

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection**

N519858758

<b>FACILITY:</b> UNIVERSAL HANDLING EQUIPMENT CO OWOSSO LLC		<b>SRN / ID:</b> N5198
<b>LOCATION:</b> 1650 INDUSTRIAL DRIVE, OWOSSO		<b>DISTRICT:</b> Lansing
<b>CITY:</b> OWOSSO		<b>COUNTY:</b> SHIAWASSEE
<b>CONTACT:</b> Lance Hodges , General Manager		<b>ACTIVITY DATE:</b> 06/30/2021
<b>STAFF:</b> Daniel McGeen	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled inspection of opt-out source which was last inspected in 2016.		
<b>RESOLVED COMPLAINTS:</b>		

On 6/30/2021, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an unannounced, scheduled inspection of Universal Handling Equipment Co. Owosso, LLC. This activity was a Partial Compliance Evaluation (OCE) activity, done as part of a Full Compliance Evaluation (FCE). Also discussed in this report is a review of facility recordkeeping, which is also a PCE activity.

**Environmental contact:**

- Lance Hodges, General Manager; 989-720-1650; [lhodges@uheusa.com](mailto:lhodges@uheusa.com)
- Brandon K. Chan, Mechanical Engineer; 989-720-1650; [bchan@uheusa.com](mailto:bchan@uheusa.com)

**Facility description:**

This facility fabricates, primes, and paints steel containers, for the solid waste handling and recycling industries.

**Emission units:**

Emission unit*	Emission unit description	Permit to Install (PTI) or relevant rule	Compliance status
Welders in Plant 4	Welding units within Plant 4 metal preparation department	MAPC** Rule 285(2)(i)	Compliance
Metal working activities in Plant 4	2 metal shears, 2 press brakes, well saw, drill press, 2 small grinders	MAPC** Rule 285(2)(i)(vi)(B)	Compliance
EUPAINTBOOTH	Shop building capable of functioning as one or two coating booths; controlled by mat/panel filters	PTI No. 239-06	Compliance
Plant 6	Storage	NA	Compliance

\*An *emission unit* is any part of a stationary source which emits or has the potential to emit an air contaminant.

\*\* Michigan Air Pollution Control

**Regulatory overview:**

This facility is considered a synthetic minor/opt-out source, because it has an opt-out permit, which restricts the facility's potential to emit (PTE) of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs), keeping it from becoming a major source. Major sources are required to obtain a Renewable Operating Permit (ROP). In 2000, this facility had been issued an ROP, but they decided to obtain an opt-out permit, Permit to Install (PTI) No. 239-06, rather than to renew the ROP after five years.

Because this facility is not a major source of HAPs, it is not subject to 40 CFR Part 63, Subpart MMMM, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation for Surface Coating of Miscellaneous Metal Parts and Products.

Additionally, this facility is not subject to 40 CFR Part 63, Subpart XXXXXX, the NESHAP for Nine Metal Fabrication and Finishing Source Categories. This is because it does not match the nine North American Industrial Classification System (NAICS) codes the regulation is targeted for. The NAICS code for this facility, as stated on their most recent Michigan Air Emission Reporting System (MAERS) report, is 332439, and represents "Other Metal Container Manufacturing".

Because this is an opt-out/synthetic minor facility, it should be inspected once every 4 years by AQD, per AQD's Compliance Monitoring Strategy from the U.S. Environmental protection Agency.

**Location:**

The facility has two main buildings (Plants 4 and 6), with a paint shop building in between them. The site is located in an almost exclusively industrial area. About 190 feet to the north, directly across the street, is a small factory. North of that are another business, and a scrapyard. About 250 feet to the west is a small factory, and 500 feet further west are two smaller industries, with woods beyond. Approximately 300 feet to the northwest of the main building (Plant 4) is an office building for a Shiawassee County government agency. To the immediate south are undeveloped land, then a farm field. To the east are woodlands/meadows, and to the northeast are other industrial or commercial facilities. The nearest house appears to be about 800 feet to the southeast of the paint shop.

**Recent history:**

In late 2011, this facility closed, for several months. However, it was reopened, and began production again, on 6/15/2012. This facility was last inspected on 3/28/2016: No instances of noncompliance were found.

