engines (RICE). There is no RICE located at this facility.

<u>Subpart HHHHH</u>, Miscellaneous Coating Manufacturing. The facility does not manufacture coatings.

<u>Subpart CCCCCC</u>, Gasoline Dispensing Facilities (GDF). The affected source is each GDF that is located at an area source. This facility is a major source of HAP and is not subject to this subpart. <u>Subpart HHHHHH</u>, Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. This facility is a major source of HAP and is not subject to this subpart.

Subpart WWWWWW, Area Source Standards for Plating and Polishing Operations. This facility

#### [Subpart MMMM Applicable]

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is a major source of HAP and is not subject to this subpart.

<u>Subpart XXXXXX</u>, Area Source Standards for Nine Metal Fabrication and Finishing Source Categories. This facility is a major source of HAP and is not subject to this subpart.

<u>Subpart DDDDD</u>, Industrial, Commercial and Institutional Boilers and Process Heaters, establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. A boiler or process heater is new if construction commenced after June 4, 2010, and you meet the applicability criteria at the time you commence construction.

Pursuant to §63.7491, the types of boilers and process heaters listed in paragraphs (a) through (n) are not subject to this subpart. Boilers identified as water heaters are specifically exempted from the subpart, per 40 CFR §63.7491(d). Autoclaves are specifically excluded from the definition of "process heater," per 40 CFR §63.7575. Because all units are described as "Units designed to burn Gas 1 fuels," no emission limitations apply.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable] CAM as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit, if it meets all the following criteria per §64.2(a):

- i. Unit is located at major source that is required to obtain Part 70 or 71;
- ii. Unit is subject to emission limitation or standard for the applicable pollutant;
- iii. Unit uses a control device to achieve compliance;
- iv. Potential pre-control emissions of applicable pollutant from unit are at least 100 percent of major source amount;
- v. Unit is not otherwise exempt.

The paint booth system uses particulate filters, but does not have potential emissions of PM greater than 100 TPY prior to the control device.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable] Facilities that hold more than a threshold quantity of a regulated substance in a process are subject to this Subpart. Spirit does not store any of the listed substances at or above the thresholds listed in this regulation. More information on this federal program is available on the web page: <u>https://www.epa.gov/rmp</u>

Stratospheric Ozone Protection, 40 CFR Part 82 [Subparts A and F Applicable] These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

<u>Subpart A</u> identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

<u>Subpart F</u> requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.

Greenhouse Gas Reporting, 40 CFR Part 98

[Applicable]

The following rules are applicable to the facility but are not addressed in the permit because Oklahoma has not been delegated authority to enforce these rules.

Subpart A, General Provision

Subpart C, General Stationary Fuel Combustion Sources

# SECTION X. COMPLIANCE

The Specific Conditions of this permit contain various testing, monitoring, recordkeeping, and reporting requirements in order to document on-going compliance with emission limits. The specific method used to document compliance was based on the type of emission unit, the type of process equipment, the specific pollutants emitted, and the amount of permitted emissions taking into account other regulatory requirements that an emission unit may be subject to.

In addition to the permitting requirements, the following periodic inspections were conducted since issuance of the last Title V renewal permit.

Inspection Type	Date	Summary/Results
Full Inspection	12/2/2016	In compliance
Full Inspection	3/28/2019	<ul> <li>Based on the information provided or obtained for purposes of this evaluation, the following compliance issue was discovered:</li> <li>Mertz exceeded their VOC permit limit from May 2018 through October 2018. Specifically, Permit No. 2014-0014-TVR established a Facility-wide VOC limit of 106 TPY. In March of 2018, Mertz contacted the DEQ to obtain a permit modification to increase the VOC limit because records were showing that the 106 TPY limit would be exceeded in the near future. The Facility was issued their current permit, Permit</li> </ul>

		No. 2014-0014-TVR (M-1) on October 18, 2018. The current permit increased the Facility-wide VOC limit to 194 TPY. According to Facility VOC emission records, Mertz exceeded the 106 TPY VOC limit from May 2018 through October 2018.
Full Inspection	4/15/2021	In compliance

# **Performance Testing**

Mertz has chosen the emission rate without add-on controls option to demonstrate that the Facility's organic HAP emission rate for coating operations (based on coatings, thinners and/or additives, and cleaning materials) is less than or equal to the applicable emission limits in § 63.3890, calculated as a rolling 12-month emission rate, and determined on a monthly basis. The Facility is required to meet all the requirements of § 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limits using this option.

# SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

This application has been determined to be **Tier II** based on the request for renewal of a Part 70 operating permit. Part 70 operating permit renewal fee of \$7,500 has been received

## **Public Review**

The applicant published the "Notice of Filing a Tier II Application" in the *Ponca City News* a daily newspaper in Kay County, on December 4, 2020. The notice stated that the application was available for public review at the DEQ main office in Oklahoma City, Oklahoma. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at <u>https://www.deq.ok.gov</u>.

The applicant will publish the "Notice of Draft Tier II Permit" in the *Ponca City News* a daily newspaper in Kay County. The notice will state that the draft will be available for public review at the DEQ main office in Oklahoma City, Oklahoma. Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: <u>https://www.deq.ok.gov/</u>

# **EPA Review**

This permit was approved for concurrent public and EPA review.

The draft permit will be forwarded as "proposed" permit to EPA Region VI for a 45-day review period.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of OAC 252:100-8-8 may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or

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unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under OAC 252:100-8-8, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under OAC 252:100-8-8, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

#### **State Review**

The facility is located within 50 miles of the Oklahoma-Kansas border. Notice of the draft permit will be provided to the state of Kansas.

#### **Tribal Review**

Tribal Nations will be notified of the draft permit.

# SECTION XIII.SUMMARY

The applicant has demonstrated compliance with all applicable air quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the permit is recommended, contingent on state, public, tribal and EPA review.

## PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

# Mertz Manufacturing, Inc. Mertz Metal Fabrication Plant

## Permit Number 2020-0438-TVR2

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on October 16, 2020. The Evaluation Memorandum dated July 14, 2022, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Facility-Wide Emission Limits: Emissions from the facility shall not exceed the following emission limits expressed as a monthly rolling, 12-month total. [OAC 252:100-8-6(a)]

Authorized Emissions in TPY		
<b>PM</b> <sub>10</sub>	VOC	
11.0	194.0	

# Authorized Emissions in TPY

- a) **EUG 1. Storage Tank & Diesel/Gasoline Fueling:** Emissions from the gasoline storage tank and diesel/gasoline fueling shall be limited by, and will contribute to, the facility-wide cap on VOC identified in Specific Condition No. 1.
  - i. Each calendar month, the permittee shall calculate emissions of VOC using emissions factors developed from Section 5.2 of AP-42 (06/08) and total throughputs of gasoline/diesel fueling process to the storage tank(s) during that month. For gasoline tank, the working and breathing losses shall be calculated using Section 7.1 of AP-42 (6/20). These emissions shall be summed with other emissions for determining compliance with the facility-wide cap. [OAC 252:100-8-6(a)]
  - ii. The 750-gal gasoline tank shall be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. [OAC 252:100-37-15(b)]
- b) **EUG 2. Grinding :** Emissions from grinding (applies to machinery operated grinding only) shall be limited by, and will contribute to, the facility-wide cap on PM<sub>10</sub> emissions identified in Specific Condition No. 1.
  - i. Each calendar month the permittee shall calculate emissions of  $PM_{10}$  associated with grinding, machining, and related operations using the amount of aluminum oxide grind disks used, the density of materials used, and the volume of grinding disks lost. The emissions shall be summed with the other emission for determining compliance with the facility-wide cap.
- c) **EUG 2. Cutting (F-1)**: Emissions from cutting shall be limited by, and will contribute to, the facility-wide cap on  $PM_{10}$  emissions identified in Specific Condition No. 1.

