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

B300066860

FACILITY: Beacon Park Finishing LLC		**SRN / ID:** B3000
LOCATION: 15765 STURGEON, ROSEVILLE		**DISTRICT:** Warren
CITY: ROSEVILLE		**COUNTY:** MACOMB
CONTACT: Garrett Kanehann , Owner/CEO		**ACTIVITY DATE:** 03/16/2023
STAFF: Adam Bognar	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On Thursday, March 16, 2023, and again on April 12, 2023, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I, Adam Bognar, conducted an unannounced targeted inspection of Beacon Park Finishing LLC (the "Facility") located at 15765 Sturgeon, Roseville, MI. The purpose of this inspection was to determine the facility's compliance status with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) rules; 40 CFR Part 63, Subpart N, National emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chrome NESHAP); and Permit to Install No. 186-91D.

Pre-Inspection

I arrived at Beacon Park Finishing at 10:30 am. I knocked and pinged the doorbell at what appeared to be the door to the lobby/office area, nobody answered. I tried calling Popat Patel (Chemist), who is generally my main contact at the facility. The main phone line for the facility found on Google was not functioning. I could not reach anyone on the phone. This was also the case during my previous inspection.

I entered the facility through the unlocked maintenance door and identified myself to a maintenance employee inside as an Air Quality Division inspector from the State of Michigan. This employee called all of the managers at the facility including Ramone Bosques, Joshua Bush (Josh), and Garrett Kanehann. None of these managers were on-site at this time. This employee informed me that the chemist/environmental compliance person has been vacationing in India for a period of a few weeks to a month.

The maintenance employee apologized and said that he did not feel comfortable showing me around the facility without a manager present. The employee stated that a manager would be on-site later in the afternoon. I thanked the employee and told him I would come by later to see if a manager is on-site.

I returned to Beacon Park Finishing at around 2:30 pm. I knocked on the front door. Joshua Bush, President, answered the door and allowed me into the office area of the facility. Joshua showed me into his office where we held a pre-inspection meeting. Joshua stated that Garrett Kanehann, Owner, would be in shortly. Joshua and I discussed current facility operations while we waited for Garrett to arrive. Joshua was hired as the President of Beacon Park Finishing in early 2023 after the previous company president, Nick Salvati, was let go.

Garrett arrived at the facility at around 3 pm. Garrett, Joshua, and I discussed the requirements of PTI No. 186-91D and current operations at the facility. Garrett explained that the nickel-chrome line is the only process currently operating at the facility. I asked if records of the chrome tank surface tension have been maintained in Popat's absence. Garrett and Joshua were both unsure if anyone had been taking surface tension records. I asked if daily records of the chrome scrubber pressure drop were maintained in Popat's absence. Garrett and Joshua were both unsure if anyone had been taking daily pressure drop records. Joshua stated that he didn't think anyone had been taking these records. Joshua stated that the nickel-chrome line was run for a couple hours in the morning on the date of this inspection.

As I was explaining the remainder of the recordkeeping requirements to Garrett, he got out a notepad and started writing everything down that I was asking as if he had never heard of these requirements before. He also made copies of the PTI that I brought with me. This is troubling because the requirements of PTI No. 186-91D have been explained to Garrett over the course of several meetings and phone calls with EGLE. This is also troubling because Garrett is not merely an investor in Beacon Park Finishing - he is the owner/operator of this business. Garrett is responsible for ensuring that the required pollution control techniques are utilized.

I told Garrett that I would need to see surface tension and pressure drop records during this on-site inspection otherwise a violation notice would be issued. The nickel-chrome line was operated on the day of this inspection, so there is no excuse for this data not to be available. I was not able to find this data during this inspection. I was able to find surface tension measurement data for all of 2022 and January 2023, but nothing after January 2023 (possibly due to Popat's absence). A violation notice was issued for failing to maintain these records.

Since Popat Patel was in India during this inspection, I told Garrett that Beacon Park Finishing has until Wednesday March 22, 2023 to submit the rest of the records which include the annual ongoing compliance status report, quarterly inspections of the chrome scrubber, and records of each fume suppressant addition – Otherwise a violation notice will be issued for each of these items. Popat was expected back to work on Monday, March 20, 2023, so it was reasonable to expect that he should be able to get the rest of the records to me by Wednesday March 22, 2023.

