

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

N340543233

FACILITY: Matthews Plating, Inc.		SRN / ID: N3405
LOCATION: 405 N. Mechanic Street, JACKSON		DISTRICT: Jackson
CITY: JACKSON		COUNTY: JACKSON
CONTACT: Todd Matthews , Owner		ACTIVITY DATE: 01/25/2018
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of a zinc plating shop.		
RESOLVED COMPLAINTS:		

Minor Source-**Facility Contacts**

Todd Matthews-Owner

ph 517-917-1587

matthewsplating@comcast.net**Purpose**

On January 25, 2018, I conducted an unannounced compliance inspection of Matthews Plating (Company) located at 405 N. Mechanic Street 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.

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

This facility was last inspected on 10/19/2016 and was found to be in compliance. The Company was originally built back in the 1980's and was known as R & J Plating Company until 2007. 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.

40 CFR Part 63, Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations (6W MACT) is **applicable** to the 4 chrome conversion coating tanks.

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company I arrived at approximately 9 am, proceeded to the facility office to request access for an inspection, provided my identification, and meet with Todd Matthews (TM) who is the owner. 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 outlined that the Company employees 18 people with 1 shifts per day, 5 days a week. TM outlined that the Company has the following process equipment:

1 Udylite 12" X 42" Rack Line (Dormant)

Main Udylite 12" X 42" Rack Line (Active) Line 7

1 Udylite 16" X 30" Rack Line (Dormant)

1 Automatic 55" X 55" Hoist Line (Dormant) Line 4

1 Udylite Cycle Master (Active infrequently)

1 Udylite Barrel Line (Active)

1 Manual Barrel Line (Active) Line 5

1 New England oven - 27 Cubic feet (Dormant)

2 - 60 GPM Water-treatment systems (Active)

TM indicated that the Company currently only does zinc plating. He provided MSDS's for the 2 types of chromium solutions used in the facility. ((Kimya Tribblue 120) & (KIMYA TC 3). See MACES report dated 10/19/2016 for copies of MSDS's.. 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.

I discussed the 6W MACT regulation that applies to the 4 chrome conversion tanks which TM was not aware of. NOTE: Perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are not used at this facility.

Onsite Inspection

TM then escorted me as I conducted the onsite tour portion of the inspection. TM showed me the 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. 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. See attached photos. TM indicated that the chromate tanks are used to "brighten" the zinc metal after the zinc electroplating process had been completed.

TM indicated that he had tentative plans to install several scrubbers to control mostly acid emissions from the various tanks in the process lines. The scrubbers would exhaust inside the building. I indicated that this change would likely be exempt from permitting.

Records Review

Attachment (1) shows listing of chemicals used for each line. Usage records were not reviewed as appeared to be similar compared to previous years and not required for the applicable permit exemptions. I also reviewed the complete MSDS binder that the Company maintains looking for PFOS compounds. None were found.

Post-Inspection Meeting

I held a brief post-inspection meeting with TM. I indicated to him that the only compliance issue were the 4 chrome conversion tanks. This will require an initial notification form and following best management practices for the 4 tanks.

I thanked TM for his time and cooperation, and I departed the facility at approximately 10:45 am.

Compliance Summary

The Company is in compliance except for the 4 chrome conversion tanks which are not in compliance with the 6W MACT. A Violation Notice (VN) will NOT be sent to the Company since State of Michigan does not have delegated authority to enforce this federal regulations.