- i. Each calendar month the permittee shall calculate emissions of PM<sub>10</sub> associated with the Plasma and Laser (x2) operations using the emission factors based on AP-12 Chapter 12 document, "Emissions of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel" and total monthly hours of operations for each unit.. The emissions shall be summed with the other emission for determining compliance with the facility-wide cap.
- ii. Each laser and plasma cutting unit shall be equipped with downdraft table systems where emissions are controlled by MERV 13 filters with control efficiency ratings capable of filtering greater than 90% of particles of 3 to 10 microns. The filtration systems shall operate per the manufacturer's requirements.
- d) EUG 2. Machining (F-2): Emissions from cutting shall be limited to:
  - i. Facility shall perform all machining as "wet" to minimize the generation any MFHAP or PM emissions during operation. Where wet" machining operations are conducted using lubricants and cutting oils.
  - ii. Facility shall keep records of all product SDS to document the VOC and HAP content of any machining oils and lubricants used.
- e) EUGs 2 & 5. Welding: Emissions from welding operations shall be limited by, and will contribute to, the facility-wide cap on PM<sub>10</sub> emissions identified in Specific Condition No. 1.
  - i. Each calendar month, the permittee shall calculate emissions of  $PM_{10}$  from the welding operations using the most appropriate electrode emissions factors from AP-42 (1/95), Table 12.91-1 and the quantity of welding rod used (pounds). The facility can alternatively elect to use the highest  $PM_{10}$  emission factor in AP-42 when electrode type is unknown. These emissions shall be summed with the other emission for determining compliance with the facility-wide cap.
  - **ii.** The permittee shall retain a copy of the SDS for each type of welding rod used.
- f) EUG 3. Abrasive Blasting Operations: Emissions from the abrasive blasting operations shall be limited by, and will contribute to, the facility-wide cap on PM<sub>10</sub> emissions as specified in Specific Condition No. 1.
  - i. Each calendar month the permittee shall calculate emissions of  $PM_{10}$  and HAPs from the indoor abrasive blasting operation using emissions factors from Table 13-2.3-1 of AP-42 (assuming that abrasive blasting grit  $PM_{10}$  emissions are 24% of  $PM_{10}$  emissions from abrasive blasting with sand; And the total PM emissions from abrasive blasting using shot are about 10 percent of total PM emissions from abrasive blasting with sand as stated in section 13.2.6.3 of AP-42), the total monthly quantity of black beauty and steel shot abrasive blasting material used. These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.

- ii. Emissions of  $PM_{10}$  from the blasting booth operations shall be controlled by two (2) Camfil Farr dust collection systems equipped with high efficiency cartridge filters rated at 99.99% efficiency for PM > 0.05 um. The cartridge filters shall operate per the manufacturer's requirements.
- g) EUG 4. Surface Coating: Emissions from each of the surface coating operations shall be limited by, and will contribute to, the facility-wide cap on PM<sub>10</sub> and VOC emissions identified in Specific Condition No. 1.
  - i. Each calendar month, the permittee shall record the quantity of each coating, primer, solvent, or related material used and shall compute the emissions of  $PM_{10}$  and VOCs,. Volatile compounds for coating operations shall be calculated based on usage of each paint, thinner, and solvent. Particulate matter emissions shall be calculated based on gallons of each paint used in the spray operations, percentage by weight, and density of the paint of each compound assuming 25% overspray and 98% filter control efficiency. These emissions shall be summed with other emissions for determining compliance with the facility-wide cap. [OAC 252:100-8-6(a)]
  - The VOC content of coatings less water and exempt solvents shall not exceed the following limits and shall include all solvents used to clean up any article, machine, or equipment used in applying coatings. VOC emissions from clean-up solvents may be determined as the difference between the amounts used minus the amounts recovered for disposal. VOC emissions from cleanup solvents shall be included when determining compliance with the limitations of VOC per gallon of coating less water and exempt solvents, unless those solvents are recycled into the system or disposed of in such a manner that would prevent their evaporation into the atmosphere. [OAC 252:100-37-25(a)]

Coating	Maximum VOC Content (lb/gallon)
Vinyls	6.0
Acrylics	6.0
Epoxies	4.8
Maintenance Finishes	4.8
Alkyd Primers	4.8
NC Lacquers	6.4
Custom Product Finishes	6.5

iii. VOC emissions from clean-up solvents may be determined as the difference between the amounts used minus the amounts recovered for disposal. The facility must maintain the specific products sent for disposal, constituent concentrations along with purchase records and disposal records in order to claim any reduction in emissions from the solvents from the painting operation. [OAC 252:100-8-6(a)] iv. Paint spraying equipment shall be cleaned with VOCs being drained into a closed container.

[OAC 252:100-8-6(a)]

- v. The permittee shall conduct all spray gun cleaning so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container. [OAC 252:100-8-6(a)]
- vi. Particulate filters shall be installed and operable during all operations. Particulate emissions from paint booth overspray shall be controlled by dry filters, demonstrated by the manufacture to achieve a minimum control efficiency of 98% for  $PM_{10}$ . The filters shall be maintained and operated in accordance with manufacturer's recommendations on a scheduled basis (or at least twice monthly) to insure maximum operating efficiency of the particulate filters.

[OAC 252:100-8-6(a)]

- vii. The paint bays shall be completely enclosed when commencing painting resulting in a 100% capture efficiency of the particulate emissions from the painting process. [OAC 252:100-8-6(a)]
- viii. The permittee shall retain a copy of the SDS of each type of coating, primer, thinner, solvent, or related material used in the surface coating operation.