There have been a couple notable employee changes since my last inspection in March 2022. Nick Salvati, former President of Beacon Park Finishing, was let go from the company in early 2022. Joshua Bush was hired in early 2022 to replace Nick. Based on our conversations, Joshua has no experience with operating a chrome plating facility or dealing with air quality regulations. Joshua was previously an electrician manager at American Axel. Eric Ozment, wastewater operator, resigned from his position in March 2023.

The owner, Garrett Kanehann, is the only consistent staff at this facility. Based on my conversations with him, Garrett does not understand any of the requirements of PTI No. 186-91D even though these requirements have been explained to Garrett multiple times. During my previous inspection, I informed him that he is operating the zinc plating line without the wet scrubber installed. In response, Garrett stated that he was not sure what a wet scrubber was. He asked if it was some kind of filter.

Garrett didn't come along with Josh and I for the on-site inspection because he was taking phone calls regarding other businesses he owns. Anytime I asked Garrett a question about the air permit and it's requirements, Garrett asked Josh if he knew what I was asking. Josh was not able to answer any of the questions about the air permit. Staff at Beacon Park Finishing have demonstrated that they are either unwilling or incapable of complying with the requirements of their air permit.

Based on what I have observed in my inspections, Popat Patel is the only one who has some basic understanding of the air quality regulatory requirements at this facility. Based on the records I observed, Popat took surface tension readings and maintained surface tension on the chrome tank throughout 2022 and in January 2023. I have a difficult time understanding Popat due to his quiet voice and heavy accent. Garrett has stated that he also has trouble understanding Popat. Other EGLE staff have also mentioned that Popat is very hard to understand. Requesting information from the facility is more difficult due to this communication barrier. Popat is the only staff that has demonstrated to me that they have any understanding of the plating chemistry and air quality regulatory requirements at this facility.

Update 3/21/2023 - Popat called me on March 21, 2023 and informed me that Beacon Park Finishing's database had crashed over the weekend and he wouldn't be able to get me the records by Wednesday, March 22, 2023. He stated he would probably be able to get them to me the following week. He stated that he did have someone taking surface tension measurements in his absence. He stated that the scrubber for the chrome exhaust (Control D) has been broken for a while now, so daily pressure drop records are not maintained. Popat was not sure of the exact date the chrome scrubber stopped working.

I received some of the records I requested on March 27, 2023. I received additional records on March 29, 2023, on April 5, 2023, and again on April 17, 2023. Due to the facility's history of recordkeeping violations regarding Control D, the records submitted after March 22, 2023 will not be accepted for purposes of determining compliance with AQD rules. A violation notice will be sent to Beacon Park Finishing for operating the chrome tank without an operational scrubber and for failing to maintain the records referenced above.

Beacon Park Finishing has had repeated issues with operating this composite mesh pad scrubber:

On January 7, 2021, a violation notice was issued to Beacon Park Finishing for failure to operate Control D while operating the nickel-chrome plating line. Again in April 2022, Beacon Park Finishing was cited for operating the nickel-chrome line without operating Control D. This is an ongoing issue at this facility.

On September 20, 2021, EGLE Air Quality Division and EGLE Materials Management Division (MMD) sent Beacon Park Finishing an Enforcement Notice. AQD and MMD sent the Enforcement Notice together because both divisions have had ongoing compliance issues with Beacon Park Finishing. This Enforcement Notice notified Beacon Park Finishing that EGLE has commenced an enforcement action against Beacon Park Finishing. The Enforcement Notice requested that Beacon Park Finishing meet with EGLE staff to discuss the alleged violations and their resolution through entry of a Consent Order at a virtual or teleconference meeting. The purpose of the meeting was to: (1) provide Beacon Park Finishing with an opportunity to demonstrate compliance by presenting any documentation or factual information that should be

considered regarding the alleged violations; and (2) discuss options for satisfactorily resolving the violations.

This meeting was held on October 12, 2021. In this meeting, Garrett Kanehann agreed to work with EGLE to resolve the ongoing violations through the administrative consent order process. This consent order has not been finalized at this time.

Facility Inspection

Beacon Park Finishing performs finishing operations on metal parts. They perform decorative nickel/chrome plating on the decorative front tow loop for the Ford F150. They also have an operational Zinc plating line, but Beacon Park Finishing is not currently contracted to do any zinc plating. Ramon stated in a follow up inspection on April 12, 2023 that the facility may try and sell off the zinc plating equipment.

Previously, the facility operated a nitric acid stripping tank. This was removed from the PTI in the latest permit modification of PTI 186-91D issued on February 15, 2023. I verified that this equipment has been dismantled during this inspection. The tank is still on-site, but the tank is not filled and some of the associated equipment has been dismantled. The tank has a thin film of liquid on the bottom. This liquid was seen by Materials Management division staff during a follow up inspection on April 12, 2023.

