

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection**

N568152098

<b>FACILITY:</b> Caster Concepts	<b>SRN / ID:</b> N5681
<b>LOCATION:</b> 16000 East Michigan Avenue, ALBION	<b>DISTRICT:</b> Jackson
<b>CITY:</b> ALBION	<b>COUNTY:</b> JACKSON
<b>CONTACT:</b> Andrew Dobbins , General Manager	<b>ACTIVITY DATE:</b> 01/09/2020
<b>STAFF:</b> Stephanie Weems	<b>COMPLIANCE STATUS:</b> Non Compliance
<b>SUBJECT:</b> Inspection conducted in response to complaint forwarded by Kalamazoo District Office.	
<b>RESOLVED COMPLAINTS:</b> C-20-02587	

**Facility Contacts:**

Contact: Andrew Dobbins

Phone: 517-629-8838

Email: adobbins@casterconcepts.com

**Purpose**

On January 9, 2020, I conducted an unannounced inspection of Caster Concepts, located at 16000 E. Michigan Ave., Albion, Michigan in Jackson County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and to respond to a complaint that the Jackson District Office was forwarded by the Kalamazoo District Office.

**Facility Location**

The facility is located in Albion. It is surrounded by parcels of farm and wooded areas to the east and west, with a few residential homes to the north. Interstate 94 is directly south of the facility. See Image 1 and 2 for aerial photos.

**Facility Background**

Caster Concepts produces industrial caster and wheel solutions for virtually every industry. They provide their customers with start to finish care, from pre-sale engineering to post-sale support. The Albion facility is recognized as the company's headquarters.

In 1993, Caster Concepts, then located at 214 E Michigan Ave. in Albion, applied for a Permit to Install (PTI) for a paint spray booth (PTI No. 673-93). During the permit evaluation it was determined that the paint booth could meet Rule 290 because it was a small source of emissions (emitting less than 1000 pounds per month). Therefore, in March of 1994, the Air Quality Division (AQD) voided the application.

On September 25, 2018 Remediation and Redevelopment Division staff in the Kalamazoo District Office received a complaint involving Caster Concepts. Part of the complaint claims that the facility burns bad wheels off in an incinerator to reclaim the casting (see complaint attached with this report in the paper file). This complaint was forward to Jackson District AQD staff on September 30, 2019.

**Regulatory Applicability**

There are no active permits on file with AQD.

**Arrival & Facility Contact**

No visible emissions or odors were observed upon my approach to the facility. I arrived at approximately 8:58 AM, proceeded to the facility office to request access for an inspection, provided my identification, and met with Andrew Dobbins, General Manager. I informed him of my intent to conduct a facility inspection and to review any necessary records. Andrew extended his full cooperation during the inspection, accompanied me during the full duration of the inspection, and fully addressed my questions.

**Pre-Inspection Meeting**

I began by explaining to Andrew the reason that I was there. I told him that EGLE's Kalamazoo District Office had received a complaint indicating that the facility burns off bad wheels in an oven, and they forwarded the complaint to us.

From there, we began discussions about the basics of the facility and what they do. This facility employs approximately 50 people. They run one shift, with employees working from either 6AM to 2:30PM or 7AM to 3:30PM. Office staff work 8AM to 5PM. Andrew explained that the operations consist of machining and manufacturing caster wheels.

I proceeded to inquire about what kind of processes are at the facility. Andrew explained that they have one emergency generator, no boilers, one parts washer, two paint booths, a burn-off oven, and the curing oven that is used in conjunction with the paint booth.

I then asked about how the facility handles their waste, and Andrew indicated that it is picked up by Safety Kleen.

