# OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM July 12, 2018

**TO:** Phillip Fielder, P.E., Permits and Engineering Group Manager

**THROUGH:** Rick Groshong, Senior Environmental Manager

Compliance and Enforcement

**THROUGH:** Phil Martin, P.E., Existing Source Section

**THROUGH:** Ryan Buntyn, P.E., Existing Source Section

**FROM:** Eric L. Milligan, P.E., Engineering Section

**SUBJECT:** Evaluation of Permit Application **No. 2014-0014-TVR (M-1)** 

Mertz Manufacturing, Inc.

Mertz Metal Fabrication Plant (SIC 3533/NAICS 333132)

Facility ID: 3553

Section 21, T26N, R2E, Kay County

Latitude: 36.72204° N Longitude: 97.10296° W 1701 N. Waverly & 2400 N. Waverly, Ponca City, OK

#### SECTION I. INTRODUCTION

Mertz Manufacturing, Inc. (Mertz) has applied for a significant modification of the current Part 70 operating permit to increase their current facility wide VOC emission cap from 106 TPY to 194 TPY. Their manufacturing facility has operations at two (2) adjacent locations: (1) 1701 N. Waverly and (2) 2400 N. Waverly. The facility is currently operating under Permit No. 2014-0014-TVR, issued May 19, 2016. The facility manufactures equipment for the energy and nonenergy industries. Equipment such as geophysical oil exploration vehicles, oil field trailers, miniexcavators, storm shelters, snow melting machines, axle boxes for strip mine operations, fire-fighting equipment, and other miscellaneous equipment. This facility is a major source of VOC and HAP. This modification is considered a significant modification because the facility is requesting a federally enforceable VOC emission limit of 194 TPY to avoid the state-only best available control technology requirements to which the facility would otherwise be subject. There are no corresponding underlying applicable requirements or state-only requirements for this VOC emissions limit.

#### SECTION II. PROCESS 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.

#### I. General

The current hours of manufacturing operations occur 24 hours per day, 5 days per week, 52 weeks per year or approximately 6,240 hours per year (hr/yr). The surface coating operation is limited by manufacturing and surface preparation activities and is currently operating two 8-hour shifts, 5 days per week, 52 weeks per year or approximately 4,176 hr/yr. The flow of work process is performed in buildings at 1701 and 2400 North Waverly Avenue.

The process used 338,743 lb (169.4 TPY) of paint (formulated with thinners, catalysts and accelerators) and 87,821 lb (43.9 TPY) of thinners resulting in a total of 65.48 TPY of VOC for 2014 (after credit for thinner shipped off site to contractors and waste facilities). According to the applicant, the facility's 2014 inventory represents the annual amount of material used for the last two years of operation and is expected to increase by 25% over the next five years. Two paint lines in each of three paint booths and one conveyor line have the maximum capacity to spray 45 gallons/hr. Other material throughputs in 2014 were 129,787 lb of argon gas 166,707 lb of welding wire and rods, 554,420 lb of Black Beauty coal slag blasting media, 1,600 lb of recyclable steel shot blasting media, 2,055 sanding discs, 607 gallons of machine tooling coolant, 6,908 gallons diesel fuel and 2,847 gallons of gasoline, and an average of 12,327 gallons of paint waste, used oil, and used coolant which are stored in 55-gallon drums and transported off site to an approved disposal facility once per month.

#### 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).

Various lubricants and water with negligible emissions are used during this process. Parts cut on the burn table produce burn table dust which is drawn down into the table base. This draw-down system results in negligible emissions for this process. Burn table dust is exhausted through an enclosed conveyance into an outside storage bin/bag house. The bag house is inspected and filters changed, once per year. Burn table dust is then transported to an approved disposal facility once a month. Wiedemann emissions are drawn through an enclosed exhaust system. Filters are changed per the manufacturer's instructions and/or two times per week. A bevel table also has a draw-down system, making emissions from this process negligible. 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.

#### 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.

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

Prime Coat Application: 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.