Currently, processes at this facility include decorative chrome plating, nickel plating, and various grinding/polishing operations. Metal plating is achieved by dipping racks of metal parts into a series of chemical & electrochemical tanks which modify the surface of the metal parts. Part racks are conveyed in and out of each plating/wash tank via an overhead hoist system.

According to Josh, there are approximately 20 employees that operate these processes during four 10-hour shifts per week. Generally, the business will operate Monday through Thursday and use Friday for maintenance activities. Based on my discussions with Joshua and Garrett, this may be reduced to 3 days a week due to lack of work. The facilities operating hours have decreased over the past 8 years. In 2015, an AQD inspector noted that there were 100 employees operating this plant 24 hours a day for 5 days a week. Garrett Kanehann purchased this facility on 10/04/2017 based on the LARA filings I reviewed.

The chrome/nickel line consists of a soak tank, alkaline cleaning tank, electrolytic cleaning tank, acid dip tank (30-40% hydrochloric acid), nickel strike tank, two nickel tanks (bright and semi-bright), two chrome tanks (only 1 of which is permitted and operational), and several aqueous wash tanks. I observed that only one chrome tank was filled during this inspection. The chrome tank (decorative) and the nickel strike tank are vented to a composite mesh pad (CMP) scrubber (Control D). This process was not being operated during this inspection.

Surface tension in the chrome tank is reduced through periodic additions of a wetting agent. Beacon Park Finishing switched to a non-PFOS based wetting agent shortly before the Chrome NESHAP rules changed to not allow PFOS based wetting agents. Popat explained that, despite having moved away from the PFOS based wetting agent, significant amounts of PFOS remained in

the plating tanks. This PFOS could not be treated with their standard wastewater treatment process.

The current wetting agent used is Ankor LF-19. The main active ingredient in Ankor LF-19 is polyfluorosulfonic acid (PFSA). Although this compound is not a "PFOS-based fume suppressant", PFSA belongs to the family of perfluorinated and polyfluorinated alkyl compounds (PFAS).

During my previous inspection on March 8, 2022, Popat stated that the chrome/nickel line is sometimes operated without the chrome scrubber functioning because scrubber water lines freeze on cold winter days. As part of this inspection, I wanted to check the water lines to see if there was any insulation added to CMP scrubber. I observed that Beacon Park Finishing added insulation to the pipes; however, the insulation was poorly installed and starting to come apart. I am certain that the installed insulation would not prevent the pipes from freezing. I also noticed that there was some fluid dripping from the pipes. I could not determine if this was due to the pipes leaking or due to snow melting from the roof of the facility. I notified Josh that it appeared that the pipes may be leaky, but I could not tell for sure. Josh stated that he would have someone take a look at the leaky pipes.

Control D was previously a wet scrubber, but the scrubber was replaced by a composite mesh pad system (CMP) in 2000. AQD considered this replacement to be exempt from Rule 201 requirements pursuant to Rule 285(2)(d).

Based on the repeated compliance issues at this facility, AQD may request that Beacon Park Finishing visually demonstrate that the composite mesh pad filter is in working shape. It may be the case that this filter has never been replaced and is becoming corroded.

According to the operation and maintenance plan, the mesh pad is washed down throughout the day based on manufacturer's recommendations. The wash down schedule is controlled by a programmable logic control system for the pre-control and stage one filter. The malfunction abatement plan states that the stage two filter is cleaned manually as needed (if pressure drop approaches 5" of water).

The zinc electroplating line consists of a soak tank, alkaline cleaning tank, acid tank (30-40% HCl), 2 zinc electroplating tanks, and several aqueous wash tanks. The HCl tank was previously permitted to be controlled by a wet scrubber (Control B). During my previous inspection, I noted that the Control B wet scrubber had been removed from the roof and the HCl tank was being operated without ventilation. This was due to the roof being replaced sometime between March 2020 and March 2021. Beacon Park Finishing was issued a violation notice for operating the HCl tank without operating the wet scrubber. To address the violation, Beacon Park Finishing modified their permit to install to remove the wet scrubber from the process. The HCl tank is now exhausted to the general in-plant environment.

Decorative chrome "Line 1" and associated "Control A" wet scrubber are no longer in operation. According to Popat, this chrome line was last operated on June 13, 2013 and was drained on January 21, 2014. The first MAERS report submitted by the facility was for the year 2015. According to that report and all MAERS reports since then, this line has not been operated. I

verified that each tank in this plating line was drained. I didn't see any evidence that this line was recently used. The area around this line is now used for storage. This equipment was removed from the facility's PTI in the most recent modification.