[OAC 252:100-8-6(a)]

- The permittee shall take reasonable precautions to minimize or prevent fugitive dust from damaging or interfering with the use of adjacent properties or exceeding or interfere with maintaining the air quality standards. Reasonable precautions include but are not limited to the following: [OAC 252:100-29-2]
  - a) The use, where possible, of water or chemicals for control of dust;
  - b) The application of water or suitable chemicals or some other covering on materials stockpiles and other surfaces that can create air-borne dusts under normal conditions;
  - c) The installation and use of hoods, fans and dust collectors to enclose and vent the handling of dusty materials or the use of water sprays or other acceptable measures to suppress dust emission during handling;
  - d) Adequate containment methods shall be employed during sandblasting or other similar operations;
  - e) The covering or wetting of open-bodied trucks, trailers, or railroad cars when transporting dusty materials;
  - f) The removal as necessary from paved street and parking surfaces of materials that have a tendency to become airborne;
  - g) The planting and maintenance of vegetative ground cover as necessary.
- 3. The following records proceeded by an asterisk shall be maintained on-site to verify Insignificant Activities. The owner/operator shall be able to keep records on alternative media such as:

microfilm, computer files, compact disks, magnetic tape disks, or microfiche, provided it does not conflict with other applicable recordkeeping requirements.

[OAC 252:100-8-2, OAC 252:100-8-6 (a)(3)(B)]

- a) Space heaters, boilers, process heaters and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas).
- b) \*Emissions from fuel storage/dispensing equipment operated solely for facility-owned vehicles if fuel throughput is not more than 2,175 gallons per day (gpd), averaged over a 30-day period.
- c) \*Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia. Facility is required to keep records of the fuel delivered to the units (monthly and annual).
- 4. The facility is subject to 40 CFR Part 63, Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products, and shall comply with all applicable standards, including but not limited to: [NESHAP Subpart MMMM]
  - a) § 63.3880: What is the purpose of this subpart?
  - b) § 63.3881: Am I subject to this subpart?
  - c) § 63.3882: What parts of my plant does this subpart cover?
  - d) § 63.3883: When do I have to comply with this subpart?
  - e) § 63.3890: What emissions limits must I meet?
  - f) § 63.3891: What are my options for meeting the emissions limits?
  - g) § 63.3892: What operating limits must I meet?
  - h) § 63.3893: What work practice standards must I meet?
  - i) § 63.3900: What are my general requirements for complying with this subpart?
  - j) § 63.3901: What parts of the General Provisions apply to me?
  - k) § 63.3910: What notifications must I submit?
  - 1) § 63.3920: What reports must I submit?
  - m) § 63.3930: What records must I keep?
  - n) § 63.3931: In what form and for how long must I keep my records?
  - o) § 63.3940: By what date must I conduct the initial compliance demonstration?
  - p) § 63.3941: How do I demonstrate initial compliance with the emissions limitations?
  - q) § 63.3942: How do I demonstrate continuous compliance with the emissions limitations?
  - r) § 63.3950: By what date must I conduct the initial compliance demonstration?
  - s) § 63.3951: How do I demonstrate initial compliance with the emissions limitations?
  - t) § 63.3952: How do I demonstrate continuous compliance with the emissions limitations?
  - u) § 63.3960: By what date must I conduct performance tests and other initial compliance demonstrations?
  - v) § 63.3961: How do I demonstrate initial compliance?
  - w) § 63.3962: (Reserved)
  - x) § 63.3963: How do I demonstrate continuous compliance with the emissions limitations?
  - y) § 63.3964: What are the general requirements for performance tests?
  - z) § 63.3965: How do I determine the emission capture system efficiency?
  - aa) § 63.3966: How do I determine the add-on control device emission destruction or removal

efficiency?

- bb) § 63.3967: How do I establish the emission capture system and add-on control device operating limits during the performance test?
- cc) § 63.3968: What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?
- dd) § 63.3980: Who implements and enforces this subpart?
- ee) § 63.3981: What definitions apply to this subpart?
- 5. All records required shall be made available to regulatory personnel upon request. These records shall be maintained for a period of at least five years after the time they are made. Such records may include, but are not necessarily limited to the following.

