

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N119255141

FACILITY: DENSO Manufacturing Michigan, Inc.		SRN / ID: N1192
LOCATION: One Denso Road, BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: Jody Smith, Advanced Environmental Engineer - Section 1		ACTIVITY DATE: 09/11/2020
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On September 11, 2020 AQD's Amanda Chapel (staff) conducted an announced, virtual air quality inspection of Denso Manufacturing Michigan, Inc. (DENSO) located at One Denso Road, Battle Creek Michigan. Due to the COVID-19 pandemic, AQD's inspection guidance changed to allow for virtual inspections of facilities where it is difficult to maintain social distancing, the facility has a history of compliance, and the facility and department have a good relationship. DENSO meets all of these criteria to conduct a virtual inspection. The purpose of the inspection was to determine the facility's compliance with Renewable Operating Permit (ROP) MI-ROP-N1192-2017c and Permit to Install (PTI) No. 138-17 and No. 94-18 and all applicable state and federal air regulations. The following will summarize plant operations and facility compliance status.

Staff interacted with Ms. Jody Smith, Advanced Environmental Engineer, Safety and Environmental Department. Mr. Michael Myszka, Section Leader, Environmental and Production Engineering walked around the facility with her and acted as her safety spotter due to the need to use earbuds for communication. Ms. Smith confirmed that EU-CONDMF42 with control ID C467A has been removed from the facility along with C825A which was part of EU-EVAP1. EU-EVAPSP4 has been installed at the facility and was operational during the inspection.

DENSO is an OEM supplier of condensers, evaporators, radiators, and heater core components that are used in HVAC systems by various automotive manufacturers. The facility utilizes a variety of processes including stamping, rolling, fluxing, brazing, powder coating, plastic injection molding, and manual assembly to produce and assemble these automotive components. DENSO has been in operation at this location since 1986 and employs approximately 3,000 associates. The facility usually operates two production shifts per day, five days a week. Due to high demand from customers, the condenser and evaporating lines are running either three shifts per day or on weekends.

The facility is a major source of volatile organic compounds (VOCs) based primarily based on the use of machining oil during the component and core assembly manufacturing process. According to the previous inspection report, VOC emissions have been trending downward over time due to installation of more efficient machining oil distribution systems on all machines in the component and core assembly areas. The facility is a synthetic minor source of hazardous air pollutants (HAPs) under MI-ROP-N1192-2017c.

The primary manufacturing areas are condenser, evaporator, radiator, and heater and associated emission units are listed below.

Condenser: EU-CONDMF4, EU-CONDMF41, and EU-CONDGIC2. EU-CONDMF42 and associated control equipment have been removed.

Evaporator: EU-EVAP1 (C825A has been removed), EU-EVAP2, EU-EVAP4, EU-EVAP5, EU-EVAPCS2 (94-18), EU-EVAPSP4 (138-17)

Radiator: EU-RDR1, EU-RDR2, EU-RDR3, EU-RDR5

Heater Core: EU-HTR1, EU-HTR2

As noted in the last inspection report, there are several ROP conditions across the four main manufacturing areas that have identical or near identical redundant requirements. These are summarized below and associated comments are based on the pre-inspection review, virtual inspection observations, and records review.

The permittee is required to perform annual evaporative oil testing on all four main manufacturing areas. Comment: Facility has complied with this requirements on an annual basis and the most recent report was submitted in December 2019.

The permittee is required to calibrate each temperature monitoring device on the thermal oxidizers at least once per calendar year. Comment: Staff reviewed calibration stickers located on or near each control device during the virtual inspection and the facility supplied the calibration final report. All thermocouples were last calibrated between 9/28/19 and 10/6/19. All thermocouples are scheduled to be calibrated before 10/31/20.

Permittee is required to keep a record of each occurrence that the automatic alarm system on the oven degreasers is activated. This record shall include the date and time of the occurrence and the duration of the occurrence. The alarm is triggered if the combustion temperature drops below the listed permit limit (either 1292 or 1400 degrees F) for more than 59 minutes. The low temperature alarm on all thermal oxidizer controls is checked quarterly. Comment: The 2019 alarm records were reviewed as a representative example of the alarm system at the facility. The radiator area experienced 8 alarms with the most being on R-640. H-251 experienced 11 alarms, most of which were in January indicating a low temperature. The response was to raise the temperature. Machine C-1150 had 5 alarms in 2019. And C452 had 9 alarms, all of which were caused by furnace cleaning taking place.