Permit to Install No. 186-91D

EUZINC

EU Zinc consists of a zinc plating line with no control. The only condition in this emission unit table requires the facility to exhaust this line to the in-plant environment. I did not observe that any of the zinc plating line tanks were exhausted out of the building. This line was not operating during this inspection.

FGLINEIV

FGLINEIV consists of all tanks in the nickel-chrome plating line. The nickel strike tank and the chrome plating tank are permitted to be controlled by a composite mesh pad scrubber – Control D.

Section I – Special Condition 1: Places a limit on chromium emissions of 0.05 micrograms per dry standard cubic meter. Compliance with this emission limit is demonstrated through proper operation of the chrome emission controls. The chrome scrubber was not operated for some unspecified period, and records of surface tension records were not kept after January 2023. According to the permit evaluation document from PTI No. 186-91B, this process will not meet the health based screening levels determined by EGLE without using both a fume suppressant and the composite mesh pad scrubber (Control D). Beacon Park Finishing was issued a violation notice for exceeding this emission limit.

Due to the repeated issues with the pollution control devices, AQD will require Beacon Park Finishing to verify the total chromium emission rates from FGLINEIV, by testing at the owner's expense, as specified in Special Conditions I.1 and V.1.

Section I – Special Condition 2: States that there shall be no visible emissions from FGLINEIV. I didn't notice any visible emissions while looking at the stack. The plating line was not operating during my inspection.

Section III – Special Condition 1: States that the permittee shall implement and maintain an approvable operation and maintenance plan. The facility maintains a plan on-site and has submitted this plan to AQD. While the submitted plan was considered approvable, it has not been implemented based on my observations during this inspection. Surface tension measurements and scrubber pressure drop readings were not taken according to this plan. The chrome scrubber malfunctioned, Beacon Park Finishing staff did not fix the scrubber, and AQD was not notified that the scrubber was not functioning. The main function of this operation and maintenance plan is to prevent this type of occurrence. I requested the most recent version of this plan, but the facility did not provide me this information. The plan will need to be updated to include more stringent conditions for identifying and fixing malfunctions. A violation notice was sent to Beacon Park Finishing for failing to implement the operation and maintenance plan.

Section III – Special Condition 2: States that the permittee shall not operate EUCHROME1 unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of the chrome tank does not exceed 40 dynes/cm^2 when measured with a stalagmometer. During my inspection, surface tension records were available for all of calendar year 2022 and January 2023. There were no surface tension records available after January 2023. Based on my conversations with staff at the facility, the chrome process was operated during February 2023 and March 2023. The chrome tank was also operated on the day of this inspection, yet no surface tension data was available for that day. A violation notice was sent to Beacon Park Finishing for failing to maintain surface tension on the chrome tank.

Section IV – Special Condition 1: States that the permittee shall not operate EUCHROME1 unless the composite mesh pad scrubber system is installed, maintained, and operated in a satisfactory manner. The composite mesh pad scrubber has not functioned for an unspecified period of time according to Popat. A violation notice was sent to Beacon Park Finishing for failing to operate the composite mesh pad scrubber while operating the chrome tank.

Section IV – Special Condition 2: States that the permittee shall not operate the nickel strike tank unless the composite mesh pad scrubber system is installed, maintained, and operated in a satisfactory manner. The composite mesh pad scrubber has not functioned for a while according to Popat. A violation notice was sent to Beacon Park Finishing for failing to operate the composite mesh pad scrubber while operating the nickel tank.

Section IV – Special Condition 3: States that the facility shall equip and maintain the composite mesh pad system with a differential pressure monitoring device. The composite mesh pad system is equipped with a differential pressure monitoring device; however, Beacon Park Finishing has not demonstrated that it has been maintained due to the lack of recordkeeping, non-functioning control, and out of range pressure drops for this device. The pressure drops for this device are sometimes reported as 0 for certain portions of the scrubber, which indicates that either the pressure monitoring device is malfunctioning, or the scrubber is malfunctioning. This is discussed in greater detail under Section VI – Special Condition 3. A violation notice was sent to Beacon Park Finishing for failing to maintain the differential pressure monitoring device.