<u>Final Production</u>: 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. EQUIPMENT

## I. 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.

#### II. EUG #2 (Fabrication) (1701 N. Waverly)

Point ID	Description	Equipment	Date Installed
F-1	Cutting, Pressing, Rolling, and Forming	CNC Plasma/Oxygen-Acetylene Cutting	1998 2002
		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
		Metal Shearer	1963 1979
		Roll Machine	1964 1999
		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
F-2	Machining	A100E Horizontal Machining Center	1978 2007

Point ID	Description	Equipment	Date Installed
		CNC Horizontal Mills	1978 2007
		CNC Lathes	1988 2001
		CNC Vertical Mills	19621998
		Conventional Mills	1962 1998
		Engine Lathes	1962 1998
		Surface Grinder	1966
		Mori Seiki/NLX4000BY/1500 ChipBlaster	2012
		MHL-2P Adjustable Position Rollover (3)	2012
		Modular Fixturing	1960 2007
F-3	Welding	Sub Arc Welding	1995
		MIG Welding	1969 2008
		TIG Welding	2006
		Stress Relieving furnace	1996
		Lincoln Sub Arc System with Side Beam and Rollers	2012
		Plymovent Air Purifier Systems (12)	2012

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

Point ID	Description	Equipment	Date Installed
SP-1	Abrasive Blasting	Shot Blasting Equipment	2012

#### Blast Booths

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.

IV. 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		

#### **Spray Guns**

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.

#### **Paint Booth Exhaust Systems**

(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 @ ½ 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 @ ½ 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 @ ½ S.P. Each fan is powered by Dayton 2-hp 230 VAC motor. Each fan has a 25.5" diameter duct.

#### **Paint Booth Filters**

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.

#### **Paint Booth Monometers**

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).

#### SECTION IV. EMISSIONS

#### **Criteria Pollutants**

Emissions are predominantly VOC from the painting operations. Throughputs of other activities and/or materials are based on the facility's 2014 material actual usage plus a 20% margin of safety and a 25% anticipated growth rate.

#### I. EUG #1 (Facility Buildings)

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.

VOC Emissions								
Course	Hours of	Annual	Emission Factor <sup>1</sup>	Emis	sions			
Source	Operation	Throughput	$(lb/10^3 gal)$	lb/hr	TPY			
Diesel fueling	N/A	6,908 gallons	0.03		< 0.01			
Gasoline fueling		2,597 gallons	12		0.02			
			TOTAL =>		0.03			

<sup>&</sup>lt;sup>1</sup> - AP-42 (6/08), Section 5.2, emissions doubled to take into account loading into storage tank and then into vehicles.

## II. EUG #2 (Fabrication)

Layout: Cutting, Pressing, Rolling and Forming, and Machining

HAP emissions from Layout (i.e., cutting, pressing, rolling and forming) and Machining activities are based on MSDS constituent content.

Machining Oils and Coolants

CAS#	Constituent	НАР	Usage TPY	Toxic Weight %	Proposed Coolant HAP TPY	PTE Coolant HAP TPY
Hpertherm Plasma Coolant(9990711)		None	0.3			
Coolant, 9904 Castrol (9995555)		None	1.0			
Coolant, Castrol MB-20 (9996198)		None	1.0			
TOTAL HAP					0	0

#### Welding Operations

<u>Argon Gas Welding</u>: HAP emissions from argon gas welding activities are based on MSDS and constituent content. AP-42 (1/95), Table 12.19-2 "HAP Emission Factors for Welding Operations" was not used. PM<sub>10</sub> emissions from welding activities are based on AP-42 (1/95), Table 12.19-1 "PM<sub>10</sub> Emission Factors for Welding Operations." 200,000 lbs/yr (argon gas) welding rods and wire is estimated to be the maximum use in any one year.

