

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

N340537203

FACILITY: Matthews Plating, Inc.		SRN / ID: N3405
LOCATION: 405 N. Mechanic Street, JACKSON		DISTRICT: Jackson
CITY: JACKSON		COUNTY: JACKSON
CONTACT:		ACTIVITY DATE: 10/19/2016
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Scheduled Inspection; in particular to check for Rule 201 and Chrome NESHAP compliance		
RESOLVED COMPLAINTS:		

Minor Source Inspection

Facility Contact

Todd Matthews – Owner, matthewsplating@comcast.net, (517) 917-1587 (office).

Company website: <http://matthewsplating.com/home>

Purpose

On October 19, 2016, I conducted an unannounced inspection of Matthews Plating (Company) in Jackson. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and the federal Chrome NESHAP Title 40, Part 63 Subpart N.

Facility Location

The facility is located in the city of Jackson near the DEQ office. It is surrounded by commercial and residential areas on all sides. See attached aerial image.

Facility Background

The Company was originally built back in the 1980's and was known as R & J Plating Company until 2007. It was last inspected in December, 2005 due to a compliant investigation regarding odors & fumes. There is no record that they have ever had a Permit to Install (PTI.) or conducted compliance testing. Very little information was available about the Company in the AQD Jackson District Files. They do zinc plating. Services include zinc plating on steel stampings, tubing assemblies, CNC and screw machine parts.

Regulatory Applicability

The Company's zinc plating operations appear to be exempt from obtaining a Permit to Install.

Permit to Install exemption rule R336.1285 (Rule 285) (r) reads as follows:

"Equipment used for any of the following metal treatment processes if the process emissions are only released into the general in-plant environment:

- (i) Surface treatment
- (ii) Pickling.
- (iii) Acid dipping.

- (iv) Cleaning.
- (v) Etching.
- (vi) Electropolishing.
- (vii) Electrolytic stripping or electrolytic plating. "

Based on an inspection of the Company's plating lines, exemptions (i), (ii), (iii), (iv), (vii) apply. All the emissions from the zinc plating lines appear to be released into the general in-plant environment. Exhaust vents on the roof appear to be either away from the zinc plating lines, disabled, or turned off. There was no dedicated ventilation system capturing emission adjacent to the plating lines.

The Company has 4 tanks containing Chromium III Nitrate solution.(trivalent chrome) These tanks are considered chrome conversion coating tanks. No electricity is being applied to these tanks. Chrome conversion coating tanks are exempt from the Chrome NESHAP.

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company I arrived at approximately 1 PM, proceeded to the facility office to request access for an inspection, provided my identification, and meet with Todd Matthews (TM) who is the owner.. A pre-inspection conference was held with MJ and provided an outdated copy of the MDEQ brochure: *Rights and Responsibilities Environmental Regulatory Inspections*. I informed TM of my intent to conduct a facility inspection and to review the various records as necessary. TM extended his full cooperation during the inspection, accompanied me during the full duration of the inspection, and fully addressed my questions. ✓

Pre-Inspection Meeting

TM and general manager Brandon Niceswander outlined that the Company employees 16 people with 2 shifts per day, 5 days a week. Business has been good this year.

TM outlined that the Company has the following process equipment:

- 1 Udylite 12" X 42" Rack Line (Dormant)
- 1 Udylite 12" X 36" Rack Line (Active)
- 2 Udylite 16" X 30" Rack Line (1 Active, 1 Dormant)
- 1 Automatic 55" X 55" Hoist Line (Dormant)
- 1 Udylite Cycle Master (Dormant)
- 1 Udylite Barrel Line (Active)
- 1 Manual Hoist Line (No answer)
- 1 New England oven - 27 Cubic feet (Dormant)
- 2 - 60 GPM Water-treatment systems (Active)

TM indicated that the Company current only does zinc plating. (Note: Company website lists nickel plating as well.) He indicated that they last did hexavalent chromium plating prior to 1995. He provided MSDS's for the 2 types of chromium solutions used in the facility. (Attachment 1(Kimya Tribblue 120) & Attachment 2(KIMYA TC 3). Purchase records indicate that 110 gallons of Kimya TC 3 & 110 gallons of Kimya Tribblue 120 had been obtained in 2016. (Attachment 3)These trivalent chromium solutions are generally not volatile. The other hazardous ingredient used in volume at the facility is hydrochloric acid in a 60% water, 40% acid mix with the acid concentrated to 12 to 20%. TM indicated that generally 3 to 4 tons of zinc are plated each year. The water treatment system for the zinc plating lines generates about 4 to 5 cubic yards of F006 listed hazardous waste per year.