[OAC 252:100-43]

- a) Safety Data Sheets (SDS) for all products used, which document the VOC content, HAP content, and solids content of each as applied coating, solvents, or thinners used;
- b) Records (inventory and/or purchasing) of usage for all coatings, solvents and thinners (daily);
- c) Records of total emissions of VOC and PM<sub>10</sub> per Specific Condition No.1 (monthly, 12-month rolling total);
- d) Records for determining compliance with OAC 252:100-37-25;
- e) Records for determining compliance with OAC 252:100-39-46;
- f) Records for determining compliance with OAC 252:100-39-47;
- g) Records for organic HAP and VOC from each primer, topcoat, specialty coating and depainting application operation, and for inorganic HAP, each spray booth or hanger that contains a primer, topcoat, specialty coating or depainting operation coating operations covered by 40 CFR Part 63, Subpart GG;
- h) Records of dry particulate filter certifications (for each new and existing paint booth) by the filter manufacturer or distributor, paint/depainting booth supplier, and, or facility owner or operator that the filters meet or exceed these efficiency data points of §63.745 (Subpart GG). The documentation should include a statement that they are certified based on Method 319 testing located in Appendix A of Subpart GG;
- i) Records of the acceptable limit(s) of pressure drop certified by the filter or booth manufacturer for each dry particulate control system on each paint booth. The document should be directly from the filter or booth manufacturer;
- j) Records of pressure differential readings for each booth (once per shift) and corrective action taken if above or below the acceptable limit(s) of pressure drop certified by the filter or booth manufacturer;
- k) Records required by 40 CFR Part 63, Subpart MMMM;
- 1) Records verifying all insignificant activities listed in Specific Condition No. 3.
- 6. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit (June 10, 2009), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

- 7. Upon issuance, Permit No. 2020-0438-TVR2 replaces and supersedes all other Air Quality operating permits for this facility, which are now cancelled.
- 8. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility. [OAC 252:100-8-6(d)(2)]

OAC 252:100-11 Alternative Reduction OAC 252:100-15 Mobile Sources OAC 252:100-17 Incinerators OAC 252:100-23 Cotton Gins OAC 252:100-24 Feed & Grain Facility OAC 252:100-47 Municipal Solid Waste Landfills

#### MAJOR SOURCE AIR QUALITY PERMIT STANDARD CONDITIONS (June 21, 2016)

#### SECTION I. DUTY TO COMPLY

A. This is a permit to operate this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

#### SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

#### [OAC 252:100-8-6(a)(3)(C)(iv)] SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a

period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

- B. Records of required monitoring shall include:
  - (1) the date, place and time of sampling or measurement;
  - (2) the date or dates analyses were performed;
  - (3) the company or entity which performed the analyses;
  - (4) the analytical techniques or methods used;
  - (5) the results of such analyses; and
  - (6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions. [OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act. [OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be

maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter ( $PM_{10}$ ). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

#### SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting

period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

# SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

#### SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

#### SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

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[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

#### SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

#### SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[OAC 252:100-8-6 (a)(6)]

#### SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege. [OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

#### SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

#### SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
- (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

### SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

#### SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
- (2) the permitted facility was at the time being properly operated;

(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F.Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

[OAC 252:100-8-6(a)(3)(C)(iv)]

## SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

#### SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

- B. 5 tons per year of any one criteria pollutant.
- C. 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

#### SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2 and OAC 252:100, Appendix J]

#### SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

- B. The permittee may make changes within the facility that:
  - (1) result in no net emissions increases,
  - (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
  - (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

#### SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

- A. Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- B. No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- C. For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for:

[OAC 252:100-25]

- a. Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
- b. Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
- c. An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
- d. Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- D. No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of

adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]

- E. No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- F. Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- G. All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

# SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

- (1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
- (2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
- (3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be

certified by an approved technician certification program pursuant to § 82.161;

- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

#### SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 C.F.R. 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).

- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.
- 1. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

#### SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed



# PART 70 PERMIT

## AIR QUALITY DIVISION STATE OF OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY 707 N. ROBINSON, SUITE 4100 P.O. BOX 1677 OKLAHOMA CITY, OKLAHOMA 73101-1677

# Permit No. <u>2020-0438-TVR2</u>

Mertz Manufacturing, Inc.

having complied with the requirements of the law, is hereby granted permission to operate the Mertz Metal Fabrication located in Section 21, Township 26N, Range 2E, IM in Ponca City, Kay County, Oklahoma, subject to standard conditions dated June 21, 2016, and specific conditions, both attached.