The permittee shall not operate the oven degreaser unless the thermal oxidizer is operating properly. Proper operation means maintaining a minimum operating temperature (1292 or 1400 degrees F, depending on the oxidizer), minimum retention time (0.3 or 0.5 seconds), and a VOC destruction efficiency (94% or 95% depending on the oxidizer) or a VOC outlet concentration limit is met. Comment: During the inspection, all operating thermal oxidizers had combustion temperatures above their respective operating limits. A table has been included with the inspection for list of oxidizer temperatures recorded during the inspection.

Under FG-FACILITY, Condition IX1, the permittee is required to maintain video surveillance and regular guard patrols to prevent unauthorized individuals from loitering in the employee parking lots extending to approximately 150 meters east of the plant. Comment: There are numerous security cameras around the facility and security patrols the facility grounds and roof once per shift. The facility is fenced to prevent unauthorized access and the employee entry points are equipped with security turnstiles.

The permittee shall maintain a current listing from the manufacturer of the chemical composition (MSDS, formulation data, etc.) of each material used including the weight percent of each component. Comment: Compliance. The facility has an electronic MSDS/SDS program for all chemicals used at the facility. The information is also included in the emissions calculation spreadsheet and used for accurate reported emissions.

The permittee is required to submit a Malfunction Abatement Plan (MAP) on all thermal oxidizers and powdered flux dust collection system control devices in use at the facility. Comment: Compliance. A revised MAP was submitted in March 2020 to include the new plasma flux machine installed at the facility.

AQD comments below related to compliance with ROP permit conditions are based on information gathered during the pre-inspection review, at home records review of records submitted by the facility, and virtual inspection. Material usage and VOC emission records based on a 12-month rolling average tons per year (tpy). The highest 12-month rolling average value will be listed as the highest example of emissions for the unit.

#### Source Wide Conditions

The facility has source wide conditions including all equipment located at the facility. They are an opt out source of HAPs with limits of 9.0 tpy of each individual HAP and less than 22.5 tpy of aggregate HAPs. The VOC limits are less than 225 tpy for all equipment at the source and less than 30 tpy of all metallic surface coating lines per R 336.1621(10). These are all on a 12-month rolling basis.

VOCs are tracked in a separate spreadsheet. It is broken out by chemical name, part number, and the application area where it is used. The parts the chemical is used on are tracked by numbers produced

over the course of a month. This is then calculated to VOC emitted, per chemical by part, in another table in the spreadsheet. These tables include calculations of VOC in lbs/item and VOC conversion to pounds. Spreadsheets are linked and all VOC emissions, by department, are totaled together monthly and 12-month rolling totals calculated.

According to the records submitted by the facility, they are tracking HAPs and VOC by area used including plastic injection molding, natural gas combustion, maintenance and facilities chemicals, final assembly operations, and office and other. The emissions are calculated, by area, monthly. The facility reports that in June 2020, the 12-month rolling emissions were 107.88 tpy of VOC, well below the limit. The plant-wide metallic surface coating emissions were 7.12 tpy of VOC well below the 30 tpy limit.

Hydrofluoric acid is the highest emitted HAP at the facility. Emissions are 6.41 tpy on a 12-month rolling basis, which is below the 9 tpy 12-month rolling limit. Records show the total HAPs emitted from the facility are 7.08 tpy 12-month rolling, below the 22 tpy permit limit. HAP emissions are broken down into monthly emissions by part number, name of coating, item size, HAPs per item, CAS number, and percent HAP.

The facility appears to be in compliance with the limits in the source wide conditions.

#### EU-HTR1 (H-451)

Heater core emissions are tracked in a separate spreadsheet. There is a 12.0 tpy limit in a 12-month rolling time period and 39.3 tpy material limit for machining oil used. Usage of machining oil is tracked monthly. September 2019 had 10.3 tpy machining oil used in a 12-month rolling time period. This was the highest number in the last 12 months. September 2019 also had the highest calculated 12-month rolling VOC emissions at 3.12 tpy.

