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

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| FACILITY: CONTROLLED PLATING TECHNOLOGIES INC | | SRN / ID: B1725 |
| LOCATION: 1100 GODFREY, GRAND RAPIDS | | DISTRICT: Grand Rapids |
| CITY: GRAND RAPIDS | | COUNTY: KENT |
| CONTACT: Steve Slot , President | | ACTIVITY DATE: 07/19/2022 |
| STAFF: Michael Cox | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Scheduled Unannounced Inspection | | |
| RESOLVED COMPLAINTS: | | |

**Air Quality Division (AQD) staff, Michael Cox (MTC) arrived at Controlled Plating Technologies, Inc. (CPT) located at 1100 Godfrey Avenue, SW, Grand Rapids, Michigan at 11:00 am on July 14, 2022, and again at 9:00 am on July 19, 2022, to conduct an unannounced, scheduled inspection.**

## Facility Description

**Prior to entering the facility, off-site odor and visible emissions observations were completed. No odors or visible emissions were observed prior to entry. Upon arrival MTC met with Steve Slot, President and Bo Ah Jung, Chemist who provided a walkthrough of the facility and answered site specific questions. Records were proved by the facility on-site.**

**CPT is a plating job shop which conducts alkaline zinc plating and chromate conversion coating on zinc and steel die cast parts. The facility currently operates three plating lines: Manual Rack Line, Automatic Rack Line, and a small Barrel Line. The zinc plating tanks (three each line) are the only electrolytic plating tanks utilized. The Manual Rack Line, Automatic Rack Line, and Barrel Line are vented through separate exhaust systems. The Barrel Line is completely internally vented and the other two are vented externally through existing scrubber shells, which is discussed further below. This facility is currently unpermitted.**

## Compliance Evaluation

**Manual Rack Line: This line has various tanks for metal preparation, rinsing, and zinc electroplating. The electro strip and hydrochloric acid pickling tank on the line are vented out of the building as well as the three zinc plating tanks on the line. CPT is utilizing the Rule 290 exemption from Rule 201 permitting for the tanks venting externally. Emission Records were provided by CPT for the time period of October 2007 through June 2022. After a review of the emission records, the Rule 290 exemption is still applicable for the tanks. It was noted that the highest emissions occurred during the month of March 2021 when 3.5 pounds (lbs.) was emitted through Vent #1 of the Manual Rack Line. The nitric acid dip tank serving the Manual Rack Line was observed during the inspection and was noted to be vented internally. Ms. Jung and I discussed the pH concentration of nitric acid used and the fact that it is maintained at ambient temperatures and is not electrolytic. The nitric acid dip tank serving the Manual Rack Line appears exempt from Rule 201 permitting per Rule 285(2)(r).**

**Automatic Rack Line: This line is essentially the same as the Manual Rack Line except for being an automated process. Various tanks for metal preparation, rinsing, and zinc electroplating are utilized by the Automatic Rack Line. The electro strip and**

**hydrochloric acid pickling tank on the line are vented out of the building as well as the three zinc plating tanks on the line. CPT is utilizing the Rule 290 exemption from Rule 201 permitting for the tanks venting externally. Emission Records were provided by CPT for the time period of October 2007 through June 2022. After a review of the emission records, the Rule 290 exemption is still applicable for the tanks. It was noted that the highest emissions occurred during the months of March, June, and August 2021 when 0.3 pounds (lbs.) was emitted through Vent #4 of the Automatic Rack Line. The nitric acid dip tank serving the Automatic Rack Line was observed during the inspection and is also vented internally. The nitric acid dip tank serving the Automatic Rack Line appears exempt from Rule 201 permitting per Rule 285(2)(r).**

**Barrel Line: This line is a small plating line used for electroplating a high volume of smaller metal objects at one time. The line consists of a non-conductive barrel-shaped cage in which the metal parts are placed before being subjected to the chemical bath in which they become plated. Various tanks for metal preparation, rinsing, and zinc electroplating are utilized on the Barrel Line. All tanks serving this line are vented internally and appear to be exempt from Rule 201 permitting per Rule 285(2)(r).**

**In the past, there was confusion on the status of the scrubber shells on the roof. After a discussion with Mr. Slot and Ms. Jung the old scrubbers located on the roof were left over from a previous chrome plating operation prior to CPT taking over the building. CPT uses the old scrubbers as exhaust fans.**

**One natural gas fired bake oven was observed during the inspection. Ms. Jung stated that the bake oven is used for heating parts prior to being processed in the zinc plating lines. It was noted that the bake oven had a set point of 375°F and was operating at 353°F during the inspection. This bake oven appears to be exempt from Rule 201 permitting per Rule 282(2)(b)(i).**

**An existing 90 HP natural gas fired Clever Brooks boiler, which had a manufacturer's date of 1957 on the faceplate was observed on site. It was noted to have last been serviced and inspected on July 8, 2021. Ms. Jung stated that another inspection/service was scheduled for July 2022. This boiler appears to be exempt from Rule 201 permitting per Rule 282(2)(b)(i).**

**This facility appears to be subject to National Emission Standards for Hazardous Air Pollutants for Area Sources Subpart WWWWWW: Plating and Polishing. The AQD does not have delegation for enforcement of this federal standard.**

**Conclusion**

**Based on the review of the records provided and the facility walk through, Controlled Plating Technologies Inc. appears to be in compliance with applicable air pollution control rules and regulations.**

NAME _____ DATE 8/2/2022 SUPERVISOR _____