CAS#	Air Pollutant	Emissions Factor (0.1 lb/10³ lb of Electrode Consumed)	lb/yr Electrode Consumed	Emissions 4,176 hr/yr lb/hr	Emissions 4,176 hr/yr TPY	PTE TPY
7440-47-3	Chromium	10.00	200,000	0.057	0.120	0.251
7738-94-5	Chromium (VI)	0.50	200,000	0.003	0.006	0.013
7439-96-5	Manganese	5.00	200,000	0.029	0.060	0.125
7440-02-0	Nickel	3.00	200,000	0.017	0.036	0.075
14808-60-7	Quartz	5.00	200,000	0.029	0.060	0.125
TOTAL HAP					0.282	0.589
PM <sub>10</sub>		18.4	200,000	0.09	0.18	0.39

Notes:

- 1. lb/yr of electrode consumed (Column D) includes a 20% MOS plus an anticipated growth factor over the next three years of 25%.
- 2. Emissions Factor is based on worst case Wt % figures included in MSDS for four types of welding wire currently used in the Mertz manufacturing process.
- 3. All calculations based on SMAW process (although Manganese is used in both SMAW and GMAW processes) except for Quartz, which is used exclusively in the Mertz SAW process. All calculations provided for each constituent are based on the maximum number Wt% provided for in the MSDSs appropriate for the welding wire used.
- 4. Welding Rods used are 7018 and 110-18 M. PM factor used from Table 12.19-1 is for 7018 (18.4) since it is higher than for 110-18 M (16.4).

<u>Aluminum Welding</u>: HAP emissions from aluminum welding activities are based on MSDS and constituent content. AP-42 (1/95), Table 12.19-2 "HAP Emission Factors for Welding Operations" was not used.  $PM_{10}$  emissions from welding activities are based on AP-42 (1/95), Table 12.19-1 " $PM_{10}$  Emission Factors for Welding Operations." 66,700 lbs/yr (argon gas) of welding rods are estimated to be the maximum use in any one year. Aluminum welding is currently rarely used. These numbers represent a worst case scenario.

CAS#	Air Pollutant	Emissions Factor 1 lb/10³ lb of Electrode Consumed	lb/yr Electrode Consumed	Emissions 8,760 hr/yr lb/hr	Emissions 8,760 hr/yr TPY	PTE TPY
7440-41-7	Beryllium	0.00	66,700	0.00	0.00	0.00
7440-47-3	Chromium	0.00	66,700	0.00	0.00	0.00
7439-95-4	Magnesium	0.05	66,700	< 0.01	0.02	0.02
7439-92-1	Lead	0.05	66,700	< 0.01	0.02	0.02
7439-96-5	Manganese	0.05	66,700	< 0.01	0.02	0.02
7440-02-0	Nickel	0.00	66,700	0.00	0.00	0.00
TOTAL HAP				0.03	0.06	0.06
PM <sub>10</sub>		24.1		0.18	0.80	0.80

#### Notes:

- 1. lb/yr of electrode consumed (Column D) includes a 20% MOS plus an anticipated growth factor over the next three years of 25%.
- 2. Emissions Factor is based on worst case Wt % figures included in MSDS for ER4043 Aluminum Welding Wire and Metallizing Wire.
- 3. An estimated PM factor of 24.1 lb/10<sup>3</sup> lb of electrode consumed.

# III. EUG #3 (Surface Preparation)

#### Abrasive Blasting Air Pollutants

There are no HAP emissions from either our Black Beauty Coal Slag blasting or our steel shot blasting operations. No sand blasting is done at this facility. Particulate emissions from loading and blasting activities are based on AP-42 (6/06), Table 11.12-2 (Sand Transfer) and AP-42 (9/97), Table 13.2.6-1, respectively.

#### PM<sub>10</sub> Emissions

Source	Throughput (lb/yr)	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

#### Notes:

# IV. EUG #4 (Surface Coating)

#### **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 2014 usage (44,109 gallons or 205 TPY) and 4,176 hours. PTE is based on scaled-up operations based on 8,760 hours/year. For operational flexibility, allowable VOC emissions were based on an expected 25% growth over the next five years. However, expected growth has been estimated to exceed that and the facility has requested an increase in allowable VOC emissions. The Specific Conditions set a maximum VOC limit of 194 TPY (rather than a production limit) to anticipate future growth.

<sup>1.</sup> PTE has safety factor of 100% (actual worst case TPY = 0.185).