**Fee status:**

This facility is considered Category E fee-subject, because it accepted an opt-out/synthetic minor permit to limit potential emissions, to keep from becoming a major source.

The facility is required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

**Safety apparel:**

I wore a hard hat, safety glasses, steel toe boots, and high visibility vest, although the hard hat and vest were not required at this site, I learned. I also wore a mask, per EGLE guidelines to field staff during the COVID-19 pandemic.

**Arrival:**

This was not an unannounced inspection. At this point during the COVID-19 pandemic, EGLE guidance to field staff on conducting inspections was:

- Pre-arrange an inspection with the facility, so that a plan may be developed to inspect the facility while complying with the facility's safety practices.
- Wear a mask at all times.
- Inquire if there have been any recent confirmed COVID cases at the facility.

On 6/30/2021, I approached the facility at about 1:30 PM. Weather conditions were partly sunny and 82 degrees F, and humid, with winds out of the west at 10-15 miles per hour. I arrived at 1:36 PM. I detected neither odors nor visible emissions from the plant in their parking lot, by the office.

I met with Mr. Lance Hodges, General Manager, Mr. Brandon K. Chan, Manufacturing Engineer, and with Mr. Jim Rogers, a retiree from the company who has worked with AQD before, and has been assisting with environmental matters.

Per EGLE COVID procedures, I asked if there had been any recent confirmed COVID cases here, and was informed that there had not been any in the last month.

I was informed that since my 2016 inspection here, all their coatings are now water-based. I was told by Mr. Rogers that they use almost no acetone now, just a minimal amount of cleaning. Acetone is not considered to be a VOC.

Some weeks prior to today's inspection, I audited the company's MAERS submittal for the 2020 operating year. Their report passed the audit, and was well below permitted limits for VOC and acetone.

#### PCE activity No. 1: Inspection:

The main building, where the plant offices are, is called Plant 4. Metal fabrication activities, such as cutting, grinding, and welding of steel, take place here. Behind it, to the south, is their paint shop building, where priming and painting are done. A few hundred feet to the east is Plant 6, which, I was informed, is just used for storage of materials and of containers which have been recently painted in the paint shop building, nearby.

AQD exemption rules were updated in December 2016, but the criteria for meeting the exemptions are unchanged, for those exemptions applicable to this facility.

#### Welding; Michigan Air Pollution Control (MAPC) Rule 285(2)(i):

Rule 285(2)(i) exempts welding activities from the requirement to obtain an air use permit. Plant 4's metal preparation department had a number of welding units. I saw no visible emissions from welding, at this time.

#### Metal working activities; MAPC Rule 285(2)(l)(vi)(B):

Plant 4's metal preparation department includes two metal shears, two press brakes, a well saw, drill press, and two small grinders. The processes exhaust into the general, in-plant environment. The two small grinding units are partially enclosed, and metal chips fall down enclosed funnels, into covered containers.

MAPC Rule 285(2)(l)(vi)(B) exempts from the requirement to obtain an air use permit equipment for carving, cutting, routing, turning, drilling, machining, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening or polishing metals, if the equipment has emissions which are released only into the general in-plant environment.

I asked about Plant 6, and was informed that there are no industrial activities taking place here, just storage of materials, and of containers which have been freshly painted in the nearby paint shop building.

#### EUPAINTBOOTH; PTI No. 239-06.

The paint shop building is situated just south of Plant 4. It is a large metal structure which can function as one or two paint booths, depending on their needs. This emission unit is designated as EUPAINTBOOTH, in the PTI. Both priming and painting are done here. They use almost no acetone now, Mr. Rogers had told me earlier. It is used in a minimal amount for cleaning.

An overhead door to the building was closed at the time, as a container was being painted, by Matt, the operator. I was told that they have 54 different colors they can apply to their products. I noted that lids were all closed atop the 55 gallon drums containing their coating materials, which satisfies the

**PTI 239-06 Special Condition (SC) 1.4 requirement to keep lids closed at all times, except when operator access is necessary.**

My understanding is that Matt fills out the "Daily Paint Consumption" records for the company, which can include primer, topcoat, or acetone usage. I was advised that they use only a single primer, and are almost certain that it's water-based. In 2017, they transitioned to a company called Titan, who is supplying them with water-based coatings, I was told.

