

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

B897733162

FACILITY: VIRON INTERNATIONAL CORPORATION	SRN / ID: B8977
LOCATION: 505 N HINTZ ROAD, OWOSSO	DISTRICT: Lansing
CITY: OWOSSO	COUNTY: SHIAWASSEE
CONTACT: Tony Sovey , Plant Manager, and Project Manager	ACTIVITY DATE: 02/01/2016
STAFF: Julie Brunner	COMPLIANCE STATUS: Compliance
SUBJECT: Unannounced, scheduled facility inspection	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

On 2/1/2016, I conducted an unannounced, scheduled inspection of Viron International Corporation (Viron) in Owosso. The Hintz Road facility was last inspected on 8/23/2011. A sister site on Kroutz Road (SRN N6476) in Owosso has closed and the property sold to Baker College. An additional manufacturing facility is located in Temple, Texas. Administration, accounting, engineering and sales/marketing are located at the Owosso, Michigan location.

Contact:

Mr. Tony Sovey, Project Manager, 989-723-8255, tsovey@vironinti.com

Facility Description:

Viron International Corporation manufactures air pollution control equipment such as scrubbers, fans, ductwork, dampers, and tanks. At the Hintz Road site, they build scrubber systems out of different types of plastic such as polyvinyl chloride (PVC), and fabricate impellers out of fiberglass. Their control devices are designed for highly corrosive environments, such as may be found at a chrome plating facility.

The facility is located on the outskirts of Owosso on a larger piece of property and is surrounded by a small amount of residential housing on the north and south sides, and along Hintz Road to the east. Some woods are on the west side or back side of the facility, and separate the nearest neighbors from the facility.

Regulatory Overview:

Viron is a true minor source of any regulated air contaminants including hazardous air pollutants (HAPs) and not subject to the Title V Renewable Operating Permit (ROP) program. Viron has three active Permits to Install (PTIs) 137-82, 139-82, and 128-86, and some exempt processes.

Emission Unit Description	Permit No.	Status
Paint room	137-82	No longer operating
Paint spray booth with drying oven	139-82	Spray booth used for touch-ups
Fiberglass hand lay-up and fiberglass grinding operation with dust collector	128-86	Operating

MAERS:

The facility is not required to report emission information.

Inspection:

I arrived at 9:30 AM. Weather conditions were 36°F, and partly cloudy with little wind. A very faint odor (most likely styrene) could be detected in the parking lot. No visible emissions were identified from the stack on the building that was visible from the parking lot.

I met with Mr. Tony Sovey. We discussed the purpose of my inspection and then we toured facility operations. The facility operates 4 days per week, 10 hours per day from 7:00 AM to 5:30 PM. Machining processes and fiberglass lay-up were occurring during the inspection.

PTI 137-82 is for a paint room and PTI 139-82 is for a paint spray booth and drying oven for a plastisol coating process. They no longer do any painting on-site, except for touch up of any nicks or scrapes on parts. They

send their parts offsite to be powder coated. The booth is still functional with panel style filters for particulate control and does not vent outside the building. A spray applicator with a small paint pot, compressed air hose for the applicator operation, and paint storage/mixing area are located beside the booth. It has been a long time since the booth was actually used for paint application, and is mainly used for parts and equipment storage. Operations permitted on PTI 137-82 for the paint room are gone. Both PTIs 137-82 and 139-82 have emission limits for volatile organic compounds (VOC) but no recordkeeping requirements. The drying oven is no longer used to dry painted parts. Both PTIs 137-82 and 139-82 could be voided. Any touch-up paint application done in the booth could use exemption Rule 287(c).

The drying oven on PTI 139-82 is a natural gas-fired 1.2 MMBtu/hr oven made by Michigan Oven Company. It is used to soften and relieve stress in plastic parts. PVC rolls are treated at 210°F and Poly Pro rolls are treated at 270°F. Fiberglass wheel impellers are also sometimes put in the oven to finish curing. This oven is vented out the roof. The stack was recently rebuilt and is estimated to be 26 feet tall with a china cap. The china cap is not recommended as it is considered to obstruct exhaust gas flow. This oven could also operate as exempt per Rule 282(b) for fuel-burning equipment used for indirect heating.

Another electric oven referred to as the "pizza oven" is used to soften small PVC sheets to form parts (plastic thermoforming). There is no exhaust vents on this oven and the process appears exempt under Rule 286(d).