# **VOC Emissions**

Primer and Painting Process	Density	Coating	Coating	VOC Wt.	VOC	PTE VOC
Timer and Familing Frocess	lb/gal	Gallons	TPY	%	TPY	(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
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)	13.79	66	0.46	17.74	0.08	0.17
+ 1000837 Thinner						
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

# **VOC Emissions**

VOC Emissio		1				
Primer and Painting Process	Density lb/gal	Coating Gallons	Coating TPY	VOC Wt. %	VOC TPY	PTE VOC (TPY)
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
Paint, Amercoat PSX 700 Safety Yellow 1979 (1000905) 4:1 with PX700-B-Cure)	10.04	113	0.57	4.14	0.02	0.05
Paint, Amercoat PSX 700 Pearl Gray Resin (1000906) 4:1 with PX700-B-Cure)	10.18	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 < 20% (1000927)	17.5	351	3.07	9.83	0.30	0.63
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

## **VOC Emissions**

Primer and Painting Process	Density lb/gal	Coating Gallons	Coating TPY	VOC Wt. %	VOC TPY	PTE VOC (TPY)
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
Permit No. 2014-0014-TVR (Allowing for 25% growth)					106.0	
Limit for This Permit					194.0	

## 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  $PM_{10}$ .

# PM<sub>10</sub> 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

# PM<sub>10</sub> Emissions

				I — -	I — -	
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
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
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

# PM<sub>10</sub> Emissions

Duimon and Dainting Duages	Density	Coating	PM	Proposed	Proposed	PTE
Primer and Painting Process	lb/gal	Gallons	lb/gal	PM <sub>10</sub> lb/yr	${ m PM_{10}} \ { m TPY}$	$PM_{10}$ $TPY$
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 < 20% (1000927)	17.5	351	15.78	27.69	0.01	0.03
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)	8.33	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

# PM<sub>10</sub> 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
Totals		44,109		1,203.67	0.60	1.26
Permit No. 2014-0014-TVR (Allowing for 25% growth)						1.56
Limit for This Permit					5.00	

**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

**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, 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
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

**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
Acrylithane 2.8 4760-009 CUDDD Rose Met (1000936)	8.87	2.84	4.11	Maint.	4.8	Y

# **Summary Facility-Wide Emissions**

		PM <sub>10</sub>	VOC
EUG	Point ID	TPY	TPY
EUG 1 Building			0.1
EUG 2 Fabrication	Layout		
	Machining Oils		
	Argon Welding	0.4	
	Aluminum Welding	0.8	
EUG 3 Surface Preparation	Shot Blasting	0.2	
EUG 4 Surface Coating	Combined Surface Coating Processes	1.6	106.0
TOTAL		5.0	194.0

# **Organic HAP**

The following table presents the organic HAP (OHAP) found in coatings (paints and primers) and solvents (accelerators and reducers), and emissions thereof, based on actual 2014 calendar throughputs and operations; i.e. 4,176 hours of painting operations. PTE values are based on 8760 hr/yr. Only those coatings and solvents with emissions greater than 0.01 TPY of any HAP were listed.

## **OHAP Emissions (Tons)**

Primer and Painting Process	Gal	lb	TPY	PTE TPY OHAP	Ethyl- benzene	TPY	Napht halene	TPY	Methyl Isobutyl Ketone	TPY	Toluene	TPY	Xylene	TPY
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
Polane Reducer-84 (530-K84) (1000933)	20	145	0.07	0.03		0.00		0.00		0.00	20.0%	0.01		0.00

# **OHAP Emissions (Tons)**

Primer and Painting Process	Gal	lb	TPY	PTE TPY OHAP	Ethyl- benzene	TPY	Napht halene	ТРҮ	Methyl Isobutyl Ketone	TPY	Toluene	TPY	Xylene	TPY
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		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

**HAP Summary of Processes** 

	TAP Summary of P.	TOCCOSCS		
CAS#	HAPs	HAP	PTE HAP Emissions	2014 HAP Emissions
CAS "		11/11	TPY	TPY
Machining Oils and Coolants				
Hpertherm Plasma Coolant	None	N		
Coolant, 9904 Castrol	None	N		
Coolant, Castrol MB-20	None	N		
Total Machining Oil & Coolant				
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	0.00	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	0.00	0.00
Total Aluminum Welding			0.06	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	125,10110		26.49	12.76
Abrasive Blasting				
14808-60-7	Quartz-crystalline silica	Y	0	0
Total Abrasive Blasting	- •		0	0
Maximum Single HAP Emission	Xylene	Y	15.61	7.44
<b>Total Combined HAP Emissions</b>			27.14	13.102

Xylene PTE exceeds 10 TPY threshold for single HAP. Combined PTE exceeds 25 TPY threshold for combination HAPs.