There was a barely detectable paint odor inside the building. In the east wall is a large bank of mat or panel filters, which provide particulate control. The filters appeared to be in very good condition. I was told they are replaced once per week, unless business is slow, and the filters might get changed every other week. This is documented on a filter replacement log form, I was informed.

**Note:** Following the inspection, I was emailed records (please see attached) by Mr. Chan, which included paint filter change out logs for 6/17 and 6/30/2021. The facility appears to be complying with the requirement of PTI 239-06, SC 1.11.

Outside of the paint shop, I was shown that in 2017 they installed a new exhaust stack, which has a rain sleeve for protection from the elements. The stack looked clean, with no sign of paint droplets on the exhaust stack. There were no visible emissions, meeting the 20% opacity or visible emission limit contained within MAPC Rule 301. I was unable to detect odors downwind (east) of the paint shop.

The replacement stack appeared to satisfy the PTI 239-06 SC 1.12, to be a minimum of 35 feet above ground level, with a maximum diameter of 34 inches. AQD now has a laser range finder tool, for use in evaluating stack height, which can be brought on a future inspection to confirm the stack height.

I left the site at 2:24 PM.

#### **Post-inspection odor evaluation:**

After the inspection, I did an odor evaluation. I drove eastbound on Industrial Drive, passing by the site. I then turned south onto Aiken Road, putting me east of the facility. I did not detect any odors from the facility. Weather conditions were mostly cloudy, 82 degrees F, and humid, with winds out of the east.

#### **PCE activity No. 2: Review of facility recordkeeping:**

The MAERS report for the 2020 operating year had been audited this spring by AQD, and I saw that they were well below permitted limits for VOC and acetone.

I requested an electronic copy of 2021 year to date (YTD) recordkeeping, and Mr. Rogers indicated that Mr. Chan would be sending me that. After the month of June had ended, Mr. Chan emailed me recordkeeping documents on 7/20/2021, please see attached. These included throughput and emissions for June 2021, including the 6/30 date of the inspection.

My review of the records is summarized below:

#### **Primer emissions:**

- 12-month rolling VOC emissions from primer, as of June 2021 = 2.11 tons VOC, below permitted limit
- Monthly VOC emissions from primer, as of June 2021 = 0.15 tons
- Highest single HAP from primer for 12-month rolling total as of June 2021: 0.16 tons triethylamine
- Total HAPs from primer for 12-month rolling total as of June 2021 : 0.16 tons
- Purge/cleanup solvent VOC emissions from primer, for 12-month rolling total: 0.00 tons
- Purge/cleanup solvent HAP emissions from primer, for 12-month rolling total: 0.00 tons.

#### **EU-2 PAINT emissions:**

- 12-month rolling VOC emissions from EU-2 PAINT, as of June 2021 = 2.16 tons VOC, below permitted limit
- Monthly VOC emissions from EU-2 PAINT, as of June 2021: 0.14 tons

- Highest single HAP from EU-2 PAINT for 12-month rolling total as of June 2021: NA, as zero HAPs reported
- Total HAPs from EU-2 PAINT for 12-month rolling total as of June 2021 : 0.00 tons
- Purge/cleanup solvent VOC emissions from EU-2 PAINT for 12-month rolling total: 0.15 tons
- Note: No VOC emissions from purge/cleanup solvents have been emitted reported since November 2020, records indicate, so the 12-month rolling total is continuing to slowly decline.

**The VOC limit of 36.0 TPY has not been exceeded, as 12-month rolling totals of primer and paint combined were 4.27 TPY VOC.**

**The single HAPs limit in PTI No. 239-06 of <9.0 TPY has not been exceeded, as the highest single HAP emitted was triethylamine, at 0.16 TPY.**

**The total HAPs limit in PTI No. 239-06 of <22.5 TPY has not been exceeded, as total HAPs for the facility were 0.16 TPY.**

**Also among the records which Mr. Chan emailed me on 7/20/2021, were filter log change out forms, documenting paint filter change outs on 6/17 and 6/30/2021.**

**Conclusion:**

**I could not find any instances of noncompliance, or any areas of concern. .**

NAME *Daniel A. McLean*

DATE 9/20/2021

SUPERVISOR *B.M.*