DRAFT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **October 16, 2023**

TO: Phillip Fielder, Chief Engineer

THROUGH: Rick Groshong, Compliance and Enforcement Group Manager

THROUGH: Eric L. Milligan, P.E., Engineering Manager, Engineering Section

THROUGH: Ryan Buntyn, P.E., New Source Permits Section

FROM: David Schutz, P.E., New Source Permit Section

SUBJECT: Evaluation of Permit Application No. **2022-0428-TVR2**
Mid American Steel & Wire LLC.
Steel Billet and Wire-making Operation (FAC ID 5553)
Sec. 35 – 5S – 5E
Madill, Marshall County, Oklahoma
1327 Smiley Road
Latitude: 34.07114°, Longitude -96.75085°

SECTION I. INTRODUCTION

Mid American Steel & Wire (Mid American) has submitted an application for renewal of the Title V operating permit for their Madill steel mill and wire plant (SIC 3312 / NAICS 331110). The facility commenced construction under Permit No. 2003-106-C issued March 25, 2002, and is currently operated under Permit No. 2016-1166-TVR (M-2) issued November 28, 2022. The facility is a major source for Prevention of Significant Deterioration (PSD) and a minor source of Hazardous Air Pollutants (HAPs).

SECTION II. PROCESS DESCRIPTIONS

(a) Existing Rod Mill Billet Reheat Furnace (EUG-10)

The facility receives steel "billets" (bar-shaped ingots) and heats the steel to 2,200°F so that it is soft enough to roll to a smaller diameter into wire. The facility processes up to 65 TPH of steel in a natural gas fired furnace rated at 74 MMBTUH.

(b) Existing Rod Mill Cooling Towers (EUG-11)

The facility previously operated six cooling tower systems for the existing operations. Two cooling towers have been removed (RCT-5 and RCT-6). All cooling towers utilize drift eliminators. The rolling mill contact cooling water system previously used four cells, each with a capacity of 800 GPM (3,200 GPM total). Deteriorated cells were replaced, resulting in operation of a 4,500 GPM tower.

(c) Fuel Storage Tanks (EUG-12)

The plant operates three fuel tanks for vehicles, two 6,000-gallon tanks for diesel fuel and one 2,000-gallon tank for gasoline. In addition, the plant operates one 900-gallon tank for diesel fuel for the emergency generators.

(d) New Melt Shop (EUG-01)

The manufacturing process begins at the steel melt shop where scrap steel, carbon, and lime are charged into one electric arc furnace (EAF). The EAF has an individual production capacity of 70 tons per hour. The furnace is normally operated leaving a liquid steel "heel" (some molten steel) in the furnace to assist the melt down of the following charge.

Scrap steel is purchased from outside suppliers and transported to the facility by truck and rail. The scrap arrives pre-processed and suitable for immediate melting. (The scrap will be inspected for plastics, lead, and free organic materials.) Scrap, flux (mostly lime), and reducing agent (carbon) will be loaded using charge buckets which are moved by overhead crane to the EAF. The EAF is a refractory-lined water-cooled vessel with a retractable roof. Graphite electrodes are inserted through the roof, and an electric current is passed between the electrodes, creating the "arc" which creates the heat for melting. The furnace also includes oxy-fuel burners and injection ports for oxygen and carbon. The steel melts and a layer of slag floats to the surface. Carbon is lanced into the slag layer, causing a foam of slag with carbon monoxide. The slag is first poured off, then the molten steel is poured into a ladle for the next process step. The pouring of molten steel is referred to as "tapping." In the ladle, additional refining is conducted to produce the desired metallurgy and final properties.

Emissions from the EAF occurs during charging, melting, and tapping; most emissions are produced in the melting stage. The furnace has a direct-shell evacuation control (DEC) and canopy hood. The DEC exhausts the EAF through a "fourth hole" in the furnace roof to maintain a negative pressure on the furnace. Both the canopy and DEC are vented to baghouses, processing discharges from the furnace and other activities in the vicinity of the furnace.

(e) Melt Ladle Metallurgical Furnace Refining (EUG-02)

Final metallurgy adjustments are made in the ladle metallurgy furnace (LMF). Lime, synthetic slag, and alloying materials are added at this furnace. The melt is stirred by argon gases, while oxygen and hydrogen are removed. The correct temperature is achieved here for subsequent operations.

The LMF also utilizes electric heating. Electrodes penetrate a close-fitting roof into the molten steel. Discharges from the furnace proceed to the LMF baghouse at a rate of approximately 37,176 DSCFM (~46,217 ACFM, varying with ambient temperatures). The LMF baghouse ID fan discharges to a common stack with the billet casting baghouse exhaust.

(f) Melt Shop Billet Casting (EUG-03)

When ladle furnace operations are complete, the ladle is moved by overhead crane to the continuous casting machine. The caster is capable of casting three strands simultaneously, but normal operations cast two strands. A bottom slide-gate in the ladle is opened to allow a controlled flow of steel into water-cooled molds. (A small amount of mineral or vegetable oil is used for mold lubrication.) The billet shape is normally a 6-inch square cross-section. Partially-hardened steel is formed into billets,

then cooled by water sprays. The steel is still soft and straightened on a horizontal run. Natural gas torches are used to cut the billets to length, then the billets are allowed to cool.

Capture hoods are used at the caster and cutting torches to collect PM and gaseous emissions. The hoods vent to a baghouse at a rate of approximately 23,000 DCFM (varying with ambient temperatures).

(g) Melt Shop Natural Gas Burners (EUG-04)

A total of eight gas-fired burners are used: five 5.0 MMBTUH, two 3.0 MMBTUH, and one 1.5 MMBTUH.

- Three burners pre-heat ladles so that they are hot when steel is received. Emissions from each heater discharge to atmosphere through a natural draft stack.
- Two natural gas fired burner stations for refractory repair drying and/or heating are permitted. The refractory lining requires ongoing repair, so one heater cures the refractory repairs and replacements. A second heater is to be installed at the EAF/ladle transfer car location. Emissions from these heaters are captured with the EAF canopy hood exhaust and discharge through the EAF baghouses.
- Two burners are Tundish (bucket) preheaters. Emissions are captured by the caster hood.
- One is a Tundish dryer. Emissions are captured with the EAF canopy hood exhaust.

(h) Melt Shop Storage Silos (EUG-05)

Two silos are installed for lime. Each silo has a dust filter. The anticipated flow is 600 ACFM during filling, but continuous operation will be assumed for emissions calculations purposes.

(i) Melt Dust Handling (EUG-06)

PM captured in the two EAF baghouses is conveyed by screw conveyor to the dust trailer enclosure, where it is loaded directly into dry bulk tanker trailers.

(j) Melt Shop Cooling Towers (EUG-07)

The EAFs, LMF, and caster are water-cooled. In addition, the caster uses a water spray on the billets. Three cooling tower systems were constructed to supply cooling water to these operations: EAF/LMF Cooling Tower, Caster Cooling Tower, and Caster Spray Water Cooling Tower. Drift eliminators are used to reduce PM emissions.

A total capacity of 15,700 GPM was installed.

(k) Fugitive Dust Sources (EUG-08)

There are two primary fugitive dust sources: unpaved roads and slag processing. Roads are treated with water or chemicals to minimize dust due to vehicle traffic. The facility has also been paving some previously unpaved areas to reduce dust emissions.

The slag is comprised mostly of lime, and phosphorus and sulfur compounds (impurities in steel). Slag processing takes EAF and LMF slag from pits under the furnaces and removes steel so that the slag may be used as an aggregate byproduct. After steel is removed, the residual solids are crushed, screened, and conveyed to storage prior to shipment. The slag processing operation is stated at 100 TPH up to 63,600 TPY.

(l) Melt Shop Emergency Generator (EUG-09)

Mid American has installed an emergency generator. The original permit called for a 1,200-hp unit, but an 1,850-hp unit was ultimately installed. The manufacture date was 2002, which pre-dates NSPS Subpart IIII. Mid American installed a 64-HP Generac RDO48 emergency generator in 2022 that is subject to NSPS Subpart IIII.

SECTION III. PERMIT HISTORY

Permits	Date Issued	Description
2016-1166-TVR (M-2)	11/28/2022	Minor modification to add a small emergency generator (EG-2 in EUG-09) to IT building.
2016-1166-TVR	1/9/2018	First TV permit renewal
2003-106-C (M-2)(PSD)	8/8/2017	Modified PSD construction permit for melt shop (revised heater sizes)
2011-532-TV	5/3/2012	Initial TV operating permit for melt shop
2003-106-C (M-1)(PSD)	9/8/2008	Initial PSD construction permit for melt shop
2003-106-O	1/3/2005	Minor operating permit: wire drawing operation
2003-106-C	3/25/2002	Minor construction permit: wire drawing operation

SECTION IV. REQUESTED CHANGES

- One silo previously used for carbon will now handle lime (EU MDSILO in EUG-05). PM emissions are unchanged.