#### SECTION V. INSIGNIFICANT ACTIVITIES

The insignificant activities (ISA) identified and justified in the application are duplicated below. Any activity to which a state or federal applicable requirement applies is not an ISA even if it is included on this list. Activities requiring records of hours, quantity, or capacity to verify emissions are below the de minimis are identified below with an asterisk "\*". Appropriate recordkeeping conditions are specified in the Specific Conditions.

- 1. Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTU/hr heat input (commercial natural gas). Some small heaters used as water heaters and other types of heaters are at the facility but qualify as trivial emission units but others may be used in the future.
- 2. \* Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with true vapor pressure less than or equal to 1.0 psia at maximum storage temperature.
- 3. \* 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.
- 4. \* Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. Aluminum welding process is an insignificant activity.
- 5. Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas.
- 6. Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas.
- 7. \* Activities having the potential to emit no more than 5 TPY of any criteria pollutant. Fueling operations are a source of insignificant emissions. Paint sludge storage is a source of insignificant emissions at both facilities.

#### SECTION VI. 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 which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule

All emission limits have been incorporated from the previous permit (Permit No. 2014-0014-TVR) or based on information in the permit application.

#### 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 emission 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 emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission 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)

[Applicable]

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))

[Applicable]

This subchapter specifies a particulate matter (PM) emissions limitation of 0.6 lb/MMBTU from new fuel-burning equipment with a rated heat input of 10 MMBTUH or less. AP-42 (7/1998), Section 1.4 lists the total PM emissions for natural gas to be 7.6 lb/MMft<sup>3</sup> or about 0.0076 lb/MMBTU. The small heaters are natural gas fired.

Section 19-12 regulates PM emissions from various industrial processes excluding indirect-fired fuel-burning units. This subchapter also limits emissions of particulate matter from processes other than fuel-burning equipment based upon their process weight rates. The emission rate in pounds per hour (E) is not to exceed the rate calculated using the process weight rate in tons per hour (P), for process rates up to 60,000 lb/hr the formula in appendix G is (E =  $4.10*P^{(0.67)}$ ).

## PROCESS PM EMISSIONS AND ALLOWABLE EMISSIONS OF OAC 252:100-19

Unit	Process Weight Rate, TPH	Allowable PM Emission Rate of OAC 252:100-19, lb/hr	Anticipated PM Emission Rate, lb/hr
Argon Welding	0.40	2.22	0.09
Aluminum Welding	0.40	2.22	0.18
Abrasive Blasting	0.40	2.22	0.08
Surface Coating	0.40	2.22	0.75

NOTE: Process rate in 2014 = 1,392 TPY. Estimated in 5 years (20% increase) = 1,670 TPY/381 lb/hr. P = 1,670 Tons / 4.176 hours = 0.40 Tons/hr.

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

[Applicable]

No discharge of greater than 20% opacity is allowed except for 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. When burning natural gas in the natural gas-fired heaters there is very little possibility of exceeding these standards. Particulate emissions from overspray of the coating operations are controlled by filters. The permit will require maintenance of the dry filters or equivalent systems to achieve and maintain compliance with this limitation. A properly functioning manometer will be required to indicate when booth filters need to be changed.

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

[Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions 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.

Particulate matter (PM) emissions are generated from welding operations, Black Beauty coal slag blasting, steel shot blasting, and surface coat applications. These activities are conducted in enclosed areas. PM emissions from welding and outdoor coal slag blasting are not controlled. Particulate emissions from blast booth steel shot blasting are controlled by a high efficiency filtration system. Under normal operating conditions, this facility will not cause a problem with regards to fugitive dust emissions. However, reasonable precautions to control fugitive dust emissions from the operations will be stated in the permit.