This permit shall expire five (5) years from the date below, except as authorized under Section VIII of the Standard Condition

Kendall Stegmann, Division Director AIR QUALITY DIVISION Date



## DRAFT/PROPOSED

Mertz Manufacturing, Inc. Attn. Frank McEnroe 1701 North Waverly Ponca City, OK 74601

SUBJECT:Title V Renewal Permit No. 2020-0438-TVR2Mertz Metal FabricationSection 21, Township 26N, R2E; Ponca City, Kay County, OK

Dear Mr. McEnroe:

Enclosed is the permit authorizing continued operation of the referenced facility. Please note that this permit is issued subject to the standard and specific conditions, which are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1<sup>st</sup> of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer, Jennie Doan, at jennie.doan@deq.ok.gov.

Sincerely,

Phillip Fielder, P.E. Chief Engineer **AIR QUALITY DIVISION** 

Enclosures



## DRAFT/PROPOSED

Kansas Department of Health and Environment Division of Environment - Air 100 SW Jackson, Suite 310 Topeka, KS 66612-1366

Subject: Operating Permit No. 2020-0438-TVR2 Company: Mertz Manufacturing, Inc Facility: Mertz Metal Fabrication Section 21, Township 26N, R2E; Ponca City, Kay County, OK

Dear Sir/Madam:

The subject referenced facility has requested the renewal of a Title V operating permit. Air Quality Division has completed the initial review of the application and prepared a draft permit for public review. Since this facility is within 50 miles of the Oklahoma – Kansas border, a copy of the proposed permit will be provided to you upon request. Information on all permits and a copy of this draft permit are available for review by public in the Air Quality Section of the DEQ Web Page: <u>http://www.deq.ok.gov</u>.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at jennie.doan@deq.ok.gov.

Sincerely,

Chillip Fielder

Phillip Fielder, P.E. Chief Engineer **AIR QUAILTY DIVISION** 



#### DRAFT/PROPOSED

Mertz Manufacturing, Inc. Attn. Frank McEnroe 1701 North Waverly Ponca City, OK 74601

SUBJECT: Title V Renewal **Permit No. 2020-0438-TVR2** Mertz Metal Fabrication Facility ID: 3553 Section 21, Township 26N, R2E; Ponca City, Kay County, OK

Dear Mr. McEnroe:

Air Quality has received the permit application for the referenced facility and completed initial review. This application has been determined to be a **Tier II** application. In accordance with 27A O.S. 2-14-301 and 302 and OAC 252:4-7-13(c), the enclosed draft permit is now ready for public review. The requirements for public review of the draft permit include the following steps, which **you** must accomplish:

- 1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located (Instructions enclosed);
- 2. Submit sample notice and provide date of publication to AQD 5 days prior to notice publishing;
- 3. Provide for public review, for a period of 30 days following the date of the newspaper announcement, a copy of the application and draft permit at a convenient location (preferentially at a public location) within the county of the facility;
- 4. Send AQD a signed affidavit of publication for the notice(s) from Item #1 above within 20 days of publication of the draft permit. Any additional comments or requested changes you have for the draft permit or the application should be submitted within 30 days of publication.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at <u>jennie.doan@deq.ok.gov</u>.

Sincerely,

PhillipFielder

Phillip Fielder, P.E. Chief Engineer AIR QUALITY DIVISION

# NOTICE OF DRAFT PERMIT TIER II or TIER III AIR QUALITY PERMIT APPLICATION

### **APPLICANT RESPONSIBILITIES**

Permit applicants are required to give public notice that a Tier II or Tier III draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Note that if either the applicant or the public requests a public meeting, this must be arranged by the DEQ.

- 1. Complete the public notice using the samples provided by AQD below. Please use the version applicable to the requested permit action;
  - Version 1 Traditional NSR process for a construction permit
  - Version 2 Enhanced NSR process for a construction permit

Version 3 – initial Title V (Part 70 Source) operating permit, Title V operating permit renewal, Significant Modification to a Title V operating permit, and any Title V operating permit modification incorporating a construction permit that followed Traditional NSR process

- 2. Determine appropriate newspaper local to facility for publishing;
- 3. Submit sample notice and provide date of publication to AQD 5 days prior to notice publishing;

4. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD.

## **REQUIRED CONTENT** (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

- 1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
- 2. Name and address of the applicant;
- 3. Name, address, driving directions, legal description and county of the site or facility;
- 4. The type of permit or permit action being sought;
- 5. A description of activities to be regulated, including an estimate of emissions from the facility;
- 6. Location(s) where the application and draft permit may be reviewed (a location in the county where the site/facility is located must be included);
- 7. Name, address, and telephone number of the applicant and DEQ contacts;
- 8. Any additional information required by DEQ rules or deemed relevant by applicant;
- 9. A 30-day opportunity to request a formal public meeting on the draft permit.