The tracking sheet is broken down into department, VOC containing material used in each department, percent captured, control efficiency, and calculated VOC emissions. Pounds of each material used are tracked in the VOC tracking spreadsheet. This is linked to the emissions calculations sheet.

Emission unit was tested on October 8, 2019.

The machining oil evaporative loss testing was completed for the heater core area on 12/9-10/19. Parts tested were 3070, 6970, and 3440. The evaporative loss was determined to be 31.6%.

The facility appears to be in compliance with the limits in this emission unit.

#### EU-HTR2 (H751)

Heater core emissions are being tracked the same way as detailed above. There is a 10.3 tpy limit in a 12-month rolling time period and 33.7 tpy material limit for machining oil used. Usage of machining oil is tracked monthly. The highest 12-month rolling VOC emissions are in July 2019 with 2.43 tpy. Highest usage monthly was also in July 2019 with 0.98 tons/month. Monthly 12-month rolling usage is 8.86 tpy 12-month rolling. These emissions are well below the permitted limits.

Unit was tested on August 11, 2015.

The facility appears to be in compliance with the limits in this emission unit.

#### EU-CONDMF3 (C-452)

Like heater core emissions, the condensers have their own separate tracking spreadsheet. All condensers are tracked monthly. The tracking sheet is broken down into department, VOC containing material used in each department, percent captured, control efficiency, and calculated VOC emissions. Pounds of each material used are tracked in the VOC tracking spreadsheet. This is linked to the emissions calculations sheet.

Limits for this emission unit are 28.4 tpy of VOC on a 12-month rolling basis and 45.6 tpy of machining oil on a 12-month rolling basis. Records show that the highest emissions were 5.86 tpy VOC 12-month rolling. Highest usage records showed 11.9 tpy machining oil used on a 12-month rolling basis. Both

usages were recorded for June 2019.

This emission unit is scheduled for testing in September 2020.

The machining oil evaporative loss testing was completed for the condenser area on 11/12-13/19. Parts tested were GC7, 010B, and DS. The evaporative loss was determined to be 27.8%.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-CONDMF41 (C-550)**

Limits for this emission unit are 29.5 tpy of VOC on a 12-month rolling basis and 57.4 tpy of machining oil on a 12-month rolling basis. PM limits are 0.01 lbs/1000 lb exhaust gas hourly, PM10 0.37 pph hourly, and PM2.5 0.37 pph hourly. PM emission limits are demonstrated using a malfunction abatement plan in operation, not operate the plasma flux machine unless the associated cartridge filter dust collection system is installed, maintained, and operated, and verification of emissions by testing.

VOC emission records show that the highest emission of VOCs were 5.86 tpy on a 12-month rolling basis in July 2019. The highest amount of machining oil used was 34.3 tpy on a 12-month rolling basis in December 2019.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative condenser area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-CONDMF42 (C467A)**

This emission unit has been removed from the facility.

#### **EU-CONDGIC2 (C1150)**

Limits for this emission unit are 30.5 tpy of VOC on a 12-month rolling basis and 70.3 tpy of machining oil on a 12-month rolling basis. PM limits are 0.01 lbs/1000 lb exhaust gas hourly, PM10 0.37 pph hourly, and PM2.5 0.37 pph hourly. PM emission limits are demonstrated using a malfunction abatement plan in operation, not operate the plasma flux machine unless the associated cartridge filter dust collection system is installed, maintained, and operated, and verification of emissions by testing.

VOC emission records show that the highest emissions of VOCs were 15.20 tpy on a 12-month rolling basis in December 2019. The highest amount of machining oil used was also in December 2019 and was 34.3 tpy on a 12-month rolling basis.

This emission unit was tested on 11/13/15.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAP1 (C801)**

C825A has been removed from this emission unit.

Limits for this emission unit are 36 tpy VOC on a 12-month rolling basis. Material limits are 31.1 tpy of machining oil, 75.3 tpy of brazing flux with a VOC content of greater than 1.0% by weight and 169.0 tpy of brazing flux with a VOC content of 1.0% or less by weight.

VOC emission records show the highest emissions in the last 12 months were in August 2019 at 1.7 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in August 2019 and 9.4 tpy was used on a 12-month rolling basis. Brazing flux records show usage of 59.6 tpy of flux that is less than 1% of VOC content on a 12-month rolling time period.