- Two cooling towers at the Rod Mill have been removed (RCT-5 and RCT-6 in EUG-11).

SECTION V. EQUIPMENT

EUG 01 Melt Shop

EU ID#	Point ID#	EU Name/Model	Construction Date
MEAF-2	EAFBH1 EAFBH2	Electric Arc Furnace (EAF) No. 2	2008
MFUG	MFUG	Melt Shop Uncaptured EAF emissions	2008

EUG 02 LMF Refining

EU ID#	Point ID#	EU Name/Model	Construction Date
MLMF	LMFBH	Ladle Metallurgy Furnace	2008

EUG 03 Billet Casting

EU ID#	Point ID#	EU Name/Model	Construction Date
MCAS	CASBH	Continuous Caster & Cut-off Torch	2008

The LMF baghouse and Caster baghouse discharge to a common stack.

EUG 04 Melt Shop Gas Burners

EU ID#	Point ID#	EU Name/Model	Construction Date
MLHTR	LHTR	Ladle Preheaters (Three 5.0 MMBTUH gas-fired)	2008
MLDRY	EAFBH1/2	Ladle Dryers/Heaters (Two 5.0 MMBTUH gas-fired)	2008
MTHTR	CASBH (common stack with LMFBH)	Tundish Preheaters (Two 3.0 MMBTUH gas-fired)	2010
MTDRY	EAFBH1/2	Ladle Preheaters (One 1.5 MMBTUH gas-fired)	2010

Each ladle preheater (MLHTR) discharges through its own natural draft stack, ladle dryers/heaters (MLDRY) and tundish dryer (MTDRY) discharge through the EAF baghouses, and tundish preheaters (MTHTR) discharge through the caster baghouse.

EUG 05 Melt Shop Materials Storage

EU ID#	Point ID#	EU Name/Model	Construction Date
MLSILO	SILO1	Lime Silos (Two)	2011
MDSILO2	SILO2	Lime Silo	2017

EUG 06 Melt Shop Dust Handling

EU ID#	Point ID#	EU Name/Model	Construction Date
MDH	DHB	EAF Dust Handling & Trailer Enclosure	2010

EUG 07 Melt Shop Cooling Towers

EU ID#	Point ID#	EU Name/Model	Construction Date
MNCT-1	MCT1	EAF/LMF Cooling Tower (10,000 gpm)	2008
MNCT-2	MCT2	Caster Cooling Tower (4,000 gpm)	2008
MCCT-3	MCT3	Caster Spray Water Cooling Tower (1,700 gpm)	2008

EUG 08 Melt Shop Fugitive Dust

EU ID#	Point ID#	EU Name/Model	Construction Date
MURD-A	--	Unpaved Roads, Scrap Trucks	2008
MURD-B	--	Unpaved Roads, Commodity and Billet Trucks	2008
MURD-C	--	Unpaved Roads, Slag Haulers	2008
SLAG	--	Slag Processing	2008

EUG 09 Melt Shop Emergency Generator

EU ID#	Point ID#	EU Name/Model	Construction Date
EG-1	EG-1	1,850-hp Emergency Generator (Detroit Diesel Model T1237K16)	2010
EG-2	EG-2	64-HP Generac RDO48	2022

EUG 10 Rod Mill Billet Reheat Furnace

EU ID#	Point ID#	EU Name/Model	Construction Date
RBRF	BRF	Rod Mill Billet Reheat Furnace (74 MMBTUH)	2003

EUG 11 Rod Mill Cooling Towers

EU ID#	Point ID#	EU Name/Model	Construction Date
RCCT-1	RCT-1	Rolling Mill Contact Water Cooling Towers (4,500 gpm total)	2003/2011/ 2022
RNCT-2	RCT-2	Stelmor Conveyor Noncontact Water Cooling Tower (1,600 gpm)	2003
RNCT-3	RCT-3	Billet Reheat Furnace Cooling Tower (800 gpm)	2003
RNCT-4	RCT-4	Chiller Cooling Tower (800 gpm)	2003

EUG 12 Fuel Storage Tanks

EU ID#	Point ID#	EU Name/Model	Construction Date
T03-D	T03-D	Diesel Fuel Tank, 900-gallons	2010
T04-D	T04-D	Diesel Fuel Tank, 6,000-gallons	2011
T06-D	T06-D	Diesel Fuel Tank, 6,000-gallons	2021

EUG 12A Gasoline Storage Tank

EU ID#	Point ID#	EU Name/Model	Construction Date
T02-G	T02-G	Gasoline Fuel Tank, 2,000-gallons	2011

SECTION VI. EMISSIONS

Emissions from the new and existing equipment were calculated using the following factors:

EUG 01 Melt Shop

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
EAFBH-1 EAFBH-2	Electric Arc Furnace (70 TPH 476,966 DSCFM)	PM_{10} / $PM_{2.5}$	0.0018 gr/DSCF	BACT
		CO	3.0 lb/ton	Emissions data from other mills and BACT determinations
		NOx	0.3 lb/ton	
		SO_2	0.3 lb/ton	
		VOC	0.3 lb/ton	
		Pb	2% of PM	
	Uncaptured PM	PM_{10}	1.4 lb/ton (0.5% uncaptured,76% PM_{10})	AP-42 (10/86) Section 12.5
		Pb	2% of PM	

EUG 02 LMF Refining

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
LMFBH (common stack with CASBH)	Ladle Metallurgical Furnace (70 TPH, 37,176 DSCFM)	PM_{10} / $PM_{2.5}$	0.002 gr/DSCF	BACT
		CO	0.10 lb/ton	Emissions data from other mills and BACT determinations
		NOx	0.05 lb/ton	
		SO_2	0.05 lb/ton	
		VOC	0.035 lb/ton	
		Pb	0.5% of PM	

EUG 03 Billet Casting

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
CASBH (common stack with LMFBH)	Caster & Cut-off Baghouse, Cut-off Torch (70 TPH, 23,000 DSCFM, 1.5 MMBTUH)	PM_{10} / $PM_{2.5}$	0.002 gr/DSCF	PM_{10}: baghouse manufacturer; combustion from AP-42 (7/00), Section 1.4; VOC from lubricant usage from stack testing
		CO	0.084 lb/MMBTU	
		NOx	0.10 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU 8.1% of lube usage	
		Pb	0.5% of PM	

EUG 04 Melt Shop Gas Burners

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
LHTR	Ladle Preheaters (3 Heaters, Each 5.0 MMBTUH)	PM_{10} / $PM_{2.5}$	0.0076 lb/MMBTU	AP-42 (7/00), Section 1.4
		CO	0.084 lb/MMBTU	
		NOx	0.10 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU	
EAFBH-1 EAFBH-2	Ladle Dryers/Heaters (2 Heaters, Each 5.0 MMBTUH)	PM_{10} / $PM_{2.5}$	0.0076 lb/MMBTU	AP-42 (7/00), Section 1.4
		CO	0.084 lb/MMBTU	
		NOx	0.10 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU	
CASBH (common stack with LMFBH)	Tundish Preheaters (2 Heaters, Each 3.0 MMBTUH)	PM_{10} / $PM_{2.5}$	0.0076 lb/MMBTU	AP-42 (7/00), Section 1.4
		CO	0.084 lb/MMBTU	
		NOx	0.10 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU	
EAFBH-1 EAFBH-2	Tundish Dryer (1.5 MMBTUH)	PM_{10} / $PM_{2.5}$	0.0076 lb/MMBTU	AP-42 (7/00), Section 1.4
		CO	0.084 lb/MMBTU	
		NOx	0.10 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU	

EUG 05 Melt Shop Materials Storage

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
SILO1	Lime Silos (600 SCFM)	PM_{10} / $PM_{2.5}$	0.005 gr/DSCF	Bin vent guarantee
SILO2	Lime Silo (600 SCFM)	PM_{10} / $PM_{2.5}$	0.005 gr/DSCF	Bin vent guarantee

EUG 06 Melt Shop Dust Handling

Emission Point	Operation	Pollutant	Emission Factor	Factor Reference
DHB	EAF Dust Handling & Trailer Enclosure	PM_{10} / $PM_{2.5}$	0.04 gr/DSCF	Performance estimate

EUG 07 Melt Shop Cooling Towers

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
MCT1	EAF/LMF Cooling Tower (10,000 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 1,000 ppm TDS	Drift eliminator performance
MCT2	Caster Cooling Tower (4,000 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 1,000 ppm TDS	Drift eliminator performance

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
MCT3	Caster Spray Water Cooling Tower (1,700 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 2,000 ppm TDS	Drift eliminator performance

Note: some of the water is re-used, resulting in higher TDS concentrations for some operations.