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

[Not Applicable]

<u>Part 5</u> 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. Space heaters and commercial building heaters are the only fuel burning equipment at this facility.

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

[Not Applicable]

Subchapter 33 establishes a maximum  $NO_X$  emission rate for gas-fired, liquid-fired, and solid fossil fuel-burning equipment with rated heat inputs of 50 MMBTUH or more. Space heaters and commercial building heaters are the only fuel burning equipment at this facility.

#### OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

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

[Applicable]

<u>Part 3</u> requires storage tanks constructed after December 28, 1974, 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. Only one on-site storage tank holds a VOC having a vapor pressure of 1.5 psia or more, the 1,000-gallon tank holding gasoline. As required by this subchapter, this tank has a submerged fill pipe.

<u>Part 3</u> 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. <u>Part 5</u> limits the VOC content of coatings used in any coating line or operation. The VOC content of coatings as applied shall not exceed, excluding the volume of any water and exempt organic compounds, the following:

**OAC 252:100-37-25(a) Coating VOC Limits** 

0110 2021100 01 20(a) 00a	ting too minus
<b>Coating Type</b>	lb VOC/gallon
Alkyd Primer	4.8
Vinyls	6.0
NC Lacquers	6.4
Acrylics	6.0
Epoxies	4.8
Maintenance Finishes	4.8
Custom Product Finishes	6.5

All coatings comply with the Subchapter 37 limits. 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.

<u>Part 5</u> requires all emissions of VOC from the clean-up of any article, machine or equipment used in applying coatings to be included when determining compliance with the lb/gallon limits above. All solvent usage not incorporated into coatings as they are applied has been averaged over coating usage and all coatings still comply with the VOC limitations.

<u>Part 7</u> requires fuel-burning equipment to be operated and maintained so as to minimize emissions of VOCs. Temperature and available air must be sufficient to provide essentially complete combustion.

Insignificant sources of VOC include: LP gas space heaters, central natural gas heating in the office area, fuel storage and dispensing and use of propane forklifts.

#### 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. Since no Area of Concern (AOC) has been designated anywhere in the state, there are no specific requirements for this facility at this time.

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

[Applicable]

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 EPA Reference Method 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.

The following	Oklahoma Air	Pollution (	Control 1	Rules are not	applicable to	this facility:

OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile 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	Grain Elevators	not in source category
OAC 252:100-39	Nonattainment Areas	not in area category
OAC 252:100-47	Municipal Solid Waste Landfills	not in source category

#### SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable]

PSD does not apply. Final total emissions are less than the major source threshold of 250 TPY of any single regulated air pollutant and the facility is not one of the listed stationary sources with a major source threshold of 100 TPY.

NSPS, 40 CFR Part 60 [Not Applicable]

<u>Subparts K, Ka, Kb</u>, VOL Storage Vessels apply to certain storage vessels for petroleum and/or volatile organic liquids greater than 40 cubic meters (19,813 gallons). There are three VOL storage tanks found on-site (two holding diesel and one holding gasoline), each having a maximum capacity of 1,000 gallons. Therefore, none of these subparts apply.

<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

[Subpart MMMM is Applicable]

<u>Subpart T</u>, Degreasing Organic Cleaners. This subpart affects halogenated solvent cleaning machines. There are no halogenated solvent cleaning machines located at the 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. This subpart affects major sources of HAP that use 250 gallons per year, or more of coatings that contain HAP in the surface coating of miscellaneous metal parts and products. 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 are no RICE located at this facility.

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

<u>Subpart CCCCC</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.

<u>Subpart WWWWW</u>, Area Source Standards for Plating and Polishing Operations. This facility 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.

#### CAM, 40 CFR Part 64

[Not Applicable]

This part applies to any pollutant-specific emissions unit at a major source that is required to obtain an operating permit, for any application for an initial operating permit submitted after April 18, 1998, that addresses "large emissions units," or any application that addresses "large emissions units" as a significant modification to an operating permit, or for any application for renewal of an operating permit, if it meets all of the following criteria.