This emission unit was tested on 9/13-14/16.

The machining oil evaporative loss testing was completed for the evaporator area on 12/4-5/19. Parts tested were CUSW, CD6, and 180L. The evaporative loss was determined to be 11.3%.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAP2 (C852)**

Limits for this emission unit are 36 tpy VOC on a 12-month rolling basis. Material limits are 23.4 tpy of machining oil, 55.2 tpy of brazing flux with a VOC content of greater than 1.0% by weight and 169.0 tpy of brazing flux with a VOC content of 1.0% or less by weight.

VOC emission records show the highest emissions in the last 12 months were in October 2019 at 16.9 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in March 2020 and 16.0 tpy was used on a 12-month rolling basis. Brazing flux records show usage 28.5 tpy of flux in October 2019 that is more than 1% of VOC content on a 12-month rolling time period.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative evaporator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAP4**

Limits for this emission unit are 26.6 tpy VOC on a 12-month rolling basis. Material limits are 26.6 tpy of machining oil, 55.2 tpy of brazing flux with a VOC content of greater than 1.0% by weight and 169.0 tpy of brazing flux with a VOC content of 1.0% or less by weight.

VOC emission records show the highest emissions in the last 12 months were in March 2020 at 16.45 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in March 2020 and 16.0 tpy was used on a 12-month rolling basis. Brazing flux records show usage 46.6 tpy of flux in August 2019 that is less than 1% of VOC content on a 12-month rolling time period.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative evaporator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAP5**

Limits for this emission unit are 21.6 tpy VOC on a 12-month rolling basis. Material limits are 21.6 tpy of machining oil.

VOC emission records show the highest emissions in the last 12 months were in March 2020 at 12.9 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in March 2020 and 12.7 tpy was used on a 12-month rolling basis.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative evaporator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAPSP4 (PTI 138-17)**

Limits for this emission unit are 13.6 tpy VOC on a 12-month rolling basis. Material limits are 12.8 tpy of machining oil and 120.6 tpy of brazing flux with a VOC content of less than 1.0% by weight.

VOC emission records show the highest emissions in the last 12 months were in June 2020 at 1.62 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in June 2020 and 1.44 tpy was used on a 12-month rolling basis. Brazing flux records show usage of 16.05 tpy of flux in June 2020 that is less than 1% of VOC content on a 12-month rolling time period.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative evaporator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-EVAPCS2 (PTI 94-18) (E320A)**

Limits for this emission unit are 7.3 tpy VOC on a 12-month rolling basis. Material limits are 35.4 tpy of machining oil.

VOC emission records show the highest emissions in the last 12 months were in June 2020 at 2.06 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was also in June 2020 and 9.67 tpy was used on a 12-month rolling basis.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative evaporator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-RDR1 (R540)**

Limits for this emission unit are 19.0 tpy VOC on a 12-month rolling basis. Material limits are 38.7 tpy of machining oil, 882 gallons per year Bonderite Weld Tube Mill Machining Oil, and 282 gallons per year Dairoll Weld Tube Mill Machining Oil.

VOC emission records show the highest emissions in the last 12 months were in June 2019 at 8.66 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was in February 2020 at 16.3 tpy on a 12-month rolling basis. The facility is tracking all radiators together that use Bonderite Oil. The limit is 882 gallons. If all lines together can stay below the limit, they are all below the limit. The most oil was used in February 2020 with 701.3 gallons used. The facility is no longer using Dairoll Weld Tube Mill Machining Oil.

This emission unit was tested on November 12, 2015.

The machining oil evaporative loss testing was completed for the evaporator area on 12/4-5/19. Parts tested were 1980, 1740, and 2221. The evaporative loss was determined to be 35.9%.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-RDR2 (R140)**

Limits for this emission unit are 22.3 tpy VOC on a 12-month rolling basis. Material limits are 38.7 tpy of machining oil, 882 gallons per year Bonderite Weld Tube Mill Machining Oil, and 282 gallons per year Dairoll Weld Tube Mill Machining Oil.