Section V – Special Condition 1: States that upon request of the AQD District Supervisor, the permittee shall verify the total chromium emission rates from FGLINEIV, by testing at the owner's expense, in accordance with 40 CFR Part 63 Subparts A and N. AQD has not requested this testing up until this point. Due to the repeated compliance issues with this process, the district supervisor is requesting that Beacon Park Finishing verify total chromium emissions from this process.

Section VI – Special Condition 1: States that the permittee shall complete all required calculations in a format acceptable to the AQD district supervisor by the last day of the calendar month. I did not request any calculations during this inspection.

Section VI – Special Condition 2: States that Beacon Park Finishing shall monitor the surface tension of the chrome tank in a satisfactory manner and according to the schedule in the chrome NESHAP. Beacon Park Finishing did not provide records showing that surface tension was monitored after

January 2023. A violation notice was sent to Beacon Park Finishing for failing to monitor the surface tension of the chrome tank.

Section VI – Special Condition 3: Specifies inspection requirements for the composite mesh pad scrubber. The pressure drop across the composite mesh pad system must be recorded daily. On March 29, 2023, Popat provided me with pressure drop records from March 2022 through December 2022. The last scrubber pressure drop reading they submitted was on December 23, 2022.

The manufacturers recommended overall pressure drop range is between 1.25" H_2O and 5.25" H_2O. The records submitted show that it was operated at 4" of water from March 2022 until June 3, 2022. After June 3, 2022 and through December 2022, the pressure drop changed to around 2.1" of water.

While the total pressure drop is within the manufacturers recommended range, the individual pressure drops for each section of the scrubber are outside of the manufacturer's recommended range. According to the records I reviewed, in March 2022, the "PRE CONT" section of the CMP system was 1.6" of water. The recommended range for this filter section is 0.5-1.5" of water.

In May & June 2022, the "PRE CONT" section of the CMP system was reported at 0.2" of water. The recommend range for this filter section is 0.5-1.5" of water. Also in May & June 2022, the "STAGE II" section of the CMP scrubber was reported at 1.4" of water. The recommended range for this filter section is 0.25-0.75" of water.

In July, August, September, October, November, & December 2022, the "PRE CONT" section of the CMP system was reported at 0.25" of water. The recommend range for this filter section is 0.5-1.5" of water. Also in July & August 2022, the "STAGE II" section of the CMP scrubber was reported at 0" of water. The recommended range for this filter section is 0.25-0.75" of water. The values are exactly the same on each date during these months with a few exceptions.

These pressure drop readings were not recorded during 2023 based on the records I reviewed. A violation notice was sent to Beacon Park Finishing for failing to maintain daily pressure drop records across the composite mesh pad scrubber and failing to maintain the pressure drop within the acceptable ranges while operating the nickel/chrome line. It was determined during a follow up inspection that the scrubber system was operating without a composite mesh pad filter installed (see discussion at the end of this report titled "Update - Follow up Inspection on April 12, 2023"). It is currently not known how long the scrubber system was operated without a composite mesh pad filter in place.

Beacon Park Finishing is required to visually inspect the composite mesh pad system, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on the pads, no evidence of chemical attack on the structural integrity of the control device, no breakthrough of chromic acid mist on the back portion of the pad closest to the fan, and no leaks in ductwork. Additionally, Beacon Park Finishing must perform wash-downs of the composite mesh pads in accordance with manufacturer's recommendations.

Beacon Park Finishing provided a quarterly inspection report for the composite mesh pad scrubber dated March 20, 2023. The report contains a list of inspection items and a blank space to write next to each item. The inspection list includes the inlet and outlet transition zones, spray nozzles, packed-bed section, overhead weir, drain lines, fan motor, and fan vibration. There is a signature next to each of these items that reads "JB" & "JM".

Special Condition VI.6 requires this inspection record to include a brief description of the working condition of the device during the inspection. There is no note of the working condition on the inspection record provided.

This inspection checklist used by Beacon Park Finishing is an EGLE template for a “Packed Bed Scrubber”. Based on my observations of this scrubber and review of past AQD inspection reports, the Control D scrubber at Beacon Park Finishing is a “Composite Mesh Pad Scrubber”. I did not observe a packed bed section on this scrubber, so I do not know what was actually inspected. Additionally this "Packed Bed Scrubber" checklist includes an inspection item called "Overhead Weir" which is also not part of a composite mesh pad scrubber system. The records submitted have initials next to "Overhead Weir" indicating an overhead weir was inspected. In addition, the Packed Bed Scrubber checklist does not have required inspection items for CMP systems, namely "Mesh Pads". Additionally, the records submitted don't include the required monitoring equipment inspection, control device maintenance records, and records of any corrective actions required for the composite mesh pad scrubber.