SAMPLE NOTICES:	Version 1 on page 2.
	Version 2 on page 3.
	Version 3 on page 4.

#### DEQ NOTICE OF TIER ... II or III... DRAFT PERMIT

**A Tier** ...II or III... **application for an air quality** ...type of permit or permit action being sought (e.g., significant modification to a Title V permit or Title V/Title V renewal permit)... **has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** ...name and address.

**The applicant requests approval to** ...brief description of purpose of application... **at the** ...site/facility name ... ...[**proposed to be] located at** ...physical address (if any), driving directions, and legal description including county.....

In response to the application, DEQ has prepared a draft operating permit [modification] (Permit Number: ...xxx-xxxx-x...), which may be reviewed at ...locations (one must be in the county where the site/facility is located)... or at the Air Quality Division's main office (see address below). The draft permit is also available for review under Permits for Public Review on the DEQ Web Page: http://www.deq.ok.gov/

**This draft permit would authorize the facility to emit the following regulated pollutants:** (*list each pollutant and amounts in tons per year (TPY)*) [For facility modifications only, either add: , which represents (*identify the emissions change involved in the modification*), or add: . The modification will not result in a change in emissions]

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below or as directed through the corresponding online notice. [Modifications only, add: Only those issues relevant to the proposed modification(s) are open for comment.] A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ staff.

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8.

If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45-day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j).

Information on all permit actions including draft permits, proposed permits, final issued permits and applicable review timelines are available in the Air Quality section of the DEQ Web page: <a href="https://www.deq.ok.gov/">https://www.deq.ok.gov/</a>.

For additional information, contact ...names, addresses and telephone numbers of contact persons for the applicant, or contact DEQ at: Chief Engineer, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100.

# Department of Environmental Quality (DEQ) Air Quality Division (AQD) Acronym List 9-10-21

ACFM AD AFRC API	Actual Cubic Feet per Minute Applicability Determination Air-to-Fuel Ratio Controller American Petroleum Institute	GAL GDF GEP GHG	Gallon (gal) Gasoline Dispensing Facility Good Engineering Practice Greenhouse Gases
ASTM	American Society for Testing and Materials	GR	Grain(s) (gr)
BACT	Best Available Control Technology	H <sub>2</sub> CO H <sub>2</sub> S	Formaldehyde Hydrogen Sulfide
BAE	Baseline Actual Emissions	HAP	Hazardous Air Pollutants
BBL	Barrel(s)	нс	Hydrocarbon
BHP	Brake Horsepower (bhp)	HCFC	Hydrochlorofluorocarbon
BTU	British thermal unit (Btu)	HFR	Horizontal Fixed Roof
COF		HON	Hazardous Organic NESHAP
C&E	Compliance and Enforcement	HP	Horsepower (hp)
CAA CAM	Clean Air Act Compliance Assurance Monitoring	HR	Hour (hr)
CAM	Chemical Abstract Service	I&M	Inspection and Maintenance
CAAA	Clean Air Act Amendments	IBR	Incorporation by Reference
CC	Catalytic Converter	ICE	Internal Combustion Engine
CCR	Continuous Catalyst Regeneration		e
CD	Consent Decree	LAER	Lowest Achievable Emission Rate
CEM	Continuous Emission Monitor	LB	Pound(s) [Mass] (lb, lbs, lbm)
CFC	Chlorofluorocarbon	LB/HR	Pound(s) per Hour (lb/hr)
CFR	Code of Federal Regulations	LDAR	Leak Detection and Repair
CI	Compression Ignition	LNG	Liquefied Natural Gas
CNG CO	Compressed Natural Gas	LT	Long Ton(s) (metric)
CO COA	Carbon Monoxide or Consent Order Capable of Accommodating	Μ	Thousand (Roman Numeral)
COA	Continuous Opacity Monitor	MAAC	Maximum Acceptable Ambient
COM	Continuous opacity monitor	<b>White</b>	Concentration
D	Day	MACT	Maximum Achievable Control
DEF	Diesel Exhaust Fluid		Technology
DG	Demand Growth	MM	Prefix used for Million (Thousand-
DSCF	Dry Standard (At Standard Conditions)		Thousand)
	Cubic Foot (Feet)	MMBTU	Million British Thermal Units (MMBtu)
EGU	Electric Generating Unit		Million British Thermal Units per Hour (MMBtu/hr)
EI	Emissions Inventory	MMSCF	Million Standard Cubic Feet (MMscf)
EPA	Environmental Protection Agency	MMSCFD	Million Standard Cubic Feet per Day
ESP	Electrostatic Precipitator	MSDS	Material Safety Data Sheet
EUG EUSGU	Emissions Unit Group	MWC MWo	Municipal Waste Combustor
EUSGU	Electric Utility Steam Generating Unit	MWe	Megawatt Electrical
FCE	Full Compliance Evaluation	NA	Nonattainment
FCCU	Fluid Catalytic Cracking Unit	NAAQS	National Ambient Air Quality Standards
FESOP	Federally Enforceable State Operating	NAICS	North American Industry Classification
FID	Permit Federal Implementation Plan	NECHAD	System National Emission Standards for
FIP FR	Federal Implementation Plan Federal Register	NESHAP	Hazardous Air Pollutants
11	i cuorar register	NH <sub>3</sub>	Ammonia
GACT	Generally Achievable Control Technology	NMHC NGL	Non-methane Hydrocarbon Natural Gas Liquids