EUG 08 Melt Shop Fugitive Dust

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
Unpaved Roads	Scrap Trucks (135 trips per day, 0.52 mile/trip)	PM_{10} / $PM_{2.5}$	0.21 lb/mile / 0.021 lb/mile	AP-42 (11/06), Section 13.2.2
	Commodity & Billet Trucks (155 trips per day, 0.37 mile/trip)	PM_{10} / $PM_{2.5}$	0.15 lb/mile / 0.015 lb/mile	
	Slag Haulers (46 trips per day, 0.22 mile/trip)	PM_{10} / $PM_{2.5}$	0.23 lb/mile / 0.023 lb/mile	
Slag Processing	100 TPH, 63,600 tons per year	PM_{10} / $PM_{2.5}$	0.0021 lb/ton / 0.0012 lb/ton	AP-42 (1/95), Section 11.19.2

EUG 09 Melt Shop Emergency Generator

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
EG-1	1,850-hp Diesel Engine (500 hours per year)	PM_{10} / $PM_{2.5}$	0.0007 lb/hp-hr	AP-42 (10/96), Section 3.4
		CO	0.0055 lb/ hp-hr	
		NOx	0.013 lb/ hp-hr	
		SO_2 *	0.00809 lb/ hp-hr*%S	
		VOC	0.00064 lb/ hp-hr	
EG-2	64-HP Diesel Engine (500 hours per year)	PM_{10} / $PM_{2.5}$	0.14 g/kW-hr	EPA Engine Database
		CO	0.6 g/kW-hr	
		NOx	3.44 g/kW-hr	
		SO_2 *	0.00809 lb/hp-hr*%S	
		VOC	0.11 g/kW-hr	

* based on 15 ppm sulfur in fuel.

EUG 10 Rod Mill Billet Reheat Furnace

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
BRF	Reheat Furnace (74 MMBTUH)	PM_{10} / $PM_{2.5}$	0.0076 lb/MMBTU	AP-42 (7/00), Section 1.4 for all but NOx; NOx from Subch. 33 limit
		CO	0.084 lb/MMBTU	
		NOx	0.20 lb/MMBTU	
		SO_2	0.0006 lb/MMBTU	
		VOC	0.0055 lb/MMBTU	

EUG 11 Rod Mill Cooling Towers

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
RCT1	Rolling Mill Contact Water Cooling Tower (4,500 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 2,000 ppm TDS	Drift eliminator performance
RCT2	Stelmor Conveyor Noncontact Water Cooling Tower (1,600 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 1,000 ppm TDS	Drift eliminator performance
RCT3	Billet Reheat Furnace Cooling Tower (800 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 1,000 ppm TDS	Drift eliminator performance
RCT4	Chiller Cooling Tower (800 gpm)	PM_{10} / $PM_{2.5}$	0.005% drift, 1,000 ppm TDS	Drift eliminator performance

EUG 12 Fuel Storage Tanks

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
T03-D	Diesel Fuel Tank, 900-gallons	VOC	TANKS4.0	TANKS4.0
T04-D	Diesel Fuel Tank, 6,000-gallons	VOC	TANKS4.0	TANKS4.0
T06-D	Diesel Fuel Tank, 6,000-gallons	VOC	TANKS4.0	TANKS4.0

EUG 12A Gasoline Storage Tank

Emission Point	Operation	Pollutant	Emission Factors	Factor Reference
T02-G	Gasoline Fuel Tank, 2,000-gallons	VOC	TANKS4.0	TANKS4.0

SUMMARY OF CRITERIA EMISSIONS

Emission Unit	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EAF No. 2	7.36	32.23	21.00	72.00	21.00	72.00	21.00	72.00	210.00	720.00
Uncaptured Meltshop PM	0.37	1.28	--	--	--	--	--	--	--	--
Ladle Metallurgical Furnace & Caster & Cut-off Torch	1.03	4.52	3.50	12.00	3.65	12.64	3.88	13.30	7.12	24.54
Ladle Preheaters	0.11	0.49	0.01	0.04	1.47	6.44	0.08	0.35	1.24	5.41
Ladle Dryer/Heater (to EAFBH)*	0.08	0.33	0.01	0.03	0.98	4.29	0.05	0.24	0.82	3.61

Emission Unit	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Tundish Preheaters (to CASBH)*	0.04	0.20	0.01	0.03	0.59	2.58	0.03	0.14	0.49	2.16
Tundish Dryer (to EAFBH)*	0.01	0.05	0.01	0.01	0.15	0.64	0.01	0.04	0.12	0.54
Lime Silo	0.03	0.11	--	--	--	--	--	--	--	--
Lime Silo	0.03	0.11	--	--	--	--	--	--	--	--
EAF Dust Handling & Trailer Enclosure	0.01	0.01	--	--	--	--	--	--	--	--
EAF Cooling Tower	0.22	0.93	--	--	--	--	--	--	--	--
Caster Cooling Tower	0.09	0.37	--	--	--	--	--	--	--	--
Caster Spray Cooling Tower	0.06	0.24	--	--	--	--	--	--	--	--
MS Unpaved Roads	1.02	3.56	--	--	--	--	--	--	--	--
Slag Processing	0.19	0.07	--	--	--	--	--	--	--	--
Emergency Generator EG-1	1.30	0.32	0.02	0.01	24.05	6.01	1.19	0.3	10.18	2.54
Emergency Generator EG-2	0.01	0.01	0.01	0.01	0.09	0.02	0.01	0.01	0.07	0.02
Billet Reheat Furnace	0.55	2.42	0.04	0.19	16.06	64.82	0.4	1.75	6.09	26.69
Rolling Mill Cooling Tower	0.21	0.92	--	--	--	--	--	--	--	--
Stelmor Conveyor Cooling Tower	0.04	0.18	--	--	--	--	--	--	--	--
Billet Reheat Furnace Cooling Tower	0.02	0.09	--	--	--	--	--	--	--	--
Chiller Cooling Tower	0.02	0.09	--	--	--	--	--	--	--	--
Hydraulic Pump Cooling Tower	0.01	0.02	--	--	--	--	--	--	--	--
Compactor Cooling Tower	0.01	0.01	--	--	--	--	--	--	--	--
Fuel Storage	--	--	--	--	--	--	--	0.25	--	--
TOTALS*	**12.68**	**47.97**	**24.60**	**84.31**	**67.95**	**169.42**	**26.64**	**88.37**	**236.06**	**785.5**

* The heater PM emissions directed to baghouses are not additive to the baghouse PM rates, which are based on outlet grain loading performance. Heater gaseous pollutants are additive to the baghouse prime emission units.

Hazardous Air Pollutants

Since steel is cast into billets without sand molds, HAP emissions are minimal. Assuming a worst-case of 2% HAP in metal processed, 2% of the 37 TPY PM emissions from the metal furnaces would be HAP, or 0.7 TPY. This is less than the major source threshold of 10 TPY of any one HAP.

Total VOC emissions from the emergency generator are 0.30 TPY, which also is less than the major source threshold for formaldehyde of 10 TPY.

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions were calculated using the factors of 40 CFR Part 98, Subpart C for stationary fuel combustion and Subpart Q for iron and steel production. Potential emissions are 93,374 TPY CO_2e.

SECTION VII. INSIGNIFICANT ACTIVITIES

Insignificant activities are listed in OAC 252:100-8, Appendix I. Insignificant activities identified and justified in the application are listed below. Any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

- Space heaters, boilers, process heaters and emergency flares less than or equal to 5 MMBTU/hr heat input (commercial natural gas). The facility includes numerous gas-fired heaters which are smaller than 5 MMBTUH. However, since these units are subject to BACT, they will not be among the "insignificant activities."

- * Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period. The plant has equipment for dispensing gasoline and diesel. The facility operates diesel and gasoline storage tanks used to fuel plant vehicles/equipment. However, since NESHAP Subpart CCCCCC now affects the gasoline tank, it ceased to be an "insignificant activity."

- * Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. The facility includes three small diesel storage tanks.

- Bulk gasoline or other fuel distribution with a daily average throughput less than 2,175 gallons per day, including dispensing, averaged over a 30-day period. This item re-states the gasoline and diesel fueling operation for company vehicles.

- * 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. This category repeats the diesel storage tank.

- Cold degreasing operations utilizing solvents that are denser than air. However, degreasing is conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

- Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. However, welding is conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

- Hazardous waste and hazardous materials drum staging areas. The facility includes a hazardous waste staging area for drummed waste.

- Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift station).

- Hand wiping and spraying of solvents from containers with less than or equal to 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas. Spot cleaning is conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

- * Activities having the potential to emit no more than 5 TPY (actual emissions) of any criteria pollutant. No additional activities listed but may be used in the future.