Section VI – Special Condition 4: States that the permittee shall keep records of the pressure drop across the composite mesh pad system on a daily basis. These records were not kept after December 23, 2022. The pressure drop readings in the records kept prior to December 23, 2022 are out of the acceptable pressure drop ranges in many cases, yet nothing was done to remedy this. Based on what I have observed during this inspection and my previous inspection, Beacon Park Finishing has demonstrated that they are either unwilling and/or incapable of maintaining a proper pressure drop across this filter. A violation notice was sent to Beacon Park Finishing for failing to keep these records.

Section VI – Special Condition 5: States that the permittee shall monitor emissions and operating and maintenance information in accordance with the chrome NESHAP. Beacon Park Finishing failed to document and maintain surface tension records or records of fume suppressant additions for February 2023 and March 2023. Beacon Park Finishing failed to document the pressure drop across the composite mesh pad scrubber after December 23, 2022. A violation notice was sent to Beacon Park Finishing for violating this condition.

Section VI – Special Condition 6: States that the permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection.

Beacon Park Finishing provided a quarterly inspection report for the composite mesh pad scrubber dated March 20, 2023. The details of this report are covered in this report under Special Condition VI.3.

Records of these inspections were provided, but they did not include all of the information required in Special Conditon VI.6 and contained inaccurate information about the control device. The inspection records provided do not identify the correct device that was inspected, they do not include the approximate time of the inspection, and they do not include a brief description of the working condition of the device during the inspection. A violation notice was sent to Beacon Park Finishing for failing to maintain records of these inspections.

Section VI – Special Condition 7: Requires Beacon Park Finishing to maintain records of the surface tension of the chrome tank, the amount of fume suppressant added to the chrome tank, and the date and time of each fume suppressant addition. During my inspection, records of surface tension and fume suppressant additions were not available from January 31, 2023 through the date of this inspection (March 16, 2023). I was able to verify that surface tension records were kept for all of 2022 and for January 2023. A violation notice was sent to Beacon Park Finishing for failing to maintain surface tension records of the chrome tanks between January 31, 2023 and March 16, 2023.

Beacon Park Finishing did not have records of surface tension available during my on-site inspection on March 16, 2023, and they were not able to provide me with these records of surface tension by March 22, 2023, as requested. Popat did send me records on March 27, 2023 which show that surface tension measurements were taken during February 2023 and March 2023. Popat stated during a phone call on March 21, 2023 that he had Eric Ozment taking surface tension records in his absence. The submitted surface tension records for February 2023 and March 2023 have "Eric" marked as the operator. The surface tension records prior to February 2023 have "pp" marked as the operator (except a few dates in January 2023 where "Eric" was marked as the operator).

Section VIII – Special Condition 1: Requires that exhaust gases from the chrome stack be discharged unobstructed vertically upwards to the ambient air from a stack at least 38’ high and 36” in diameter. I did not verify stack dimensions during this inspection. The stack appeared to be exhausted vertically and unobstructed to the ambient air.

Chrome NESHAP

The facility emailed me the ongoing compliance status report on March 29, 2022. This report was filled out showing the number of amp-hours the chrome tank operated. The report was missing a signature from the responsible official (Garrett Kanehann) at the bottom which certifies that the information in the report is accurate and true to the best of their knowledge. Without this signature, this report cannot be accepted. On March 31, 2023, I responded to this email requesting that Garrett sign this report.

Popat responded to my request with an updated ongoing compliance status report on April 5, 2023. This new ongoing compliance status report appears to include Garrett’s signature (not legible).

The report contains the name and address of the affected source, an identification of the operating parameter that is monitored for compliance (surface tension), the relevant emission limitation for the affected source (40 dynes/cm^2), the beginning and ending dates of the reporting period

(calandar year 2022), a description of the type of process performed in the affected source (1 decorative chrome tank), and the total operating time of the affected source during the reporting period (1208 hours).

The report is missing a certification by a responsible official (Garrett Kanehann) that the work practice standards in 40 CFR 63.342(f) were followed in accordance with the operation and maintenance plan for the source. 40 CFR 63.342(f) specifies operation and maintenance practices for the chrome tank and associated pollution control equipment. A violation notice was sent to Beacon Park Finishing for failing to certify that these work practice standards were adhered to.

Subpart WWWWWW
The zinc plating tanks, nickel plating tanks, and the nitric acid strip tank appear to be subject to 40 CFR Part 63 - National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations (NESHAP WWWWWW). The AQD has not taken delegation of 40 CFR Part 63 Subpart WWWWWW (6W) standards therefore compliance was not evaluated.