# 9-10-21

NO <sub>2</sub>	Nitrogen Dioxide	RICE	Reciprocating Internal Combustion
NOx	Nitrogen Oxides		Engine
NOI	Notice of Intent	RO	Responsible Official
NSCR	Non-Selective Catalytic Reduction	ROAT	Regional Office at Tulsa
NSPS	New Source Performance Standards	RVP	Reid Vapor Pressure
NSR	New Source Review		I I I I I I I I I I I I I I I I I I I
		SCC	Source Classification Code
<b>O</b> 3	Ozone	SCF	Standard Cubic Foot
O&G	Oil and Gas	SCFD	Standard Cubic Feet per Day
O&M	Operation and Maintenance	SCFM	Standard Cubic Feet per Minute
O&NG	Oil and Natural Gas	SCR	Selective Catalytic Reduction
OAC	Oklahoma Administrative Code	SER	Significant Emission Rate
OC	Oxidation Catalyst	SI	Spark Ignition
	2	SIC	Standard Industrial Classification
PAH	Polycyclic Aromatic Hydrocarbons	SIP	State Implementation Plan
PAE	Projected Actual Emissions	SNCR	Selective Non-Catalytic Reduction
PAL	Plant-wide Applicability Limit	SO <sub>2</sub>	Sulfur Dioxide
Pb	Lead	SOx	Sulfur Oxides
PBR	Permit by Rule	SOP	Standard Operating Procedure
РСВ	Polychlorinated Biphenyls	SRU	Sulfur Recovery Unit
PCE	Partial Compliance Evaluation		
PEA	Portable Emissions Analyzer	Т	Tons
PFAS	Per- and Polyfluoroalkyl Substance	TAC	Toxic Air Contaminant
PM	Particulate Matter	TEG	Triethylene Glycol
PM2.5	Particulate Matter with an Aerodynamic	THC	Total Hydrocarbons
	Diameter <= 2.5 Micrometers	TPY	Tons per Year
$PM_{10}$	Particulate Matter with an Aerodynamic	TRS	Total Reduced Sulfur
	Diameter <= 10 Micrometers	TSP	Total Suspended Particulates
POM	Particulate Organic Matter or Polycyclic	TV	Title V of the Federal Clean Air Act
	Organic Matter		
ppb	Parts per Billion	μg/m <sup>3</sup>	Micrograms per Cubic Meter
ppm	Parts per Million	US EPA	U. S. Environmental Protection Agency
ppmv	Parts per Million Volume		
ppmvd	Parts per Million Dry Volume	VFR	Vertical Fixed Roof
PSD	Prevention of Significant Deterioration	VMT	Vehicle Miles Traveled
psi	Pounds per Square Inch	VOC	Volatile Organic Compound
psia	Pounds per Square Inch Absolute	VOL	Volatile Organic Liquid
psig	Pounds per Square Inch Gage	VRT	Vapor Recovery Tower
DACT	Dessenably Available Control	VRU	Vapor Recovery Unit
RACT	Reasonably Available Control	VD	Vaar
ДАТА	Technology Balativa Accuracy Test Audit	YR	Year
RATA	Relative Accuracy Test Audit	ACT D	2 Stroke Leon Dum
RAP	Regulated Air Pollutant or	2SLB	2-Stroke Lean Burn 4-Stroke Lean Burn
RFG	Reclaimed Asphalt Pavement Refinery Fuel Gas	4SLB 4SRB	4-Stroke Lean Burn 4-Stroke Rich Burn
MG	Kennery Fuel Cas	HOLD	+-SUOKE KICH DUIH