N6696
MANILA

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

N669642718

FACILITY: DYNAMIC METAL FINISHING		**SRN / ID:** N6696
LOCATION: 5999 BEWICK, DETROIT		**DISTRICT:** Detroit
CITY: DETROIT		**COUNTY:** WAYNE
CONTACT: James Bartolotta , Owner		**ACTIVITY DATE:** 11/01/2017
STAFF: Terseer Hemben	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Chrome Plating and nickel anodizing		
RESOLVED COMPLAINTS:		

INSPECTED BY : Terseer Hemben, MDEQ
PERSONNEL PRESENT : James Bartollotta, (Owner)
FACILITY PHONE NUMBER : (313)-922-6455
FACILITY FAX : (313)-922-1640
DATES OF INSPECTION : 11/01/2017
Dynamic Metal Finishing, Inc.
5999 Bewick Detroit, MI 48213
SRN: N6696

FACILITY BACKGROUND:
The Dynamic Metal Finishing, Inc. (DMF) is a decorative chrome electroplating operation. The facility has been in operation since 1989. The operation has been a small open surface type consisting a single electroplating line comprising sanding, aqua-based cleaning, rinsing, electroplating, nickel phosphating and drying. Chrome plating facilities are regulated under 40 CFR 63, Subpart N. All emissions generated in this electroplating process are released within the general in-plant environment. The process is a minor source by the estimated power usage in the amount 28,000,000 ampere-hours per year.
The facility is an EPA source. The process meets the SIP exemption from the provisions of Rule 201(1) pursuant to provisions of Rule 285(2)(r). There are no certificates of operation. All process emissions are discharged into the general in-plant area..

INSPECTION NARRATIVE
I arrived at the premises of the DMF on November 1, 2017 at 1040 hours. The purpose of visit was to conduct a scheduled emission regulatory compliance inspection of the decorative chrome electroplating facility. Temperature at the hour was 42 F with wind speed 7 mph coming from the South, and humidity was 62%. I was admitted onto the facility by Mr. James Bartolotta. We went over the inspection agenda. Mr. Bartolotta informed the facility had not been modified or undergone changes. Mr. Bartolotta walked me around the electroplating line. We examined the records kept at the facility. The records were kept in a satisfactory format. I requested samples of records for evaluation. Mr. Bartollota asked for an extension of time for submitting copies of the records since he was working alone and needed time to review the records before submitting them to the AQD. I granted the request. The consultant called me to confirm the time extension for providing the requested records. The time was again extended. The records were submitted on December 15, 2017.

COMPLAINT/COMPLIANCE HISTORY:
No complaints have been received from the citizens regarding air quality issues attributed to DMF's operations.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING VN:

None

OPERATING SCHEDULE/PRODUCTION RATE:
The facility operates a regular 2-3 hours a day within Monday through Friday; and opens the workshop 2-3 days per week throughout the year.

PROCESS DESCRIPTION:
The DMF process consists of single line decorative chrome electroplating tank that plates bumpers for old and new trucks that use chrome parts. The facility also electroplates motorcycle, boat, and other small auto metal parts. The equipment consists of one plating tank and associated cleaning, rinse and acid dipping tanks. The equipment have no certificates of operation and no assigned enforceable permit conditions. The facility has few employees, and operates out of a building that is about the size of a small house. The control of the electroplating process is built in the process and equipment setup. DMF utilizes composite mesh pads with fume suppressant/wetting agent called Broco CMS-N3 to maintain low chrome emissions. Emissions from the electroplating area are discharged within the in-plant area. Polishing and grinding processes are discharged inside the building. The facility is exempt from Rule 201(1) pursuant to the provisions of Rule 285(2)(r) because surface cleaning, acid dipping, polishing, pickling, and electroplating processes are undertaken on the process line. However the DMF is required to keep records pursuant to the provisions of SIP Rule 941 and NESHAP, 40 CFR 63, Subpart N where applied. Records submitted by the facility are attached. The pollutant identified with the process is Cr+6. The MSDS for the wetting agent/fume suppressant - Broco CMS-N3 is attached [Pgs. 4-9]. A letter certifying the analysis indicating the wetting agent is PFOS free is attached.

APPLICABLE RULES, REGULATIONS AND CONDITIONS:
The applicable rules consist of requirements of 40 CFR 63, Subpart N. There are no certificates of operation with regulatory conditions. The facility keeps records. The decorative chromium electroplating source is subject to the provisions of Rule 941 and NESHAP, of 40 CFR Part 63, Subpart N for Hard & Decorative Chromium Electroplating and Chromium Anodizing tanks. The Chromium Electroplating process tank, whose emissions are released into the general in-plant environment, is exempt from the provisions of Rule 201(1) pursuant to the provisions of Rule 285(2)(r) hence has no permit.