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY or 10/25 TPY of a HAP

None of the emission units located at this source use a control device to achieve compliance with the applicable emission limits or standards for any regulated air pollutant.

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

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable] This facility does not store any regulated substance above the applicable threshold limits. More information on this federal program is available at the web site: <a href="http://www.epa.gov/rmp">http://www.epa.gov/rmp</a>.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subparts A and F are 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.

The standard conditions of the permit address the requirements specified at §82.156 for persons opening appliances for maintenance, service, repair, or disposal; §82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; §82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; §82.166 for recordkeeping; § 82.158 for leak repair requirements; and §82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

#### SECTION VIII. COMPLIANCE

## **Inspection**

A full compliance evaluation was conducted on December 2, 2016. Rodney Pesch, Environmental Programs Specialist, conducted the evaluation for the Air Quality Division of the Oklahoma Department of Environmental Quality. Frank McEnroe, Environmental Manager, represented Mertz. There have been no changes at the facility since the inspection and no compliance issues were discovered at the time of the evaluation.

#### Tier Classification and Public Review

This application has been determined to be **Tier II** based on the request to establish a federally enforceable facility wide VOC emission limit at a Part 70 facility. The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operations upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land. Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: <a href="www.deq.state.ok.us/">www.deq.state.ok.us/</a>.

The applicant published the "Notice of Filing a Tier II Application" in *The Ponca City News*, a daily newspaper circulated in Kay County, on July 13, 2018. The notice stated that the application was available for public review at the facility and at the AQD main office. The applicant will publish the "Notice of Tier II Draft Permit" in *The Ponca City News*, a daily newspaper circulated in Kay County. The notice will state that the draft permit is available for public review at a specified location within the county. The draft permit notice will also state that the draft permit is available for public review at the AQD main office and on the DEQ web page at <a href="http://www.deq.state.ok.us">http://www.deq.state.ok.us</a>.

This permit has been approved for concurrent public and EPA review. If no comments are received from the public, then the draft permit will be considered the proposed permit.

#### **State Review**

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

# **EPA Review**

The draft/proposed permit has been forwarded to EPA Region VI for a 45-day review period.

#### **Fees Paid**

Part 70 source operating permit significant modification application fee of \$6,000.

## **SECTION IX. SUMMARY**

The facility is operated as stated in the application. 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 operating permit is recommended contingent on public and EPA review.

# PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

Mertz, Manufacturing, Inc. Mertz Metal Fabrication Plant Permit No. 2014-0014-TVR (M-1) Facility ID: 3553

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on March 21, 2018, January 8, 2014, and at various other times as requested. The Evaluation Memorandum dated July 12, 2018, 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: Records shall be maintained to show the quantity of products used at the facility and to verify that the limits are not exceeded.

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

POLLUTANT	Emission Limit TPY
PM <sub>10</sub>	5
VOC	194

- 2. There is no limit for any Single HAP or Combination HAP. A record of HAP emissions are required. [OAC 252:100-8-6(a)]
- 3. The permittee is authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
- 4. The VOC content of coatings as applied, less water and exempt solvents, shall not exceed the following limits and shall include all solvents used to cleanup 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	lbs/gallon
Alkyd Primers	4.8
Epoxies	4.8
Maintenance Finishes	4.8
Vinyls	6.0
Acrylics	6.0
NC lacquers	6.4

Coating	lbs/gallon
Custom Product Finishes	6.5

- 5. Particulate filters shall be installed and operable during all operations. Particulate emissions from paint booth overspray shall be controlled by dry filters, with an efficiency rating of at least 98%. The filters or alternative device with the same or better control efficiency 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. The particulate filters may be replaced only by a control device with equal or greater control efficiency (98%).

  [OAC 252:100-8-6(a)]
- 6. The permittee shall calculate emissions of each HAP emitted to the atmosphere from the coating operations, welding, and abrasive blasting. 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 efficiency.

  [OAC 252:100-8-6(a)]
- 7. Paint spraying equipment shall be cleaned with VOCs being drained into a closed container. [OAC 252:100-8-6(a)]
- 8. The permittee shall maintain the conventional spray guns in good working order so as to minimize paint overspray during operations. [OAC 252:100-8-6(a)]
- 9. 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.