Bake Oven
There is one 250,000 BTU/hr natural gas fired bake oven used to relieve stress within metal parts before and after plating activities. Ramone stated in my previous inspection that this oven was recently purchased for a specific job, but they lost the job before the oven was needed. Based on my observations, this oven is exempt from permitting pursuant to Rule 282(2)(a)(i).

I did not notice any cold cleaners, boilers, or emergency generators on-site. Process tanks are heated electronically where necessary.

Update – Follow up Inspection on April 12, 2023:

On April 12, 2023 at 1 pm, EGLE conducted a multi-disciplinary inspection with Adam Bognar (myself) & Brad Myott of the EGLE Air Quality Division, Jennifer Hazelton of the EGLE Materials Management Division, Eric Moore & Stacey Thiel from the EGLE Water Resources Division, Trish Edwards from the EPA, Lisa Quiggle Michigan Department of Health and Human Services, William Ciner from the Roseville fire department, and Jim Osterhaut from the Roseville building department.

We arrived at Beacon Park Finishing between 12:30 pm and 1 pm. We parked in the lot behind the facility. Popat Patel came out the back door of Beacon Park Finishing and greeted us. Brad Myott explained to Popat that we are all gathered here to inspect Beacon Park Finishing for compliance with each of our respective rules. Popat stated that he needed to call his management for advice on what to do. Popat was able to get ahold of Ramon, Plant Manager. Garrett Kanehann, Owner, was not reachable according to facility staff. Ramon stated that Garrett was in a meeting about one of his other businesses. Ramon allowed us into the facility to conduct our inspections.

I will not discuss the findings of other divisions/departments in this report. My objectives during this second inspection were to watch Popat take a surface tension reading on the chrome tank, determine if there is a composite mesh pad filter installed in the chrome scrubber, and make sure the buffing stations are operated according to AQD permit exemption rules.

I told Ramon I needed to see the filters on the chrome scrubber, Control D, because AQD has had chrome plating sources operate composite mesh pad scrubbers without the composite mesh pad because the filter is expensive. Additionally, Popat Patel stated that Control D has not been functioning for some unspecified period. Beacon Park Finishing happened to be performing maintenance on the chrome scrubber, Control D, during this inspection. I was told the maintenance was to replace a blower motor. Ramon and I walked outside to the scrubber and there was a maintenance staff, Justin Moore, on a scissor-lift working on the scrubber. The bolts on two of the three filters were already removed.

I advised Justin Moore that I needed to see if the 3-stage filter system on the scrubber was installed. He was angry and explained that he is just trying to get his work done. I explained that I have been to the facility multiple times over the past few years and this scrubber has never been functioning correctly. Justin removed the final filter, which appears to be a furnace type filter or HEPA filter. The final filter was installed and had a lot of material on it, some of which flew all over the parking lot after it was removed. It appears that this filter may have been clogged due to the high amount of material caked on it.

Justin started going back to the task he was doing, but I advised him that I need to see the middle filter, which is the main composite mesh pad filter. Justin stated that he can remove it, but there isn't anything there because the filter fell down into the unit and is wedged in a way that he cannot remove on his own. I asked Justin to please remove the middle filter scaffolding. Justin removed the middle filter scaffolding showing that the composite mesh pad filter was not installed. Only scaffolding for the filter was present. The composite mesh pad filter is the part of the system designed to control hexavalent chromium emissions.

I told Justin and Ramon that, since they both were aware that there was no filter installed, it sounds like a decision was made to operate the composite mesh pad system without the filter due to the high cost of filter replacement. Justin stated that this is exactly what happened. Justin informed me that the replacement filter cost is $40,000. I did not ask Justin to remove the prefilter because there were 20-40 bolts that required removal. Attached to this report is a picture showing that the composite mesh pad filter was not installed.

On March 29, 2023, Beacon Park Finishing submitted records of quarterly inspections on this chrome scrubber required by the PTI. According to this document, an inspection was conducted on the chrome scrubber, Control D, on March 20, 2023. The document states that the inlet/outlet transition zones, spray nozzles, packed bed section, overhead weir, drain lines, fan motor, and fan vibration were checked. No issues with the scrubber were noted during this inspection. Based on my conversations with staff, multiple facility staff were aware that the filter was not installed. The inspection document is initialed "JB" which likely refers to Josh Bush, President. It is also initialed "JM", which likely refers to Justin Moore.