SECTION VIII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Applicable]

Potential emissions for NO_X, CO, VOC, and PM_{10}, are greater than the major source threshold for this source category. Any emission increases from future modifications must be evaluated for PSD in terms of the significant emission rates. Full PSD review for initial construction was conducted in accordance with Part 7 of OAC 252:100-8.

NSPS, 40 CFR Part 60 [Subparts AAa and IIII Applicable]

Subpart AAa, Steel Plants: Electric Arc Furnaces (EAF) applies to EAF and dust handling systems which are installed or modified after September 17, 1983. Discharges from EAFs are limited to 0.0052 gr/DSCF and 3% opacity. Shops containing affected facilities are limited to 6% opacity, and dust-handling systems are limited to 10% opacity. A COMS is required on the baghouse unless the operator (1) conducts daily Method 9 VE readings, and (2) installs bag leak detectors. All applicable requirements have been incorporated into the permit.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines, affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. An emergency engine was acquired which was manufactured in 2002 and pre-dates this regulation. The engine EG-2 is subject to emergency engine standards of Subpart IIII.

2007 model year and later emergency CI ICE with a maximum engine power less than or equal to 3,000-hp with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the Tier 2 or Tier 3 emission standards for new nonroad CI engines as described in 40 CFR Part 1039, Appendix I, for all pollutants, and the smoke standards as specified in §1039.105.

Table 2 to Appendix I - Tier 3 Emission Standards (g/kW-hr)

Rated power (kW)	Model year	NO_X+NMHC	CO	PM
37 ≤ kW < 75	>2008	4.7	5.0	0.40

Smoke from the CI-ICE may not exceed the following standards:

§ 1039.105(b)(1) 20 percent during the acceleration mode.
§ 1039.105(b)(2) 15 percent during the lugging mode.
§ 1039.105(b)(3) 50 percent during the peaks in either the acceleration or lugging modes.

Beginning October 1, 2010, owners and operators of CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel (i.e., a maximum sulfur content of 15 ppmw).

The owner or operator of an emergency CI-ICE, that does not meet the standards applicable to non-emergency engines for the applicable model year, must install a non-resettable hour meter prior to startup of the engine. The owner or operator must keep records of the operation of the emergency CI-ICE in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. All applicable requirements have been incorporated into the permit.

The facility is also not an affected source under the following NSPS subparts for metallurgical operations since it does not fall into one of the affected categories.

- Subpart L: secondary lead operations
- Subpart N: basic oxygen furnaces
- Subpart Na: basic oxygen furnaces
- Subpart Q: secondary zinc operations
- Subpart P: secondary copper operations.
- Subpart R: primary lead operations
- Subpart S: aluminum reduction
- Subpart Z: ferroalloy production
- Subpart KK: lead-acid batteries
- Subpart KKa: lead-acid batteries

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, coke oven emissions, radionuclides or vinyl chloride. The facility emits mercury but it is not one of the applicable sources and is, therefore, exempt from this part.

NESHAP,40 CFR Part 63 [Subparts ZZZZ, YYYYY and CCCCCC are Applicable]
Subpart XXX, Ferromanganese and Silicomanganese Alloys. This facility will not produce products with this composition.
Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions. Engine EG-2 is subject to NSPS Subpart IIII and complies with Subpart ZZZZ by complying with Subpart IIII. The 1,850-hp emergency generator engine was constructed prior to June 12, 2006 and is

considered an existing stationary emergency source. A summary of the requirements for existing CI RICE located at this facility is shown below.

Engine Category	**Normal Operation[1] @ 15% O_2**
Existing Emergency, CI RICE & Black Start CI RICE	Change oil and filter every 500 hours of operation or annually, whichever one comes first; Inspect air cleaner every 1,000 hours of operation or annually, whichever one comes first; and Inspect all hoses and belts every 500 hours of operation or annually, whichever one comes first and replace as necessary.

[1] During Startup - Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Sources have the option to utilize an oil analysis program in order to extend the specified oil change requirements of this subpart. Initial compliance demonstrations must be conducted within 180 days after the compliance date. Owners and operators of a non-operational engine can conduct the initial compliance demonstration when the engine is started up again.

Other applicable requirements include:

1) The owner/operator must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
2) Existing emergency stationary RICE located at an area source of HAP emissions must install a non-resettable hour meter if one is not already installed.
3) Fuel sulfur limits for CI RICE.

All applicable requirements have been incorporated into the permit.

Subpart EEEEE, Iron and Steel Foundries. This subpart affects only foundry operations at major sources of HAPs; the Mid American facility is an "area" source.

Subpart YYYYY, Electric Arc Furnaces: Area Sources. This subpart affects EAF steelmaking facilities. The operator is required to follow a pollution prevention plan to inspect scrap, removing chlorinated plastics, free organic materials, and lead; alternatively, the facility must not charge scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing PCBs, lead-containing components, chlorinated plastics, or free organic liquids. Mercury switches must be removed from scrap before charging to the EAFs. Electric arc furnaces and argon-oxygen decarburation vessels are limited to 0.0052 gr/DSCF PM and 6% opacity. The BACT requirements are more stringent than these area source MACT standards. All applicable requirements have been incorporated into the permit.

Subpart CCCCCC, Gasoline Dispensing Facilities. This subpart establishes emission limitations and management practices for HAP emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF) located at an area source. GDF means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

If a GDF has a monthly throughput of less than 10,000 gallons of gasoline, the operator must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

1) Minimize gasoline spills;
2) Clean up spills as expeditiously as practicable;
3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

All applicable requirements have been incorporated into the permit.

Subpart JJJJJJ, Commercial and Institutional Boilers. This subpart affects new and existing boilers located at area sources of HAP, except for gas-fired boilers. The gas-fired heaters are not among the types of units regulated by Subpart JJJJJJ.

Compliance Assurance Monitoring, 40 CFR Part 64 [Applicable]

Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source, that is required to obtain a Title V permit, if it meets all 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 greater than major source thresholds.

Baghouse particulate control devices are used on the EAFs, LMF, and Continuous Caster. The baghouses on the EAFs and LMF have potential pre-control device emissions exceeding the applicability threshold and are subject to this part, but have controlled emission limits less than the major source threshold and are not “large pollutant-specific emissions units”.

CAM plans were required at renewal of the operating permit. The two EAF baghouses are on units which are subject to NSPS and MACT standards, therefore monitoring under those standards is presumptively-acceptable for monitoring under CAM. Presumptively acceptable monitoring includes continuous emission, opacity, or predictive emission monitoring systems that satisfy applicable monitoring requirements and performance specifications. Although the NSPS allows for a continuous opacity monitoring system, which would ensure the performance of the baghouse and meet established monitoring requirements and performance specifications, it is not required if the facility does daily VE observations or the facility operates a bag leak detection system. A bag leak detection system is required to be equipped with an alarm system and have a site specific monitoring plan. The bag leak detection system would be considered a continuous monitoring system that ensured performance of the baghouse and it would be required to meet specific monitoring requirements and performance specifications.

The potential uncontrolled emissions from the caster operations does not exceed the applicability threshold. CAM plans for the LMF baghouse have been incorporated into the permit from Permit No. 2016-1166-TVR.

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: *http://www.epa.gov/rmp/*.

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).
Subpart A 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.
Subpart F 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 IX. 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]
Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees) [Applicable]
The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the AQD. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 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, or
- 2 TPY of any one HAP or 5 TPY of multiple HAP or 20 percent of any threshold less than 10 TPY for single HAP that the EPA may establish by rule.

This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Title V operating permit is required. Emission limitations for all the sources are taken from the permit application and previous permit.

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 252:100-19 (Particulate Matter) [Applicable]
This subchapter specifies maximum allowable emissions of particulate matter (PM) based on rated heat input. All fuel-burning units are in compliance with their applicable limits.

Unit ID	Description	Equipment Capacity MMBTU/hr	Allowable Emission Rate lb/MMBTU	Emission Rate lb/MMBTU
MLHTR	Ladle preheaters (3)	5.0	0.6	0.0076
MLDRY	Ladle dryers / heaters (2)	5.0	0.6	0.0076
MTHTR	Tundish preheaters (2)	3.0	0.6	0.0076
MTDRY	Tundish dryer (1)	1.5	0.6	0.0076
BRF	Billet reheat furnace	74	0.38	0.0076
EG-1	Emergency generator	14.8	0.58	0.0988
EG-2	Emergency generator	0.51	0.6	0.0988

This subchapter also specifies the allowable rates of emissions from industrial processes based on process rate. The following table lists the applicable processes, their process weight rate, and allowable emissions rate. As shown, all units are in compliance with their applicable emission limits.