VOC emission records show the highest emissions in the last 12 months were in March 2020 at 6.3 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was in October 2019 at 16.3 tpy on a 12-month rolling basis. The Bonderite and Dairoll usage has been addressed under EU-RDR1.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative radiator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

#### **EU-RDR3 (R640)**

Limits for this emission unit are 22.4 tpy VOC on a 12-month rolling basis. Material limits are 53.7 tpy of machining oil, 882 gallons per year Bonderite Weld Tube Mill Machining Oil, and 282 gallons per year Dairoll Weld Tube Mill Machining Oil.

VOC emission records show the highest emissions in the last 12 months were in June 2019 at 8.78 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was in June 2019 at 20.8 tpy on a 12-month rolling basis. The Bonderite and Dairoll usage has been addressed under EU-RDR1.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative radiator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

**EU-RDR5 (R940)**

This emission unit was not running during the inspection and will be removed from the facility.

Limits for this emission unit are 26.5 tpy VOC on a 12-month rolling basis. Material limits are 53.3 tpy of machining oil, 882 gallons per year Bonderite Weld Tube Mill Machining Oil, and 282 gallons per year Dairoll Weld Tube Mill Machining Oil.

VOC emission records show the highest emissions in the last 12 months were in June 2019 at 7.52 tpy VOC on a 12-month rolling basis. The highest material usage of machining oil was in June 2019 at 16.01 tpy on a 12-month rolling basis. The Bonderite and Dairoll usage has been addressed under EU-RDR1.

Testing requirements are satisfied for the VOC destruction efficiency by testing of a representative radiator area thermal oxidizer.

The facility appears to be in compliance with the limits in this emission unit.

All oven degreaser temps are as follows:

TO. ID	Component	EU-ID	PTI/ROP T(F)	9/11/20 Temp in C	ΔT Cal. Date
C452A	Condenser	EU-CONDMF3	1292	738	10/06/19
C467A	Condenser	EU-CONDMF42	Removed		
C550A	Condenser	EU-CONDMF41	1400	779	09/28/19
C1150A	Condenser	EU-CONDGIC2	1292	722	10/06/19
C801	Evaporator	EU-EVAP1	1400	780	10/06/19
C825A	Evaporator	EU-EVAP1	Removed		
C852	Evaporator	EU-EVAP2	1400	785	10/06/19
C884	Evaporator	EU-EVAP2	1400	784	09/28/19
E320	Evaporator	EU-EVAPCS2	1292	709	09/28/19
H451	Heater	EU-HTR1	1292	721	10/05/19
H751	Heater	EU-HTR2	1400	780.6	10/05/19
R640	Radiator	EU-RDR3	1292	781	10/05/19
R140	Radiator	EU-RDR2	1400	782	09/28/19
R940	Radiator	EU-RDR5	1400	Not Running	09/29/19
R540	Radiator	EU-RDR1	1292	724	09/29/19

**FG-COLDCLEANERS**

The facility maintains cold cleaners in the manufacturing and maintenance areas of the plant. One cold cleaner, located in the Heater Core area, uses Cedardraw Oil and is subject to Part 7 rules. The SDS was provided. The remaining cold cleaners use a product that contains no VOC and they are not subject to part 7 rules.

**FG-RULE290**

The facility maintains Rule 290 emission units for VOC only that are mainly comprised of process groups located in the equipment testing and final assembly areas. Material throughput including inks, alcohols, Loctite, ect. Are associated emissions are tracked by specific process codes and then

designated to process groups within a spreadsheet. The facility emits only one carcinogenic VOC, methylene chloride, which is in an acrylic adhesive used in small quantities by maintenance to join piping. The facility tracks the use of methylene chloride in a spreadsheet. According to Ms. Smith, the adhesive containing this chemical is rarely used, only once or twice a year. It has not been used in 2020.

**FG-MACT-ZZZZ≤500HP**

This emission unit contains EU-FAG#1, EU-FAG#2, EU-FAG#3, EU-FAG#5, EU-FAG#6, EU-FIRE PUMP#1 and #2. The facility contracts maintenance of the diesel and natural gas fired emergency generators and fire pumps to an outside vendor. They are responsible for changing the oil and oil filters, air filter inspection, and other required maintenance on an annual basis. Each generator is equipped with a non-resettable hours meter and the facility maintains operation records.