Popat stated during this inspection that the chrome scrubber hasn't operated since at least January 2023. It is not possible that this inspection on March 20, 2023 was performed correctly. The facility initialed stating that the "packed bed section" was checked; however, this type of scrubber does not even contain a packed bed section. There are only three filters associated with this

scrubber. Even if staff mistakenly thought the composite mesh pad section was the "packed bed section", they should have noticed that no filter was installed during this inspection. Based on my observations during this inspection and the documents submitted to me, Beacon Park Finishing appears to have submitted falsified records to AQD which indicate that Control D was functioning while facility staff were aware that no filter was installed.

Before I walked outside to look at Control D, I asked Popat if I he could perform a surface tension reading on the chrome tank. Popat stated that he cannot perform the reading because they are not operating. I asked Popat why this wasn't possible. Popat stated that he only takes surface tension readings while the chrome tank is in operation because the surface tension values are much less while electroplating is occurring.

I told Popat that the surface tension should be below the chrome NESHAP requirements whether or not electroplating is occurring since electroplating shouldn't ever start if the surface tension is above 40 dynes/cm^2. Popat agreed to perform a surface tension test. Popat performed the first surface tension test while I was outside looking at Control D. He stated that the results of this test showed 34.28 dynes/cm^2. I asked Popat to perform the test again because I wanted to observe how he performs the test.

Popat obtained the chrome sample from the chrome tank by dipping a beaker into the tank. Popat did not wear gloves while performing this task, and his hands became covered in reddish fluid from the chrome bath. Popat set up his Stalagmometer with the chrome bath sample. He first rinsed out the stalagmometer with chrome solution before measuring. Again, Popat spilled chrome bath solution onto his hands. Popat, Brad Myott, and I watched as 48 drops came out of the stalagmometer during the test. Popat plugged the number 48 into his excel spreadsheet and determined the surface tension was 35.7 dynes/cm^2. The chrome bath solution was dumped down the sink. According to Popat, the sink in the laboratory area is directed to the waste-water treatment plant. Popat washed his hands off after finishing this task, but the chrome bath solution stained his hand in a way that soap did not remove. I advised Popat that he should wear gloves while performing these tasks. I am requesting that Popat submit the manufacturer's procedure for determining surface tension with the stalagmometer he uses.

After taking surface tension readings, I asked Ramon and Popat to show me the grinding/buffing area. I observed that the ducting was removed from the buffing stations that were previously ducted through a cyclone dust collector to the ambient air outside the plant. All buffing stations are exhausted to the general in-plant environment. Most (if not all) of the buffing stations are controlled by fabric filters. Based on my observations during this inspection, these buffing stations are exempt from Rule 201 requirements pursuant to Rule 285(2)(l)(vi)(B). These grinding stations meet the requirements of the Chrome NESHAP since these operations are located in a separate room from the chrome plating operations.

Ramon stated that the business is in the process of trying to sell/salvage much of the equipment at this facility rather than restart operations. This includes the zinc line, which was manufacturing zinc plated parts as recently as December 2022. The facility has only lost business in recent years, the phone line for the facility is inoperable, and Ramon stated that the facility will likely be shut down for a couple of weeks due to lack of parts to plate.

The interior of the plant is, overall, in much worse shape than during my previous inspections. Electrical boxes are rusted out, uncapped wires are sticking out of places and on the ground, metal walkways are corroded, there are numerous chemical spills on the ground, hazardous materials are stored in an open air containment dyke, chrome samples are taken without gloves, the roof is leaking, one of the bay doors was hit by some equipment and was sealed with foam insulation, some of the doors to the facility are not lockable, and staff are generally unaware of the highly toxic nature of the compounds they are working with and around.

Compliance Determination

Based on my findings during my inspection and record review, Beacon Park Finishing is not operating in compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules; 40 CFR Part 63, Subpart N – Chrome NESHAP; and PTI No. 186-91D.

The violation notice issued during my last inspection on April 21, 2022 will not be resolved. The majority of the violations identified in the April 21, 2022 violation are still ongoing. The violations regarding the zinc plating line were resolved through modifying their air permit. The violations regarding the grinding/buffing stations were resolved through exhausting these operations only to the general in-plant environment.

The staff at this facility have continually demonstrated that they are not willing and/or able to comply with AQD rules. Based on my observations during my inspection and record review, I believe Beacon Park Finishing poses a serious threat to the environment if they are allowed to continue operating in this manner.

NAME Adam Bognar DATE 4/25/2023 SUPERVISOR K. Kelly