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Genesee

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N136647916

FACILITY: Corsair Engineering inc.		**SRN / ID:** N1366
LOCATION: 2702 N Dort Hwy, FLINT		**DISTRICT:** Lansing
CITY: FLINT		**COUNTY:** GENESEE
CONTACT: Craig McLean , General Manager		**ACTIVITY DATE:** 02/21/2019
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced, scheduled inspection of facility which was last inspected by AQD in 2011.		
RESOLVED COMPLAINTS:		

On 2/21/2019, the Michigan Department of Environmental Quality, which subsequently became the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an unannounced inspection of Corsair Engineering.

Environmental contacts:

Craig McLean, General Manager; 810-234-3664

Facility description:

Corsair manufacturers shipping containers for automotive companies. These are steel racks to hold parts and automotive components.

Emission units:

Emission unit* descriptions; relevant exemption rule; compliance status:

1. Welding lines controlled by smoke eater; Rule 285(2)(i); Compliance
2. Shot blaster; Rule 285(l)(vi)(C), Compliance
3. Powder coating line; Rule 287(d); Compliance

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

Regulatory overview:

Corsair Engineering is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns. The PTE for this facility for particulate matter and for VOC is considered to be far below 100 TPY each.

Corsair Engineering is also considered a minor or *area source* for Hazardous Air Pollutants (HAPs), because it is not considered to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

The processes onsite are considered exempt from the requirement of Rule 201 to obtain a permit to install. The exemptions are discussed in more detail, later in this report. .

The federal regulation 40 CFR Part 63, Subpart JJJJJJ—*National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* was written for area sources of HAPs. To determine if it applies to Corsair Engineering, I inquired as to the presence of any boilers onsite. There are no boilers, we were told, although there is a single hot water heater, residential

in size. To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. Pursuant to Section 63.11195(f), because the unit here is believed to be below 120 gallons, it is considered exempt from Subpart JJJJJJ.

Fee status:

This facility is not a Category I fee subject source, because it is not a major source for criteria pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

Corsair Engineering is on the east side of North Dort Highway. It is at the north end of a long-standing area of industrial use. To the immediate west is a residential area. The nearest residences to the west are about 175 feet away. To the east is a residential area, about 300 feet away. To the northeast are railroad tracks and a residential area about 325 feet away. To the south are other industries.

History:

Corsair Engineering was last inspected by AQD on 3/3/2011, and was found to be in compliance. There are no records of AQD receiving complaints about this facility as far back as the start of 1995. Pre-1995 files were sent to the State of Michigan Records Center, some years ago.

Safety apparel required:

Safety glasses with side shields, steel toed boots, hearing protection recommended by AQD.

Odor evaluation:

AQD was represented today by inspector Samantha Braman, and by myself. We conducted an odor evaluation, as we approached the facility. No odors were detected west of the plant or to the north. When we were east (downwind) of the plant, in a mixed residential and business area, we were unable to detect any odors. Weather conditions were sunny, clear, and 35 degrees F, with winds out of the west at 10-15 miles per hour.

Arrival:

No visible emissions could be seen as we approached the plant. We arrived at 11:40 AM. I could not detect either odors or visible emissions from the parking area adjacent to the west wall of the plant.

Because Mr. Craig McLean, General Manager, was not in at the moment, we were advised by their office staff that Mr. Tim Anderson might be the best contact.

We were informed by Mr. Anderson that equipment at the plant is mostly unchanged since AQD's 2011 inspection here, but the welding units have been replaced by newer, more efficient units, and they are controlled now. There are also more welders than the 6 welding lines in 2011.

The plant takes lunch at 12 noon, so S. Braman and I left the site. We returned after lunch, and observed neither smoke nor odors from the plant as we approached from parking across Dort Highway. We then met Mr. Craig McLean, General Manager, along with Mr. Tim Anderson, and Rufus. We were told that the site building managed by Mr. McLean does metal fabrication, while the building managed by Mr.. Anderson does the powder coating, shot blasting, and assembly, and Rufus is in charge of the weld shop. They accompanied us on the inspection.

Inspection:

Steel is welded into the various shipping containers. The pieces are shot blasted, powered coated and assembled.

