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

| 1151165673   |                               |                           |
|--|-------------------------------|---------------------------|
| FACILITY: 2/90 Sign Systems                            |                               | SRN / ID: N1511           |
| LOCATION: 5350 Corporate Grove Boulevard, GRAND RAPIDS |                               | DISTRICT: Grand Rapids    |
| CITY: GRAND RAPIDS                                     |                               | COUNTY: KENT              |
| CONTACT: Nathan Drews , Production Manager             |                               | ACTIVITY DATE: 12/06/2022 |
| STAFF: April Lazzaro                                   | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT  |
| SUBJECT: Unannounced, sch                              | eduled inspection.            |                           |
| RESOLVED COMPLAINTS:                                   |                               |                           |

Air Quality Division (AQD) staff, April Lazzaro, conducted an unannounced scheduled inspection of 2/90 Sign Systems located at 5350 Corporate Grove Boulevard in Cascade Township. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations as well as Permit to Install (PTI) No. 264-98. Accompanying AQD staff on the inspection were Nathan Drews, Production Manager and Ben Rienks, Senior Production Coordinator.

## FACILITY DESCRIPTION

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2/90 Sign Systems manufacturers interior signage primarily for commercial and institutional buildings. The facility consists of material manufacturing, paint or ink finishing and assembly operations. The source is a synthetic minor source for hazardous air pollutants (HAPs).

## COMPLIANCE EVALUATION

The facility manufactures signs through various forms of cutting and shaping of metal and plastic materials. These processes are vented to a baghouse located inside the plant and in which exhaust air is released to the in-plant environment. These manufacturing processes are exempt from permitting under Rule 285(2)(I)(vi) (B).

Parts are painted in the sign coating process which consists of two quad spray booths, one rectangular spray booth, and two infrared ovens. The hydrographic application process has been removed from the facility. All booths are operated independently. Each booth is controlled by a panel of fabric filter squares. At the time of the inspection the majority of filters were not installed properly on the booths. I mentioned this to Mr. Drews and Mr. Rienks and informed them that changes were necessary in order to close all open gaps, as the paint solids (particulate matter) was bypassing the filters and going into the stack. Mr. Drews and Mr. Rienks indicated they would address it immediately. I received an email on December 13, 2022, from Mr. Rienks that included photos of the corrective actions taken to eliminate filter gaps. The corrections included purchasing new racks for the filters to attach to, as well as using one large mat filter to cover the space, instead of small squares. At the time of the email, the filter issues had been corrected.

The company currently is using high volume low pressure (HVLP) spray guns as marked on the sides of the spray gun observed. At the last inspection they were using "low volume lower pressure" (LVLP), gravity fed spray guns which only require a couple teaspoons of solvent to clean/purge the tips between color changes. It was determined during the previous compliance inspection that the LVLP guns have an equivalent or better transfer efficiency as HVLP and as such, the permit is being met.

The company uses coatings in small quantities (i.e. quarts at time) and has very little paint waste. During the previous inspection, it was noted that the company had two small solvent recovery stills, exempt under Rule 285(2)(u), that recycle solvent from paint waste. These stills were not observed during this inspection.

The company is maintaining all records in accordance with the permit (records attached). Mr. Rienks keeps all records available in a binder sorted by month which he had during the inspection. Company records were requested via email for the time period of January 2021 through October 2022, these records were provided timely. The 12-month rolling time periods all indicated compliance with the permit limits. The results of the most recent 12-month period ending in October of 2022 are as follows:

| Pollutant                   | Actual<br>Emissions    | Limit                           | Compliance |
|-----------------------------|------------------------|---------------------------------|------------|
| VOC from coating operations | 5.61 tons              | 29.7 tons per 12-month rolling  | Y          |
| VOC from purge/clean-<br>up | 0.64 tons              | 2.0 tons per 12-month rolling   | Y          |
| Individual HAP              | 3.10 tons<br>(toluene) | 9 tons per 12-month<br>rolling  | Y          |
| Aggregate HAP               | 3.79 tons              | 25 tons per 12-month<br>rolling | Y          |

All stacks appeared to meet permitted stack requirements and have not changed from the previous inspection.

## CONCLUSION

2/90 Sign Systems was in compliance at the time of the inspection.

NAME April Lazzaro

DATE 12/14/2022 SUPERVISOR