Unit ID	Process	Process Rate (TPH)	Allowable Emission Rate (lb/hr)	Controlled Emission Rate (lb/hr)
MEAF-2	No. 2 electric arc furnace	70	47.77	7.36
MLMF	Ladle metallurgical furnace	70	47.77	1.03
SLAG	Slag processing	100	51.28	0.53
MCT1	EAF / LMF	2,490	90.00	0.22
MCT2	Caster	1,000	77.59	0.09
MCT3	Caster water spray	425	67.03	0.06
RCT1	Rolling mill	1,126	79.13	0.21
RCT2	Stelmor conveyor	400	66.32	0.04
RCT3	Billet reheat	200	58.52	0.02
RCT4	Chiller	200	58.52	0.02

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20 percent 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 percent opacity. Units subject to an opacity standard under NSPS or NESHAP are exempt from this subchapter, including the two EAFs and the LMF.

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. The primary sources of fugitive dust are unpaved roads and slag processing. This permit also requires that reasonable precautions be taken to minimize fugitive dust.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. The permit requires the use of pipeline natural gas with a sulfur content less than 0.5 gr/100 SCF to ensure compliance with Subchapter 31. For liquid fuels for the emergency generator, Part 5 limits SO_2 emissions to 0.8 lb/MMBTU. Using diesel fuel with 15 ppmw sulfur, SO_2 emissions will be 0.0015 lb/MMBTU. This emission rate is in compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides) [Applicable]
The rule affects NOx emissions from new fuel-burning equipment with a rated heat input of 50 MMBTUH or more. This facility has several fuel-burning units, but only one of which exceeds the threshold: the Billet Reheat Furnace at 74 MMBTUH. The calculated NOx emissions from this furnace are 0.20 pounds per MMBTU which is in compliance with the standard of 0.20 pounds per MMBTU.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
This subchapter affects the following processes: foundry cupola, blast furnace, basic oxygen furnace, and catalytic cracking unit. The EAF and LMF furnaces are not among the types of equipment regulated by Subchapter 35.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]
Part 3 requires new (constructed after December 28, 1974) storage tanks with a capacity between 400 and 40,000 gallons holding an organic liquid with a true vapor pressure greater than 1.5 psia to be operated with a submerged fill pipe. This requirement affects the 2,000-gallon gasoline tank. The diesel tank has a vapor pressure below the 1.5 psia threshold.
Part 5 limits the VOC content of paints and coatings. There are no coating lines at this facility.
Part 7 requires fuel-burning equipment to be cleaned, operated, and maintained so as to minimize VOC emissions. Based on manufacturer's data and good engineering practice, the equipment must not be overloaded and temperature and available air must be sufficient to provide essentially complete combustion. The permit will require compliance.

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 AOC has been designated 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.
Annual testing of CO emissions from the EAF baghouses is required.

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

OAC 252:100-8 Part 9	Major Sources Affecting Nonattainment Areas	not in area 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 252:100-29-2	Fugitive Dust/Nonattainment Areas	not in area category
OAC 252:100-39	Nonattainment Areas	not in area category
OAC 252:100-47	Landfills	not in source category

SECTION X. COMPLIANCE

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

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

Inspection Type	Date	Summary/Results
Full Compliance Evaluation	6/23/2022	One noncompliance identified that was resolved in Enforcement Case ID 10652, and case was closed on June 6, 2023.
Full Compliance Evaluation	5/15/2020	Four noncompliance issues identified that were resolved in Enforcement Case ID 10036, and case was closed on December 14, 2021.
Full Compliance Evaluation	3/23/2018	One noncompliance issue identified that was resolved in Enforcement Case ID 9455, and case was closed on June 11, 2019.

There have been no other enforcement actions since issuance of the last Title V renewal permit.

SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

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

The applicant published the "Notice of Filing a Tier II Application" in the *Madill Record* newspaper, a local newspaper in Marshall County on August 4, 2022. The notice stated that the application was available for review at the Madill City County Library in Marshall County, and also at the Air Quality Division's main office in Oklahoma City. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at http://www.deq.ok.gov.

The draft permit will be available for public review on the Air Quality section of the DEQ web page at *http*:/www.deq.ok.gov. The proposed permit will be sent to EPA for a 45-day review period.

This facility is located within 50 miles of the border of Oklahoma and Texas. That state will be notified of the draft permit. Tribal Nations will be notified of the draft permit.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of OAC 252:100-8-8(j) may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under OAC 252:100-8-8(j), the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under OAC 252:100-8-8(j), the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

Environmental Justice Review

Environmental Justice is a federal initiative. Industrial facilities tend to be built on the cheapest land available. The surrounding population tends to be low-income citizens, and there tends to be a higher proportion of minorities in that surrounding area. Those low-income / minority citizens experience the highest impacts of air pollution coming from the adjacent industrial facilities.

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no population bears a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or from the execution of federal, state, and local laws; regulations; and policies. Meaningful involvement requires effective access to decision makers for all, and the ability in all communities to make informed decisions and take positive actions to produce environmental justice for themselves.

The following pages detail how the Department of Energy (DOE) implements environmental justice within the Department.

- Community Engagement Initiatives
- DOE Environmental Justice Documents and Publications
- DOE Environmental Justice Frequently Asked Questions
- DOE Environmental Justice Strategy Updates/Revisions
- History of Environmental Justice at the Department of Energy
- Place-based Initiatives
- Resources to Overburdened, Underserved, and Economically Distressed Communities
- Youth/Student Opportunities

EPA has prepared a screening tool, EJSCREEN, which incorporates census data to show the demographics adjacent to a facility. Eleven criteria have been identified to determine whether a disproportionate impact is occurring on nearby minority populations. When those impacts exceed the 80% percentile, additional public participation is warranted. The indexes in the EJ Screening tool to be considered are the following:

- Particulate Matter 2.5
- Ozone
- Diesel Particulate Matter
- Air Toxic Cancer Risk
- Air Toxic Respiratory Hazard Index
- Traffic Proximity
- Lead Paint, this addresses lead paint based on number of homes built <1960
- Superfund proximity
- Risk management plan (RMP) facility proximity
- Hazardous waste proximity
- Underground storage tanks (UST) and leaking UST (LUST)

The following table shows the EJSCREEN finding for a 1.5 mile buffer surrounding the location of the plant.

Criterion	**Screening Level of Concern**	**State Percentile**	**USA Percentile**
$PM_{2.5}$	80th Percentile	88	78
Ozone	80th Percentile	89	79
Diesel Particulate Matter	80th Percentile	84	72
Air Toxic Cancer Risk	80th Percentile	88	77
Air Toxic Respiratory Hazard Index	80th Percentile	88	78
Traffic Proximity	80th Percentile	91	73
Lead Paint	80th Percentile	74	85
Superfund Proximity	80th Percentile	79	63
Risk Management Plan Facility Proximity	80th Percentile	70	64
Hazardous Waste Proximity	80th Percentile	90	79
Underground storage tanks (UST) and leaking UST (LUST)	80th Percentile	84	74
Wastewater Discharge	80th Percentile	77	70
People of Color	80th Percentile	85	67

The facility exceeds 80th percentile on several items. Enhanced public review will be required.

SECTION XII. SUMMARY

The facility was constructed and is operated as described in the permit application and supplemental materials. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the permit is recommended, contingent on public and EPA review.

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

DRAFT

Mid American Steel & Wire Company **Permit No. 2022-0428-TVR2**
Madill Steel Mill

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on July 5, 2022. The Evaluation Memorandum, dated October 16, 2023, 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. Point of emissions and applicable emissions limitations. [OAC 252:100-8-6(a)(1)]

A. EUG 01 Melt Shop and EUG 04 Melt Shop Gas Burners

EU ID#	Point ID#	EU Name/Model	Construction Date
MEAF-2	EAFBH-1/2	Electric Arc Furnace (EAF) No. 2	2008
MFUG	MFUG	Melt Shop Uncaptured EAF emissions	2008
MLHTR	LHTR	Ladle Preheaters (Three 5.0 MMBTUH gas-fired)	2008
MLDRY	EAFBH-1/2	Ladle Dryers/Heaters (Two 5.0 MMBTUH gas-fired)	2008
MTHTR	LMFBH & CASBH	Tundish Preheaters (Two 3.0 MMBTUH gas-fired)	2010
MTDRY	EAFBH-1/2	Tundish dryer (One 1.5 MMBTUH gas-fired)	2010

Point ID	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EAFBH-1	7.36	32.23	21.01	72.02	22.13	76.94	21.06	72.27	210.95	724.15
EAFBH-2										
MFUG	0.37	1.28	--	--	--	--	--	--	--	--
LHTR	0.11	0.49	0.01	0.04	1.47	6.44	0.08	0.35	1.24	5.41