The NESHAP requirements for the facility include:

a) Emission limits
b) Work practice standards
c) Performance testing
d) Monitoring
e) Recordkeeping, and
f) Reporting

The DMF is classified as an existing area source chromium electroplating operation. Information relating to compliance with the NESHAP requirements is on file.

a) Emission Limits
The Chrome NESHAP 40 CFR 63.342(d)(1) specifies that the concentration of total chromium in the exhaust gas stream discharged to the atmosphere not to exceed 0.007 milligrams/dry standard cubic meter(mg/dscm). Facilities can typically achieve this limitation by using a control and monitoring of the surface tension (force/unit length) of the chromium electroplating tanks. Pursuant to the provisions of 40 CFR 63.342(d)(3), the facility can demonstrate compliance with the emission limit of 0.007 mg/dscm by testing or not allowing the surface tension of the hard chrome electroplating bath to exceed 40 dynes/centimeter, as measured by a stalagmometer. DMF demonstrated compliance through surface tension monitoring. Attached are the copies of the recent 12 months surface tension test results for the chromium electroplating tanks bath (Pgs. 2 & 3). The results showed a maximum surface tension value of 34.2 dynes/cm as measured by a stalagmometer on September 30, 2016. This surface tension value is less than the required limit of 40 dynes/cm.

b) WORK PRACTICE STANDARDS
The chromium NESHAP specifies that the facility must prepare an operation and maintenance plan including the following requirements:

- DMF specified the operation and maintenance criteria for the tank, control technique, and monitoring equipment through recordkeeping. [Attachment Pgs. 10 &11]
- DMF provided a checklist to document the operation and maintenance of the tank, control technique, and monitoring equipment. [Information is on file]
- DMF incorporated work practice standards. [Attachment Pg. 10]
- IDMF included a step-by step procedure for identifying and correcting malfunctions. [Information is on file]
- DMF specified procedures to be followed that would prevent malfunctions. consistent with the compliance provisions of 40 CFR Part 63. (Attachment Pg. 10-14).

c) PERFORMANCE TESTING

The facility opted to demonstrate compliance using surface tension limit. DMF is not responsible for performing an initial performance testing requirements.

d) MONITORING

The facility must demonstrate continuous compliance by monitoring an operating parameter value for its control technique. In this case, the facility is to show compliance as described in the following table:

Control Technique	Operating parameter	Monitoring Frequency	Operating Limit
Wetting agent-type fume suppressant	Surface Tension	Every 40 hours of operation	35 dynes/cm with tensiometer 40 dynes/cm with stalagmometer

Surface tension tests of the facility's chromium tank were conducted by the facility's chemical vendor on a monthly basis. Records provided by DMF followed the required sequence of testing consecutively at every 40 hours as required. However, the 40 hours did not occur with the expected weekly work schedule. The manager informed the facility electroplates at a frequency, on the average of 3 hours per day, and 5 days per a week. Occasionally, Saturdays are utilized when there is a demand. It was not conceivable to test weekly following a consecutive 40 hour-frequency. The facility monitored the surface tension at the 40 hour operation schedule, except the records of hours of operation were not logged in the satisfactory format. The facility management was reminded, and pledged to keep records in a satisfactory format onward. Testing was scheduled biweekly to meet the required 40 hour-frequency. Attachment Pgs. 2-3 show the facility's monitored surface tension values and dates. The maximum surface tension value was reported at 34.2 dynes/cm in September 2016. Records of surface tension measurement reports covering the last 12 months period of August 9, 2016-October 18, 2017 are attached to this report and indicate compliance with the required 40 dynes/cm limit.

e) RECORDKEEPING

The facility must keep records to document compliance with:

- **Inspection records -the relevant records were kept as required.**
- **Maintenance records - records were kept as attached.**
- **Malfunction records-there were no indicated malfunctions except for the recorded regular maintenance.**
- **Performance test results - DMF was not required to do performance test.**
- **Monitoring data - Surface tension monitoring data was made available.**
- **Excess emission records - there were no excess emissions experienced since the facility stated the -process was under-producing.**
- **The facility provided a standard operating procedure information (Attachment Pgs. 2, 3);**
- **Process records include (i) operating time for the chromium electroplating tank, (ii) the date and time that fume suppressants are added. Records indicated date and time for wetting agent addition.**

The records well kept in a satisfactory manner [Attachment Pgs. 2-3; these are the records that have been on file for an ongoing operating time.].

f) REPORTING

The facility must fulfill several reporting requirements. The table below summarized what reports are required for the facility and the reporting deadline:

Type of report	Facilities That Must Report	Reporting Deadline
1. Ongoing compliance status report	Area sources	Complete once a year or two times a year if exceedances occur or if requested

2. Notification of construction or reconstruction	All facilities	As soon as practical before construction or construction is planned to begin
3. Notification of when construction or reconstruction is commenced	All facilities	Within 30 days of beginning construction
4. Notification of actual startup	All facilities	Within 30 days of startup
5. Notification of process change	All facilities	No later than 30 days after the process change

The facility was not required to make notifications. Table Item#1-#5 was not applicable.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:
This facility does not have nor needs a fugitive dust plan.
Rule 201 (1): DMF's facility met an exempt status from Rule 201(1) pursuant to Rule 285(2)(r) conditions.

Rule 941: DMF's facility met the regulatory conditions of MACT, Subpart N. Therefore, the facility is in good standing with Rule 941.

Rule 301: There was no PM or dust concerns at the facility during the inspection.

Rule 901: There was no fallout or nuisance occurrence at the facility or attributed to the facility operations at the time of inspection.

40 CFR 63.342(d)(4): DMF facility was requested to demonstrate its PFOS free status. The facility submitted a laboratory certification of its PFOS free status.

FINAL COMPLIANCE DETERMINATION:
The Dynamic Metal Finishing facility was inspected. The facility's plating operation met compliance with the MACT, Subpart N requirements and the requirements of the Rule 941. The facility remains a minor source operation. DMF is confirmed PFOS free.

NAME _____ DATE 1/16/2019 SUPERVISOR JK