DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N214855149

FACILITY: Novares - Howell		SRN / ID: N2148
LOCATION: 1301 McPherson Park Dr., HOWELL		DISTRICT: Lansing
CITY: HOWELL		COUNTY: LIVINGSTON
CONTACT: George McLaughlin , Health, Safety & Environmental Coordinator		ACTIVITY DATE: 09/23/2020
STAFF: Samantha Davis	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection for compliance with PTI No. 275-02. Inspection was coordinated due to COVID-19.		
RESOLVED COMPLAINTS:		

On 9/23/2020, I conducted a coordinated, scheduled inspection of the Key Plastics L.L.C. Howell plant. This inspection was coordinated due to COVID-19.

Facility environmental contacts:

David Weissling, Maintenance Manager, dweissling@novaresteam.com; Phone 517-552-2570; Mobile 248-949-3522 took over for George McLaughlin, Health, Safety & Environmental Coordinator who has recently retired.

Facility description:

Key Plastics LLC's Howell plant creates injection molded plastic parts for the auto industry, and coats them. They also perform some minor assembly.

Regulatory overview:

This facility has a synthetic minor permit, Permit to Install (PTI) No. 275-02, which contains restrictions that limit the facility's Potential to Emit (PTE) of Volatile Organic Compounds (VOCs) to below the 100 ton major source threshold. Major sources of criteria pollutants, such as VOCs, are required to obtain a Renewable Operating Permit (ROP). The PTI also limits the plant's PTE for Hazardous Air Pollutants (HAPs), to less than the major source threshold of 10 tons per year (TPY) for any single HAP, or 25 TPY for total HAPs.

Additionally, Key Plastics had a PTI 58-15 for a burnoff oven, to remove paint from metal coating racks. This unit had been removed earlier in 2020 and sent down to the Mexico facility. During my inspection I was able to verify that the unit was no longer there. A request to void the permit has been sent.

Complaint history:

The Key Plastics Howell plant was once known as Libralter Plastics. AQD received frequent odor complaints regarding this source, from 1995 through 1999. Following the replacement of the original recuperative thermal incinerator with a more advanced unit, in 2000, and an associated increase in stack height of 13 feet, the number of odor complaints greatly decreased.

The most recent complaint received had been in 2010, until an odor complaint was received from a nearby school, in late March, 2016.

Location:

The Key Plastics Howell plant is in an industrial park on the west side of Howell. Roughly 400 feet to the north and east is a large subdivision, so odorous emissions woud have the potential to impact neighbors. Several hundred feet to the southeast, south, and west are other industries.

Arrival:

This was a coordinated inspection. At 1:30 PM, I arrived in the parking lot of Key Plastics. No visible emissions were visible from exhaust stacks or the roofline of the plant. There was a slight odor of paint in the parking lot.

I met with Mr. David Weissling, Maaintenance Manager, who has recently taken over for George McLaughlin, Health, Safety & Environmental Coordinator. I provided him with a copy of the of my business card and explained the typical inspection process.

Inspection:

We observed assembly operations within the plant. These involve mechanical assembly, with installation of pins and parts. There appeared to be no air emissions from these processes. Processes involving flaring of metal could be considered exempt under Rule 285(I)(I), for bending or forming or pressing of metals.

EU-PBPLINE2; PTI No. 275-02:

The power wash system has 5 stages.

Stage 1 is the pre-clean; stage 2 contains the cleaner itself (surfactant); stage 3 is a rinse stage with city supplied

water: stage 4 contains previously used reverse osmosis (RO) rinse water; stage 5A contains recirculated RO rinse water (cleaner than in stage 4); and stage 5B, the Halo rinse, contains virgin RO water, plus Aqua Shed, a rinse agent which prevents water spots on parts. They try to reuse the RO water, as much as they can. Natural gas is used to heat the water in the wash system. It is not uncommon to see a steam plume from the two booth exhaust stacks, during the cold months of the year.

Air nozzles blow water droplets off the freshly washed parts, which then enter a natural gas-fired dry off oven. The set-point of this oven is as low as 190F to as high as 260F. A tunnel serves as a cool down area for the parts, which are then ready to be primed.

The plastic parts coating system consists of manual prime booths 1 and 2, base coat booths 1 through 2, and clearcoat booths 1 and 2. Prime booths 1 and 2 are manually operated, with two handheld High Volume, Low Pressure (HVLP) spray guns per booth, which apply an adhesion promoter. Parts receive their first coating in booth 1, and their second coating in booth 2. A water wash paint system is used to capture particulate emissions of paint droplets. Air enters through the top of the booths and is drawn through the water. The parts coated with adhesion promoter pass through a bake oven. Prime booth 1 was running, while booth 2 was idle. Base coat booths 1 and 2 are used for applying color coats to parts, and utilize two robotic, electrostatic spray guns per booth. Clear coat booths 1 and 2 apply successive layers of clear coat. Each booth uses two robotic, electrostatic spray guns.

Earlier during the inspection, we observed the area where collected paint solids are removed from the water which circulates through the water wash system. The water can reportedly be reused for 1.5 to 2 years, before needing to be changed out. A tote is used to remove water from the sludge, which drip dries, and the sludge is disposed of as a non-hazardous waste.

The control technology for the bake ovens and the paint room is a rotary zeolite concentrator, with recuperative thermal incinerator preceded by a three-stage fabric filter collector. The recuperative thermal incinerator is also known as a regenerative thermal oxidizer, or RTO. It is rated at a 90% capture rate and 95% destruction efficiency, for VOC emissions. There were no visible emissions from the RTO exhaust stack. The RTO temperature during my visit was reading a set-point of 1550F and an actual of 1555F.

PTI No. 275-02 requires a minimum temperature of 1,300 degrees F, so they are well above that. I observed a circular chart recorder which appeared to be in working order. While I was checking the temperature, a worker came over and logged some data. I was informed that he comes over and performs a checklist every two hours. Which means they are meeting the required daily maintenance check sheet for the RTO, as in Appendix A

Plastic injection molding machines; Rule 286(b):

They had 31 machines, but have eliminated a few and now have a total of 25 plastic injection molding machines.

There is a new emergency generator on site that is natural gas fired. It is a 100KW or 341,214.200btu Generac Industrial Generator GS100 that is used as back-up for lighting and computers. It currently has 229.6 hours on it. It is operating under exemption 282(2)(b)(i).

EUBURNOFF; PTI No. 58-15:

This emission unit has been removed and sent down to their Mexico facility. A request for a permit void has been submitted.

EU-PBPLINE2 VOC daily limit: 662.4 lbs/day

EU-PBPLINE2 yearly VOC limit: 69 tons per year (TPY), on a 12-month rolling average.

The VOC emission records were not able to be provided to me at this time. Compliance to be determined once I receive and review the records.

FGFACILITY individual HAPs limit: <9.0 TPY FGFACILITY total HAPs limit <22.5 TPY

The individual and aggregate HAP records were not able to be provided to me at this time. Compliance to be determined once I receive and review the records.

Conclusion:

Key Plastics has not been able to provide me with the required records to determine compliance; therefore, Key Plastics is currently not in compliance with PTI 275-02. A violation may be forthcoming depending on what the records indicate when I receive them, and how long it takes to receive the correct required documentation.

NAME Samantha Davis

DATE_9/30/2020

SUPERVISOR