1. Discharges from the electric arc furnace emissions capture system shall be processed by a fabric filter or equivalent system which achieves 0.0018 gr/DSCF PM emissions (filterable PM). The fabric filter system consists of Baghouse No. 1 (West) and Baghouse No. 2 (East). [40 CFR § 60.270a - § 60.276a]
2. The electric arc furnace is subject to 40 CFR Part 60, Subpart AAa, and shall comply with all applicable provisions
   a. Applicability and designation of affected facility. [40 CFR § 60.270a]
   b. Definitions [40 CFR § 60.271a]
   c. Standard for particulate matter [40 CFR § 60.272a]
   d. Emissions monitoring [40 CFR § 60.273a]
   e. Monitoring of operations [40 CFR § 60.274a]
   f. Test methods and procedures [40 CFR § 60.275a]
   g. Recordkeeping and reporting requirements [40 CFR § 60.276a]

3. Compliance Assurance Monitoring requirements and specifications for stacks EAFBH-1 and EAFBH-2: [40 CFR § 64.1 - § 64.9]
   a. § 64.1 Definitions.
   b. § 64.2 Applicability.
   c. § 64.3 Monitoring design criteria.
   d. § 64.6 Approval of monitoring.
   e. § 64.7 Operation of approved monitoring.
   f. § 64.8 Quality improvement plan (QIP) requirements.
   g. § 64.9 Reporting and recordkeeping requirements.

B. EUG 02 LMF Refining and EUG 03 Billet Casting

EU ID#	Point ID#	EU Name/Model	Construction Date
MLMF	LMFBH	Ladle Metallurgy Furnace	2008
MCAS	CASBH	Continuous Caster & Cut-off Torch	2008

Point ID	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
LMFBH & CASBH	1.03	4.52	3.50	12.02	4.24	15.22	3.91	13.44	7.62	26.71

1. Discharges from this unit shall be processed by a fabric filter or equivalent system which achieves 0.002 gr/DSCF PM emissions. [OAC 252:100-8-6]
2. Compliance Assurance Monitoring requirements and specifications: [40 CFR § 64.1 - § 64.9]
   a. § 64.1 Definitions.
   b. § 64.2 Applicability.
   c. § 64.3 Monitoring design criteria.
   d. § 64.6 Approval of monitoring.
   e. § 64.7 Operation of approved monitoring.
   f. § 64.8 Quality improvement plan (QIP) requirements.
   g. § 64.9 Reporting and recordkeeping requirements.

	Indicator 1	Indicator 2	Indicator 3
Indicator	Visible emissions	Baghouse pressure differential	Reference method stack tests
Measurement Approach	EPA Method 9 of 40 CFR 60, Appendix A	Differential pressure transducer or manometer	Emissions testing using Methods 1-5 or Method 5D

	Indicator 1	Indicator 2	Indicator 3
Indicator Range	An excursion is defined as a 6-minute average above 3% opacity. Excursions trigger an inspection, corrective actions, and a reporting requirement.	An excursion is defined as a 1-hour average pressure differential below 2 inches water column or above 7 inches. Excursions trigger an inspection, corrective actions, and a reporting requirement.	An excursion is defined as a PM test result above 0.002 gr/DSCF. Excursions trigger an inspection, corrective actions, and a reporting requirement.
Data Representativeness Performance Criteria	Method 9 tester shall be certified in Method 9.	The differential pressure gauge monitors the static pressures upstream and downstream of the baghouse.	Follow procedures of Methods 1-5.
QA/QC Practices and Criteria	Per Method 9.	Monthly comparison to U-tube manometer. Acceptability criterion is 0.5 inches WC.	Follow procedures of Methods 1-5.
Monitoring Frequency	At least once per operating day.	Pressure differential is monitored at least once every shift.	Every 5 years
Data Collection Procedure	Opacity observations recorded on Method 9 forms.	Recorded on paper sheets or electronic database.	Follow procedures of Methods 1-5.
Averaging Period	6-minutes	12-hours (or shift period)	At least 3-hours

C. EUG 05 Melt Shop Materials Storage

EU ID#	Point ID#	EU Name/Model	PM_{10} / $PM_{2.5}$	
			lb/hr	TPY
MLSILO	SILO1	Lime Silos	0.03	0.11
MDSILO2	SILO2	Lime Silo	0.03	0.11

1. Discharges from these units shall be processed by a fabric filter or equivalent system which achieves 0.005 gr/DSCF PM emissions. [OAC 252:100-8-6]

D. EUG 06 Melt Shop Dust Handling

EU ID#	Point ID#	EU Name/Model	PM_{10} / $PM_{2.5}$	
			lb/hr	**TPY**
MDH	DHB	EAF Dust Handling & Trailer Enclosure	0.01	0.01

1. Discharges from these units shall be processed by a fabric filter or equivalent system which achieves 0.04 gr/DSCF PM emissions.
2. The EAF dust handling system is subject to 40 CFR Part 60, Subpart AAa, and shall comply with all applicable provisions
   a. Applicability and designation of affected facility. [40 CFR § 60.270a]
   b. Definitions [40 CFR § 60.271a]
   c. Standard for particulate matter [40 CFR § 60.272a]
   d. Emissions monitoring [40 CFR § 60.273a]
   e. Monitoring of operations [40 CFR § 60.274a]
   f. Test methods and procedures [40 CFR § 60.275a]
   g. Recordkeeping and reporting requirements [40 CFR § 60.276a]

E. EUG 07 Melt Shop Cooling Towers

EU ID#	**Point ID#**	**EU Name/Model**	**PM_{10} / $PM_{2.5}$**	
			lb/hr	**TPY**
MNCT-1	MCT1	EAF/LMF Cooling Tower (10,000 gpm)	0.22	0.94
MNCT-2	MCT2	Caster Cooling Tower (4,000 gpm)	0.09	0.38
MCCT-3	MCT3	Caster Spray Water Cooling Tower (1,700 gpm)	0.06	0.25

1. The above units shall be constructed with drift eliminators designed to achieve 0.005% or better. [OAC 252:100-8-6]

F. EUG 08 Melt Shop Fugitive Dust

EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
MURD-A	--	Unpaved Roads, Scrap Trucks	2008
MURD-B	--	Unpaved Roads, Commodity and Billet Trucks	2008
MURD-C	--	Unpaved Roads, Slag Haulers	2008
SLAG	--	Slag Processing	2008

1. The permittee shall water or use chemicals on haul roads when necessary to control emissions of fugitive dust. [OAC 252:100-29]
2. Slag processing operations shall be conducted with wet materials. [OAC 252:100-29]

G. EUG 09 Melt Shop Emergency Generators

EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
EG-1	EG-1	1,850-hp Emergency Generator	2008
EG-2	EG-2	64-hp Emergency Generator	2022

Point ID	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EG-1	1.30	0.32	0.02	0.01	24.05	6.01	1.19	0.30	10.18	2.54
EG-2	0.01	0.01	0.01	0.01	0.09	0.02	0.01	0.01	0.07	0.02

1. The emergency generators shall be fueled with No. 2 diesel with a maximum of 15 ppm by weight sulfur.
2. The owner/operator shall comply with all applicable requirements of the NESHAP: Reciprocating Internal Combustion Engines, Subpart ZZZZ, for each affected facility including but not limited to: [40 CFR §§ 63.6580 through 63.6675]
   a. § 63.6580 What is the purpose of subpart ZZZZ?
   b. § 63.6585 Am I subject to this subpart?
   c. § 63.6590 What parts of my plant does this subpart cover?
   d. § 63.6595 When do I have to comply with this subpart?
   e. § 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
   f. § 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?
   g. § 63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?
   h. § 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
   i. § 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
   j. § 63.6605 What are my general requirements for complying with this subpart?
   k. § 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
   l. § 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?
   m. § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
   n. § 63.6615 When must I conduct subsequent performance tests?
   o. § 63.6620 What performance tests and other procedures must I use?
   p. § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
   q. § 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

r. § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
s. § 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?
t. § 63.6645 What notifications must I submit and when?
u. § 63.6650 What reports must I submit and when?
v. § 63.6655 What records must I keep?
w. § 63.6660 In what form and how long must I keep my records?
x. § 63.6665 What parts of the General Provisions apply to me?
y. § 63.6670 Who implements and enforces this subpart?
z. § 63.6675 What definitions apply to this subpart?

3. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and shall comply with all applicable requirements including but not limited to the following: [40 CFR §§60.4200 – 60.4219]

a. § 60.4200 Am I subject to this subpart?
b. § 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?
c. § 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?
d. § 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?
e. § 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
f. § 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?
g. § 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?
h. § 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?
i. § 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?
j. § 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?
k. § 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?
l. §60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?
m. § 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?
n. § 60.4218 What parts of the General Provisions apply to me?
o. § 60.4219 What definitions apply to this subpart?