Welding lines with smoke eater; Rule 285(2)(i):

We saw the new welding lines, some of which were in use. We were advised that an exhaust hose is connected to each welding station, instead of a hood. They have done particulate monitoring by having their employees wear monitors, we were told. Indoor air quality was good, even with several welders running.

The smoke eater is the control device, as in years past. It vents externally, and was manufactured by Nederman. No visible emissions from it could be seen, during the inspection.

Welding is considered exempt under Rule 285(2)(ii), which exempts the following:

(i) Brazing, soldering, welding, or plasma coating equipment.

We were advised that they now shot blast parts ahead of welding them, because rust would burn or spark, otherwise.

Shot blaster; Rule 285(l)(vi)(C):

There is one large shot blaster, which was down for cleaning, as of the time of the inspection. Outside, we saw that collected particulate from the baghouse was being stored in two 55 gallon drums. The housekeeping here appeared to be good.

As described in the 2011 inspection report by AQD's Michael McClellan, the parts are sent through via an overhead conveyor. The shot blaster exhaust is controlled by an outdoor baghouse. The area around the baghouse was relatively clean. The spent shot is collected in 55 gallon drums. When there are 30 full drums a roll off dumpster is ordered. The drums are emptied into the dumpster. The waste is sent to the landfill. Freezer curtains at the entrance and exit of the shot blaster itself help prevent fugitive emissions.

The shot blaster is considered exempt pursuant to Rule 285(l)(vi)(C), which applies to the following:

(l) The following equipment and any exhaust system or collector exclusively serving the equipment:
(vi) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:
(A) Equipment used on a nonproduction basis.
(B) Equipment that has emissions that are released only into the general in-plant environment.
(C) Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner. (Emphasis added.)

Powder coating line; Rule 287(d):

The powder coater was installed in 2000, we were told. It was running at the time of the inspection, with coatings spray-applied manually.

As described by AQD's Michael McClellan in 2011, the parts are sent through the powder coater, via an overhead conveyor. The parts are grounded, i.e. negatively charged. The paint is positively charged. The paint is sprayed on with stationary applicators that spray the paint upwards. There are 2 painters in the booth manually spraying the paint as well. The painters are suited up with supplied air. The booth is ducted to 2 cyclones which recycle the paint. The finer particulates are exhausted to a fabric filter to be captured. The baghouse particulates are not able to be reused, because the colors are mixed together.

The collector has a pressure drop gauge, I was told, which signifies it needs a new filter when it reaches 12 inches, water column (w.c.) The final filter had a pressure drop reading of 0 inches, w.c., because it was clean. I believe both these references apply to the fabric filter, as the cyclones would not be expected to have particulate filters which need changing out.

The cyclones and fabric filter appeared to be working properly. There were no fugitive emissions inside the plant. Housekeeping for the paint collection containers under the cyclones appeared to be good. No visible emissions could be seen from outside the plant. I was informed that there is a maintenance plan for the powder coating process. The powder coating is exempt pursuant to Rule 287(d), which applies to:

d) A powder coating booth that has an appropriately designed and operated particulate control system and associated ovens.

The powder coating operation appears that it would also meet the stricter exemption criteria for the Rule 287(2)(d) exemption, a revision to the earlier exemption which went into effect on 12/20/2016. This revised exemption applies only to units installed on or after 12/20/2016, and exempts:

(d) A powder coating booth and associated ovens, where the booth is equipped with fabric filter control. The fabric filter control shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the owner or operator shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.

The painted parts are sent through an oven for 45 minutes. They are then ready to be assembled. There were no visible emissions from the curing oven exhaust stack.

Miscellaneous:

There is a solvent-based parts washer here, service by Safety Kleen. The lid was closed, and cold cleaner operating instructions were posted, as required by Michigan Air Pollution Control Rule 707, for cold cleaners which are considered new sources (installed after 7/1/1979). The instructions referenced contact numbers for both PEAS and the then-DEQ's Clean Air Assistance Division. The solvent used appears to be Safety Kleen Premium Solvent, which uses petroleum distillates.

Conclusion:

No instances of noncompliance with the Michigan Air Pollution Control Rules could be found. We left the site at 2:37 PM, detecting neither odors nor visible emissions as we departed.

NAME _____ DATE 9/29/2019 SUPERVISOR _____