- 10. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit, 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)]
- 11. 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:

  [40 CFR 63.3880 to 63.3981]

## What This Subpart Covers

- 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? Emissions Limitations
- 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? General Compliance Requirements
- 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? Notifications, Reports, and Records
- 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? Compliance Requirements for the Compliant Material Option
- 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?

#### Compliance Requirements for the Emission Rate Without Add-On Controls Option

- 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?

#### Compliance Requirements for the Emission Rate With Add-On Controls Option

- 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?
  - Other Requirements and Information
- dd. § 63.3980: Who implements and enforces this subpart?
- ee. § 63.3981: What definitions apply to this subpart?
- 12. The following records shall be maintained on-site to verify Insignificant Activities. No recordkeeping is required for those operations that qualify as Trivial Activities.

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

- a. Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with true vapor pressure less than or equal to 1.0 psia at maximum storage temperature.
- b. For fluid storage tanks with a capacity of less than 39,894 gallons and a true vapor pressure less than 1.5 psia; records of capacity of the tanks and contents.
- c. For activities that have the potential to emit less than 5 TPY (actual) of any criteria pollutant; the type of activity and the amount of emissions from that activity (cumulative annual).
- 13. The following records shall be maintained on-site. All such records 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. [OAC 252:100-8-6(a)]
  - a. Usage of coatings, thinners, and solvents by type and volume (monthly and 12-month rolling total).
  - b. Material Safety Data Sheets (MSDS) for all products used, which document the VOC content and HAP content expressed in pounds per gallon of coating or grams per liter of each product.
  - c. Total emissions of all VOCs (monthly and 12-month rolling total).
  - d. Total emissions of PM<sub>10</sub> (monthly and 12-month rolling total).
  - e. Total emissions of Single HAP and Combined HAPs (monthly and 12-month rolling total).
  - f. Records to verify thresholds are not exceeded as specified in Specific Condition No. 1 and No. 4 above.
  - g. Inspection and maintenance of all air pollution control devices.
  - h. Records to verify welding material usage, including aluminum welding wire.
  - i. Records to verify material usage for sand blasting.
  - j. Amount of collected cleaning solvent or wastes for disposal (monthly and 12-month rolling total).
  - k. Records required by Subpart MMMM.

#### 

14. This permit supersedes all previous Air Quality operating permits for this facility, which are now cancelled.

Mr. Frank J. McEnroe Environmental Manager Mertz Manufacturing, Inc. 1701 N. Waverly Ponca City, OK 74601

SUBJECT: Permit **No. 2014-0014-TVR (M-1)** 

Facility: Mertz Manufacturing Plant (Facility ID: 3553) Location: 1701 N. Waverly & 2400 North Waverly, 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 is 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. 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.
- 3. Send AQD a written affidavit of publication for the notices from Item #1 above together with any additional comments or requested changes, which you may have for the permit application within 20 days of publication.

The permit review time is hereby tolled pending the receipt of the affidavit of publication. Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at eric.milligan@deq.ok.gov or at (405) 702-4217.

Sincerely,

Phillip Fielder, P.E.
Permits and Engineering Group Manager
AIR QUALITY DIVISION

Enclosures



# PART 70 PERMIT

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

Permit No. 2014-0014-TVR (M-1)

Mertz Manufacturing, Inc.
having complied with the requirements of the law, is hereby granted permission to operate
the Mertz Manufacturing plant located in Section 21, Township 26N, Range 2E, IM in Ponca
City, Kay County, Oklahoma, subject to the Standard Conditions dated July 21, 2016 and
the Specific Conditions, both of which are attached.
This permit shall expire five years from May 19, 2016, except as authorized under Section
VIII of the Standard Conditions.
Division Director Date

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

#### SECTION I. DUTY TO COMPLY

- A. This is a permit to operate / construct 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.

[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.

- (1) 5 tons per year of any one criteria pollutant.
- (2) 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:

(1) 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]

- (2) 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]
- (3) 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.
- (4) 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]

- (5) 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]
- (6) 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)]
- (7) 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 airtight 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.
- B. 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.

[OAC 252:100-43-6]