H. EUG 10 Rod Mill Billet Reheat Furnace

EU ID#	Point ID#	EU Name/Model	Construction Date
RBRF	BRF	Rod Mill Billet Reheat Furnace 74 MMBTUH	2003

Point ID	PM_{10} / $PM_{2.5}$		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
BRG	0.55	2.42	0.04	0.19	16.06	64.8	0.40	1.75	6.09	26.69

1. The Billet Reheat Furnace shall be fueled with pipeline-grade natural gas.

I. EUG 11 Rod Mill Cooling Towers The equipment items listed below are considered insignificant.

EU ID#	Point ID#	EU Name/Model	Construction Date
RCCT-1	RCT-1	Rolling Mill Contact Water Cooling Tower (4,500 gpm)	2003
RNCT-2	RCT-2	Stelmor Conveyor Noncontact Water Cooling Tower (1,600 gpm)	2003
RNCT-3	RCT-3	Billet Reheat Furnace Cooling Tower (800 gpm)	2003
RNCT-4	RCT-4	Chiller Cooling Tower (800 gpm)	2003

J. EUG 12 Fuel Storage Tanks The equipment items listed below are considered insignificant.

EU ID#	Point ID#	EU Name/Model	Construction Date
T03-D	T03-D	Diesel Fuel Tank, 900-gallons	2010
T04-D	T04-D	Diesel Fuel Tank, 6,000-gallons	2011
T06-D	T05-D	Diesel Fuel Tank, 6,000-gallons	2021

K. EUG 12 Gasoline Storage Tank

EU ID#	Point ID#	EU Name/Model	Construction Date
T02-G	T02-G	Gasoline Fuel Tank, 2,000-gallons	2011

1. The gasoline storage tank and related loading activities are subject to 40 CFR Part 63, Subpart CCCCCC, and shall comply with all applicable requirements.

[40 CFR §§60.4200 – 60.4219]

   a. § 63.11110 What is the purpose of this subpart?
   b. § 63.11111 Am I subject to the requirements of this subpart?
   c. § 63.11112 What parts of my affected source does this subpart cover?
   d. § 63.11113 When do I have to comply with this subpart?
   e. § 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
   f. § 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

g. § 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.
h. § 63.11120 What testing and monitoring requirements must I meet?
i. § 63.11124 What notifications must I submit and when?
j. § 63.11125 What are my recordkeeping requirements?
k. § 63.11126 What are my reporting requirements?
l. § 63.11130 What parts of the General Provisions apply to me?
m. § 63.11131 Who implements and enforces this subpart?
n. § 63.11132 What definitions apply to this subpart?

K. EUG 13 Rod Mill Fugitive Dust

EU ID#	Point ID#	EU Name/Model	Construction Date
RURD-D	--	Unpaved Roads, Rod Mill transport activities	2003

1. The permittee shall water or used chemicals on haul roads when necessary to control emissions of fugitive dust. [OAC 252:100-29]

2. The permittee shall be authorized to operate the 70-TPH, electric arc furnace continuously (24 hours per day, every day of the year) up to a production rate of 480,000 tons/yr of steel produced, 12-month rolling total. [OAC 252:100-8-6(a)]

3. Each baghouse shall be monitored at least daily for pressure differential. Alternatively, the permittee may install and calibrate bag leak sensors. If the pressure differential monitoring option is selected, the baghouses shall be operated in the following pressure differential ranges. [OAC 252:100-43]

Baghouse	Acceptable Pressure Differential Range, Inches Water
EAF Baghouse No. 1 (West) or 2 (East)	1 - 10
LMF Baghouse	2 – 7
Caster Baghouse	2 – 7

4. Except for units subject to opacity limitations of 40 CFR Part 60, Subpart AAa or 40 CFR Part 63, Subpart YYYYY, the opacity of any emission to the atmosphere shall not exceed 20% except for short-term occurrences not to exceed five minutes in any hour or 20 minutes in any 24-hour period; in no case shall opacity exceed 60%. [OAC 252:100-25]

5. Except for the emergency generator, the fuel-burning equipment shall only be fueled with pipeline quality natural gas. Pipeline-quality natural gas is subject (under Part 72) to a limit of 0.5 grains of total reduced sulfur (TRS) per 100 scf. Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill. Compliance shall be demonstrated at least once every calendar year. [OAC 252:100-31]

6. Pursuant to OAC 252:100-29, the permittee shall not 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 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]

7. The following records of operations 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.

   A. Amount of steel billets produced (monthly and cumulative annual).
   B. Pollution control device operating parameters (daily).
   C. For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 5.
   D. Records as required by 40 CFR Part 63, Subpart YYYYY.
   E. Records as required by 40 CFR Part 60, Subpart AAa.
   F. Records as required by 40 CFR Part 63, Subpart CCCCCC.
   G. Records as required by 40 CFR Part 63, Subpart ZZZZ.
   H. CAM records as required by 40 CFR Part 64.
   I. Records as required by 40 CFR Part 60, Subpart IIII.

8. At least once every year, the permittee shall conduct performance testing as follows and furnish a written report to Air Quality. A sampling protocol and notification of testing date(s) shall be submitted at least 30 days in advance of commencement of testing. The following USEPA methods shall be used for testing of emissions, unless otherwise approved by Air Quality: [OAC 252:100-43]

Method 1:	Sample and Velocity Traverses for Stationary Sources.
Method 2:	Determination of Stack Gas Velocity and Volumetric Flow Rate.
Method 3:	Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight.
Method 4:	Moisture in Stack Gases.
Method 10:	CO Emissions from Stationary Sources

9. The facility is subject to 40 CFR Part 63, Subpart YYYYY, and shall comply with all requirements including but not limited to the following:

   A. Am I subject to this subpart? [40 CFR § 63.10680]
   B. What are my compliance dates? [40 CFR § 63.10681]
   C. What are the requirements for the control of contaminants from scrap? [40 CFR § 63.10685]
   D. What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels? [40 CFR § 63.10686]
   E. What parts of the General Provisions apply to this subpart? [40 CFR § 63.10690]
   F. Who implements and enforces this subpart? [40 CFR § 63.10691]
   G. What definitions apply to this subpart? [40 CFR § 63.10692]

10. No later than 30 days after each anniversary date of the issuance of the initial Title V operating permit (May 3, 2012), 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. On issuance, Permit No. 2022-0428-TVR2 replaces and supersedes Permit No. 2016-1166-TVR (M-2); Permit No. 2016-1166-TVR (M-2) will be canceled.

12. This facility is considered an existing Prevention of Significant Deterioration (PSD) facility. As such, the facility is subject to the provisions of OAC 252:100-8-36.2(c) for any project as defined therein. [OAC 252:100-8-36.2(c)]

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. 2022-0428-TVR2

Mid American Steel & Wire Company, LLC

having complied with the requirements of the law, is hereby granted permission to operate a steel melting furnace and associated equipment at their steel and wire manufacturing facility at 1327 Smiley Road, Madill, Marshall County, subject to standard conditions dated July 21, 2016, and specific conditions, both attached.

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

DRAFT

Division Director, Air Quality Division **Date**

Mid American Steel & Wire
Attn: Mr. Mike Bain
P. O. Box 296
Madill, OK 73446

Re: Permit Application No. 2022-0428-TVR2
Steel Melt Shop (FAC ID 5553)
Madill, Marshall County, Oklahoma

Dear Mr. Bain:

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

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

Thank you for your cooperation in this matter. If we can be of further service, please contact our office at (405) 702-4100.