Generator ID/Location	Fuel	Brake HP	Install Date	Regulation	Manufacturer	Hour Meter Reading (9/11/2020)	Mfg. Emission Certificate Tag?
FAG # 1/Powerhouse	Diesel	134	1985	ZZZZ	Cummins	1347.1	NA
FAG # 2/Powerhouse	Diesel	61	1986	ZZZZ	Cummins	961.8	NA
FAG # 3/Powerhouse	Diesel	66	1987	ZZZZ	Cummins	926.8	NA
FAG # 5/Office Roof	Gas	202	1999	ZZZZ	Cummins	735.8	NA
FAG # 6/Outside J-20	Gas	176	2001	ZZZZ	Ford	855.5	NA
FAG # 7/Roof	Gas	44	2011	NSPS/JJJJ	GM	573.6	Verified
Fire Pump # 1/Pump-House # 1	Diesel	231	1985	ZZZZ	Caterpillar	1143.2	NA
Fire Pump # 2/Pump-House # 2	Diesel	208	1993	ZZZZ	Cummins	715.0	NA

**FG-NSPS-JJJJ**

This emission unit contains EU-FAG#7. The facility has previously provided the manufacturer's emission certificate that shows the generators compliance with 40 CFR Part 60, Subpart JJJJ emission limitations for natural gas fired emergency generators based on its 2011 installation date.

**FGSURFACECOAT**

This emission unit contains EU-C832, EU-C833, EU-C834, and EU-C933. Each emission unit within FGSURFACTCOAT has a 10.0 ton per 12-month rolling average limit for VOC and a 2,000 pounds/month VOC emission limit. According to the records submitted, the highest 12-month rolling VOC emission was in January 2020 at 8.93 tpy. This would also indicate that each of the lines are meeting the 10 tons per 12-month rolling time period as well.

**Miscellaneous**

According to the previous inspection report, the facility has multiple plastic injection machines that produce primarily polypropylene, polyethylene, and nylon components for HVAC parts. Mold cleaner and mold release agents are used on these lines along with various solid fillers that impart desired characteristics requested by the customer. According to production records reported in their 2019 MAERS report, the overall process emitted 751 pounds VOC which is well below Rule 278 exclusionary criteria. Therefore the process is exempt from permitting under Rule 286(2)(b).



The facility has two 20.92 MMBtu/hr rated natural gas only fired boilers (i.e. powerhouse) which supply steam load to the evaporator surface treatment process and building service heat. The boilers are exempt from NSPS, subpart Dc requirements based on their October 1985 install date. The boilers are also exempt from boiler MACT Part 63, Subpart JJJJJJ per 40 CFR 63.11195€ based on being designated as existing boilers that only fire natural gas. The facility has four other natural gas fired hot water boilers installed between 1985 and 1987 that are less than 10 MMBtu/hr each and 41 natural gas fired air handling units each less than 0.3 MMBtu/hr. The powerhouse boilers, hot water boilers, and air handling units are all exempt at the time of installation from air use permitting under Rule 282(2)(b)(i).

The facility has a spray can puncturing machine in the Heater Core area. This equipment is exempt from air permitting requirements per Rule 287(2)(b).

At the time of the inspection, the facility appears to be in compliance with all permits and state and federal air regulations.

## Section 2 – Denso Air Systems, Michigan

DENSO Air Systems, Michigan located at 300 Fritz Keiper Blvd, Battle Creek Calhoun County was recently added as Section 2 to MI-ROP-N1192-2017c due to changes within the management structure. This section was inspected in February 2019 and was in compliance with all permits and state and federal regulations.

Staff sent an email to Mr. Scott LeForge, Safety, Health, and Environmental Manager to determine the status of the facility. Mr. LeForge confirmed that there have been no additional pieces of equipment installed at the facility from the last inspection. Additionally, he said that many of the permitted pieces have been removed and the long-term plan is to completely remove all equipment from this location and cease operations by the end of summer, 2021.

Emission units that have been removed are:

EU-OVEN1  
EU-ACLIQUID  
EU-ACMANUAL  
EU-ACUNDERFLOOR  
EU-MAINUNDERFLOOR

Based on the inspection completed in 2019 and the information about the future closing of this location, the facility appears to be in compliance with MI-ROP-N1192-2017c and all other applicable federal and state air regulations.

NAME

Amber Clupe

DATE

9/18/2020

SUPERVISOR

RIL 9/23/20