Onsite Inspection

TM then escorted me as I conducted the onsite tour portion of the inspection. TM showed me the 3 active zinc plating lines and the various tanks associated with the process. It was confirmed that all emissions from the plating lines are being released into the general in-plant environment. Overall, there was very little odor of any sort in the plant with good airflow being provided from various intake fans. The exhaust fans located on the roof appeared to be mostly related to dormant processes but none of them were directly connected to any of the zinc plating lines both active/dormant. The 4 tanks containing the trivalent chromium did not have electricity being applied to the tank solution although there was a motor being used to agitate the liquid. TM indicated that the chromate tanks are used to "brighten" the zinc metal after the zinc electroplating process had been completed. The inactive zinc plating lines were reported by TM to be generally dormant for many years. The oven was inspected and confirmed to be dormant. Upon closer inspection, the oven was found to being used as a storage location for a small number of paint cans & solvents that have been used to paint facility walls etc.

Post-Inspection Meeting

I held a brief post-inspection meeting with TM. I reviewed my findings that it appeared that the processes at the facility appeared to be exempt from air permitting. I indicated that I would need to further review the Chrome NESHAP for applicability and would get back to him if I discovered any problems. I thanked MJ for his time and cooperation, and departed the facility at approximately 2:30 PM.

Recordkeeping Review

I reviewed the MSDS's for the trivalent chrome solutions, and invoices for the purchase of those components. I didn't review other records as generally very few records are required for air exempt metal treating processes.

Compliance Summary

Based upon the facility inspection, review of the records, and review of applicable requirements, the Company appears to be in compliance.

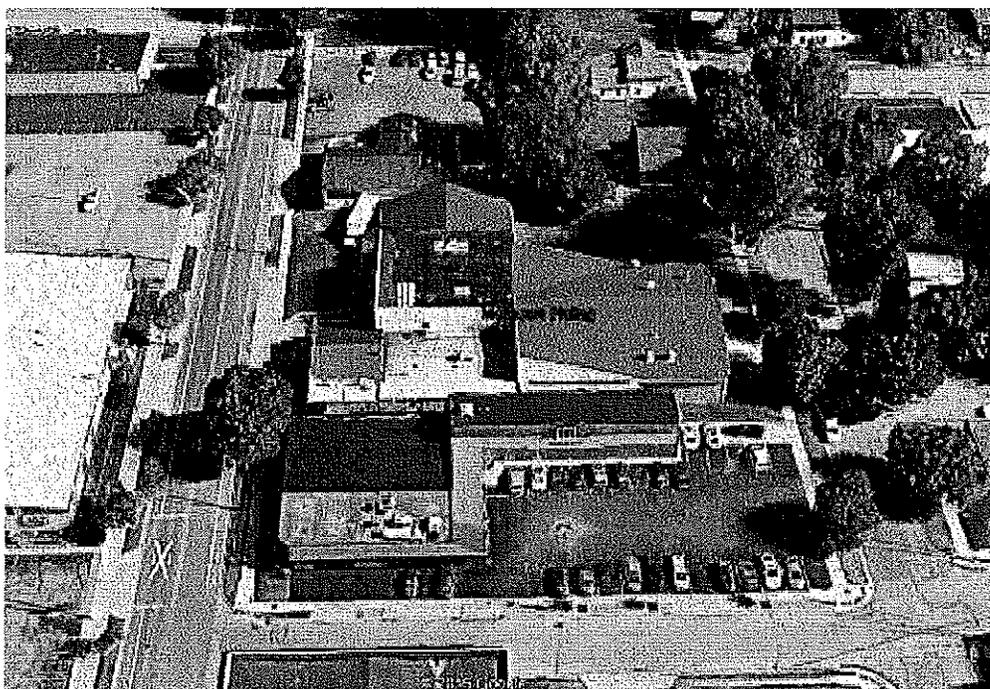


Image 1(Matthews Plating) : Aerial image of Matthews Plating

NAME M. Kordelich

DATE 10/20/2016

SUPERVISOR [Signature]