### **Onsite Inspection**

**Safety glasses and steel-toed boots are required.**

**We began the facility tour by heading down to the production floor. The first section of the facility houses many machining and welding stations. These units are routed to a small dust collector and vented internally.**

**It was noted that much of the area was also used for storage of castings and metal parts.**

**From there, we went over to see the parts washer located in the small shop area. It is an aqueous based parts washer. It appeared to be in keeping with all air quality rules.**

**Next, we observed one of the paint booths. Andrew explained that there are two paint booths on site but only one is used. I was able to observe that it is equipped with a fabric filter, and it appeared to have its own dedicated exhaust. I asked Andrew how much paint they use per month. He estimated that they may use 5 gallons per week. Andrew indicated that the facility doesn't keep paint usage records so I requested the facility's paint purchasing records.**

**We then viewed the wheel production area. Andrew explained that the wheels consist of polyurethane, and they use an open cast reaction injection molding process to form the wheels. Once cast and painted, the wheels go through a curing oven to complete the process.**

**After this, we walked over to the burn-off oven. Andrew explained that they will reclaim the casting by burning off the wheel in the oven. He said that they also use the oven to burn off the residue that can build up in the steel molds they use. The oven did not appear to be in operation at the time of the inspection. Andrew explained that they don't always run the oven, and that it depends on what they are currently producing and the production success. He estimated that the oven runs at about 800 degrees F. I was able to see that the oven vents externally through a stack that exits through the side of the building.**

### **Recordkeeping Review**

I requested that Andrew submit the facility's purchase records for their paint. Additionally, after returning to the office, I requested more information regarding a few of the processes (see email correspondence attached to this report in the paper file).

Attachments 1 and 2 are the paint purchase records for 2018 and 2019. It appears that they purchased a total of 174 gallons of paint in 2018 and 140 gallons of paint in 2019. If it is assumed that the facility uses all of the paint that they purchase, the total number of gallons used per year is far below the monthly limit outlined in PTI exemption Rule 287(2)(c).

Attachments 3 and 4 are the safety data sheets for the materials used in the paint booth. Part 7 rules were reviewed in regard to volatile organic compound (VOC) content. Upon review, and based on the monthly purchase records, it appears as though the coating operation can meet Rules 621 and 610 under Rule 702(d). If there is ever a change in the process, materials, or production rate, this should be reevaluated as the facility may then become subject to further limits under these rules. The facility is urged to keep detailed records of daily paint usage, as emission records are required to be maintained under the rule.

Overall, it appears that the following processes observed at the facility could meet a PTI exemption:

The welding operations appear to meet exemption Rule 285(2)(i).

The machining operations appear to meet exemption Rule 285(2)(l).

The aqueous-based parts washer appears to meet exemption Rule 281(2)(k).

The surface coating line appears to meet exemption Rule 287(2)(c).

The open cast reaction injection molding process appears to meet exemption Rule 286(2)(e).

The emergency generator appears to meet exemption Rule 285(2)(g). Furthermore, Andrew supplied a record of maintenance activities and hours ran for the generator since 2013. He also confirmed that there is a non-resettable hour meter on the unit. It appears that the emergency generator is in compliance with 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Also, I notified Andrew that their facility may or may not be subject to 40 CFR Part 63, Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products or 40 CFR Part 63, Subpart RRRR – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture, depending on what the wheels they are coating are used for. Since EGLE does not currently have delegation over either of these standards, a compliance determination was not made. However, Andrew was notified that they should be aware of whether their facility is subject to these standards and, if so, what they should do to comply with them.

#### **Post-Inspection Meeting**

Upon completion of the tour, I held a post-inspection discussion with Andrew. We discussed the requested records and when they would be expected by. I provided Andrew with a copy of the PTI exemption handbook, and we discussed which processes could possibly fit exemptions. I explained that I have never seen a burn-off oven that has met an exemption, and that burn-off ovens typically require a PTI.

I then explained to Andrew what to expect moving forward. First, I explained that I would need to report my findings to my supervisor, and a written report would be created detailing the inspection. I told Andrew that he would receive a copy of the finalized report. Additionally, I explained that the burn-off oven would most likely warrant a violation notice (VN) for operating a process without a permit. This VN would allow 21 days for the company to respond. I explained that an acceptable response is either the submission of a permit application or the submission of an acceptable exemption demonstration. I pointed out Rules 278 and 278a, explaining the exemption demonstration.

Upon conclusion of this meeting, I thanked Andrew for his time and cooperation, and I left the facility at 9:32AM.

#### **Compliance Summary**

Based upon the facility inspection and the information received, it appears that Caster Concepts is in violation of operating a process without a permit. A VN for Rule 201 will be sent.



**Image 1(1) :** Aerial view



**Image 2(2) :** Broad aerial view

NAME Steph Weems

DATE 01.14.2020

SUPERVISOR [Signature]