Sincerely,

DRAFT

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

Enclosures

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 air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

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

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
(5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

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

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

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]

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

ACFM	Actual Cubic Feet per Minute
AD	Applicability Determination
AFRC	Air-to-Fuel Ratio Controller
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
BBL	Barrel(s)
BHP	Brake Horsepower (bhp)
BTU	British thermal unit (Btu)
C&E	Compliance and Enforcement
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CAAA	Clean Air Act Amendments
CC	Catalytic Converter
CCR	Continuous Catalyst Regeneration
CD	Consent Decree
CEM	Continuous Emission Monitor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CI	Compression Ignition
CNG	Compressed Natural Gas
CO	Carbon Monoxide or Consent Order
COA	Capable of Accommodating
COM	Continuous Opacity Monitor
D	Day
DEF	Diesel Exhaust Fluid
DG	Demand Growth
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)
EGU	Electric Generating Unit
EI	Emissions Inventory
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EUG	Emissions Unit Group
EUSGU	Electric Utility Steam Generating Unit
FCE	Full Compliance Evaluation
FCCU	Fluid Catalytic Cracking Unit
FIP	Federal Implementation Plan
FR	Federal Register
GACT	Generally Achievable Control Technology
GAL	Gallon (gal)
GDF	Gasoline Dispensing Facility
GEP	Good Engineering Practice
GHG	Greenhouse Gases
GR	Grain(s) (gr)
H_2CO	Formaldehyde
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HC	Hydrocarbon
HCFC	Hydrochlorofluorocarbon
HFR	Horizontal Fixed Roof
HON	Hazardous Organic NESHAP
HP	Horsepower (hp)
HR	Hour (hr)
I&M	Inspection and Maintenance
IBR	Incorporation by Reference
ICE	Internal Combustion Engine
LAER	Lowest Achievable Emission Rate
LB	Pound(s) [Mass] (lb, lbs, lbm)
LB/HR	Pound(s) per Hour (lb/hr)
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LT	Long Ton(s) (metric)
M	Thousand (Roman Numeral)
MAAC	Maximum Acceptable Ambient Concentration
MACT	Maximum Achievable Control Technology
MM	Prefix used for Million (Thousand-Thousand)
MMBTU	Million British Thermal Units (MMBtu)
MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
MMSCF	Million Standard Cubic Feet (MMscf)
MMSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MWC	Municipal Waste Combustor
MWe	Megawatt Electrical
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards

NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH_3	Ammonia
NMHC	Non-methane Hydrocarbon
NGL	Natural Gas Liquids
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NOI	Notice of Intent
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
NSR	New Source Review
O_3	Ozone
O&G	Oil and Gas
O&M	Operation and Maintenance
O&NG	Oil and Natural Gas
OAC	Oklahoma Administrative Code
OC	Oxidation Catalyst
PAH	Polycyclic Aromatic Hydrocarbons
PAE	Projected Actual Emissions
PAL	Plant-wide Applicability Limit
Pb	Lead
PBR	Permit by Rule
PCB	Polychlorinated Biphenyls
PCE	Partial Compliance Evaluation
PEA	Portable Emissions Analyzer
PFAS	Per- and Polyfluoroalkyl Substance
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers
PM_{10}	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers
POM	Particulate Organic Matter or Polycyclic Organic Matter
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million Volume
ppmvd	Parts per Million Dry Volume
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
psia	Pounds per Square Inch Absolute
psig	Pounds per Square Inch Gage
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RAP	Regulated Air Pollutant or Reclaimed Asphalt Pavement
RFG	Refinery Fuel Gas
RICE	Reciprocating Internal Combustion Engine
RO	Responsible Official
ROAT	Regional Office at Tulsa
RVP	Reid Vapor Pressure
SCC	Source Classification Code
SCF	Standard Cubic Foot
SCFD	Standard Cubic Feet per Day
SCFM	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SER	Significant Emission Rate
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SOP	Standard Operating Procedure
SRU	Sulfur Recovery Unit
T	Tons
TAC	Toxic Air Contaminant
TEG	Triethylene Glycol
THC	Total Hydrocarbons
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulates
TV	Title V of the Federal Clean Air Act
$\mu g/m^3$	Micrograms per Cubic Meter
US EPA	U. S. Environmental Protection Agency
VFR	Vertical Fixed Roof
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRT	Vapor Recovery Tower
VRU	Vapor Recovery Unit
YR	Year
2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

Mid American Steel & Wire LLC
Attn: Mr. Mike Bain
P. O..Box 296
Madill, OK 73446

Permit Number: 2022-0428-TVR2
Permit Writer: David Schutz
October 16, 2023

SUBJECT: Permit Application No. **2022-0428-TVR2**
Mid American Steel & Wire LLC.
Steel Billet and Wire-making Operation (FAC ID 5553)
Sec. 35 – 5S – 5E
Madill, Marshall County, Oklahoma

Dear Mr. Bain:

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

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

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at (405) 702-4100.

Sincerely,

Phillip Fielder

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

Enclosures

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

October 16, 2023

Texas Natural Resources Conservation Commission
Operating Permits Division (MC 163)
P.O. Box 13087
Austin, TX 78711-3087

SUBJECT: Permit Application No. **2022-0428-TVR2**
Mid American Steel & Wire LLC.
Steel Billet and Wire-making Operation (FAC ID 5553)
Sec. 35 – 5S – 5E
Madill, Marshall County, Oklahoma
Permit Writer: David Schutz

Dear Sir / Madame:

The subject facility has applied for a Part 70 operating permit. Air Quality Division has completed the initial review of the application and prepared a draft permit for public review. Since this facility is within 50 miles of the **Oklahoma - Texas** border, a copy of the proposed permit will be provided to you upon request. The draft permit is also available for review on the Air Quality section of the DEQ web page at *http://www.deq.ok.gov*.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at (405) 702-4198.

Sincerely,

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

DEQ NOTICE OF TIER *…II or III…* **DRAFT PERMIT**

A Tier *…II or III…* **application for an air quality construction permit for a modification at an existing major facility has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** *…name and address.*

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

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

This draft permit would authorize the facility to emit the following regulated pollutants: *(list each pollutant and amounts in tons per year (TPY))***, which represents** (*identify the emissions change (increase or decrease) involved in the modification)***. [**Or add: **The modification will not result in a change in emissions.**] [For PSD permits only, add**: The project will consume the following increment levels:** *(list the amount of increment consumption for each pollutant in ug/m^3).*]

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

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. The requirements of the construction permit will be incorporated into the Title V operating permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V operating permit.

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

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

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

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

October 16, 2023

Choctaw Nation of Oklahoma
Attn: Gary Batton, Chief
P.O. Box 1210
Durant, OK 74702-1210

Re: Permit Application No. **2022-0428-TVR2**
Mid American Steel & Wire LLC.
Steel Billet and Wire-making Operation (FAC ID 5553)
Sec. 35 – 5S – 5E
Madill, Marshall County, Oklahoma

Dear Mr. Batton:

The Oklahoma Department of Environmental Quality (ODEQ), Air Quality Division (AQD), has received the Tier II/Tier III application referenced above. A Tier II/III application requires the facility provide a 30-day public comment period on the draft Tier II/III permit and a 20-day public comment period on a proposed Tier III permit at a public location within the county of the facility. The process requires the facility to notify the public by newspaper notice in a newspaper in the county of the proposed project. Since the proposed project falls within your Tribal jurisdiction, AQD is providing this direct notice. This letter notification is in addition to the newspaper notice.

Copies of draft permits and comment opportunities are also provided to the public on the ODEQ website at the following location:

https://www.deq.ok.gov/air-quality-division/air-permits/public-participation-issued-permits/

If you prefer a copy of the draft and/or proposed permit, or direct notification by letter for any remaining public comment opportunities, if applicable, on the referenced permit action, please notify me by e-mail at phillip.fielder@deq.ok.gov, or by letter at:

Department of Environmental Quality, Air Quality Division
Attn: Phillip Fielder, Chief Engineer
707 N Robinson
Oklahoma City, OK, 73102

Thank you for your cooperation. If you have any questions, I can also be contacted at (405) 702-4185.

Sincerely,

Phillip Fielder

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

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

October 16, 2023

Chickasaw Nation
Attn: Bill Anoatubby, Governor
P.O. Box 1548
Ada, OK 74821

Re: Permit Application No. **2022-0428-TVR2**
Mid American Steel & Wire LLC.
Steel Billet and Wire-making Operation (FAC ID 5553)
Sec. 35 – 5S – 5E
Madill, Marshall County, Oklahoma

Dear Mr. Anoatubby:

The Oklahoma Department of Environmental Quality (ODEQ), Air Quality Division (AQD), has received the Tier II/Tier III application referenced above. A Tier II/III application requires the facility provide a 30-day public comment period on the draft Tier II/III permit and a 20-day public comment period on a proposed Tier III permit at a public location within the county of the facility. The process requires the facility to notify the public by newspaper notice in a newspaper in the county of the proposed project. Since the proposed project falls within your Tribal jurisdiction, AQD is providing this direct notice. This letter notification is in addition to the newspaper notice.

Copies of draft permits and comment opportunities are also provided to the public on the ODEQ website at the following location:

https://www.deq.ok.gov/air-quality-division/air-permits/public-participation-issued-permits/

If you prefer a copy of the draft and/or proposed permit, or direct notification by letter for any remaining public comment opportunities, if applicable, on the referenced permit action, please notify me by e-mail at phillip.fielder@deq.ok.gov, or by letter at:

Department of Environmental Quality, Air Quality Division
Attn: Phillip Fielder, Chief Engineer
707 N Robinson
Oklahoma City, OK, 73102

Thank you for your cooperation. If you have any questions, I can also be contacted at (405) 702-4185.

Sincerely,

Phillip Fielder

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