Fiberglass Lay-Up and Fiberglass Grinding Operation:

Fiberglass lay-up and fiberglass grinding operation under PTI 128-86 are located in a separate room. They make fan impellers using fiberglass lay-up for scrubbers. They utilize molds to get the proper curvature of the fan blades on to which they place fiberglass mats. They mix resin with a catalyst, and this is hand applied to the fiberglass mat with a roller brush. Gelcoat is typically not used and acetone is used for clean-up. The lay-up operation is done on a table in the corner of the room. The air in-takes to vent the emissions are in the ceiling and emissions are vented out the west side wall of the facility. The vent outside was about 10 to 12 feet above ground level. A faint odor was outside but the facility has no listed odor complaints, and there is some distance between the facility and the nearest residential neighbors.

Once the fiberglass parts are cured, they are balanced and ground to a more finished state in a controlled grinding operation. The fiberglass grinding operation is in a 3-sided booth controlled by a 5000 cfm fabric filter dust collector. The operator sits in the booth, wears a dust mask, and the control device was observed to effectively draw the particulate into the control system. The dust collector is vented outside over the roof in a horizontal discharge. The dust collector filters are cleaned out once per week at the end of the last shift. No emissions were observed from the dust collector stack and the control system appears to be operating properly per the conditions of the permit.

There are no stack requirements on PTI 128-86. While horizontal discharge of air emissions is not recommended, it is not a compliance issue with the permit.

CNC Router and Other Machining:

The plastic arrives at the plant in sheets, which are sent to a CNC router to be machined or cut. The router exhausts to the in-plant environment, and is exempt under Rule 285(l)(vi)(B). For the PVC plastic, they bend the plastic, and weld it. The welding is done with hot air welders, which utilize a PVC welding rod to form a bead of material. Sheets of plastic which have been cut to shape have the major seams joined by a butt welder. Smaller welds are done with the hand held hot air welders.

They have a small metal shop, but their metal cutting is generally done at a facility in Livonia, which has a laser cutter. They have one MIG welder which is exempt under Rule 285(i).

Records Review:

There are no recordkeeping requirements in the PTIs, and upon request the material used in the fiberglass lay-up area was provided. The following are the type and quantities of each material used between January 2015 and December 2015:

Hetron 922 vinyl Ester Resin: 10,848 lbs.

Owens-Corning 1.5oz./sq. ft. FRP Chopped Strand Mat: 7,440 lbs.

Norox MEKP-925 Catalyst: 104 lbs.

Acetone: 1,432 lbs.

VOC emissions for 2015 -**10,848 lbs resin x 140 lb styrene/ton of resin* x 1 ton/2000 lbs = 759 lb/yr (0.38 tpy)****104 lbs catalyst x 2% by wt of VOC/100 = 2.1 lb/yr (0.001 tpy)****Total VOC emissions = 0.38 tpy < 1.0 tpy (permit limit)**

* EF Table 1: Unified Emission Factors for Open Molding of Composites (10/13/2009), manual application, 43% by weight styrene content in the resin.

VOC emissions from the fiberglass lay-up process are below the permitted emission limits. It is recommended that monthly records and emission calculations be maintained to demonstrate compliance with the permit limits.

Summary:

The facility appeared to be in compliance with the applicable rules and regulations.

A review of the exemptions that would be used in place of PTIs 137-82 and 139-82 for the paint room, spray booth, and drying oven (Michigan Oven Company) was conducted. For the paint mixing, storage and prep area, exemption rule R 336.1287(k) would be appropriate. For the spray booth, exemption Rule 287(c) would be appropriate. Monthly usage records are required to be kept with this exemption to demonstrate that not more than 200 gallons (minus water) per month of coating is used in the spray booth. For the natural gas-fired drying oven, exemption Rule 282(b) would be appropriate as the rated heat input capacity of the oven is less than 50 MMBtu/hr. Mr. Sovey agreed to have PTIs 137-82 and 139-82 voided and any painting will be done under an exemption.

The Krouse Road facility (SRN N6476) is listed as permanently closed in MACES, but PTI 140-98 is still active. Mr. Sovey agreed to have PTI 140-98 voided.

NAME Julie L. Bunker DATE 2/4/16 SUPERVISOR B. M.