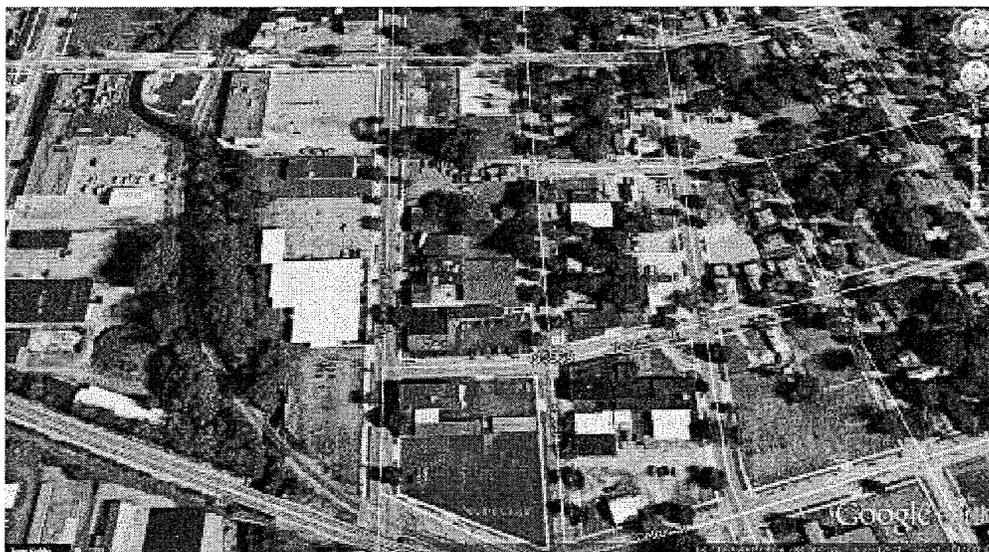


Image 1(Aerial Photo) : Aerial photo

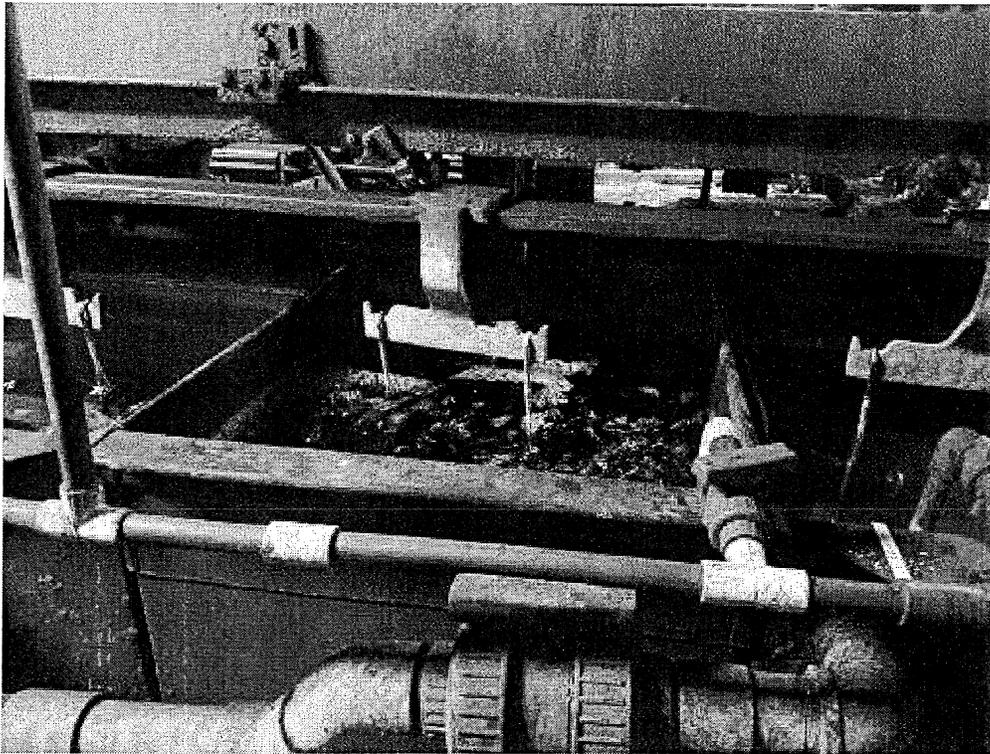


Image 2(Chrome conversion) : Chrome conversion tank

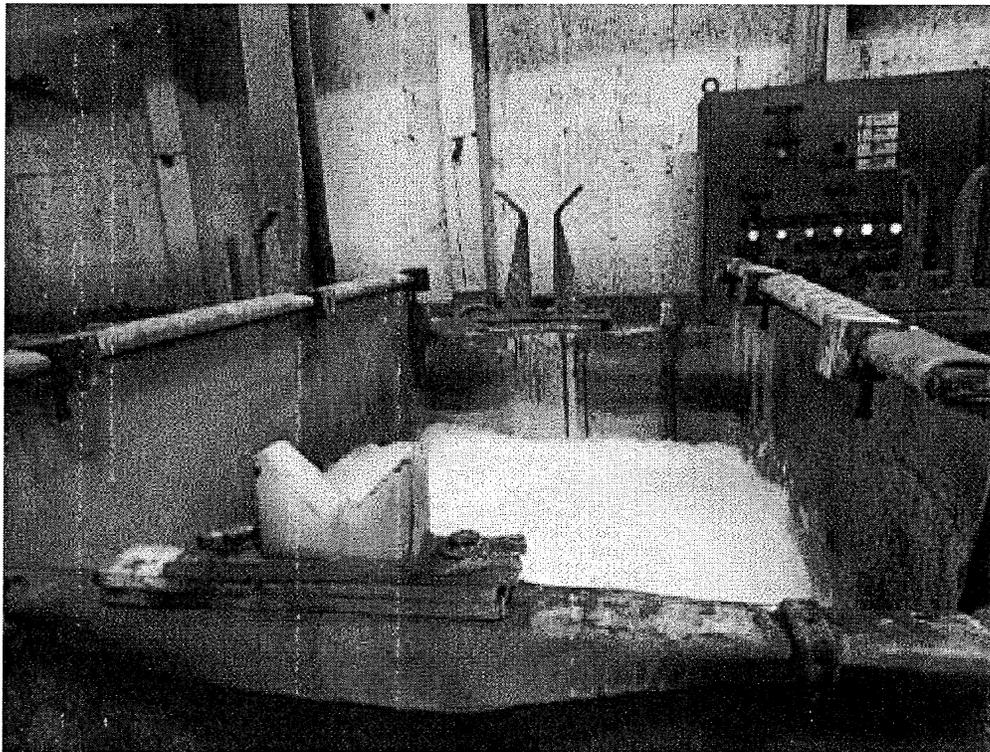


Image 3(Chrome conversion) : Chrome conversion tank

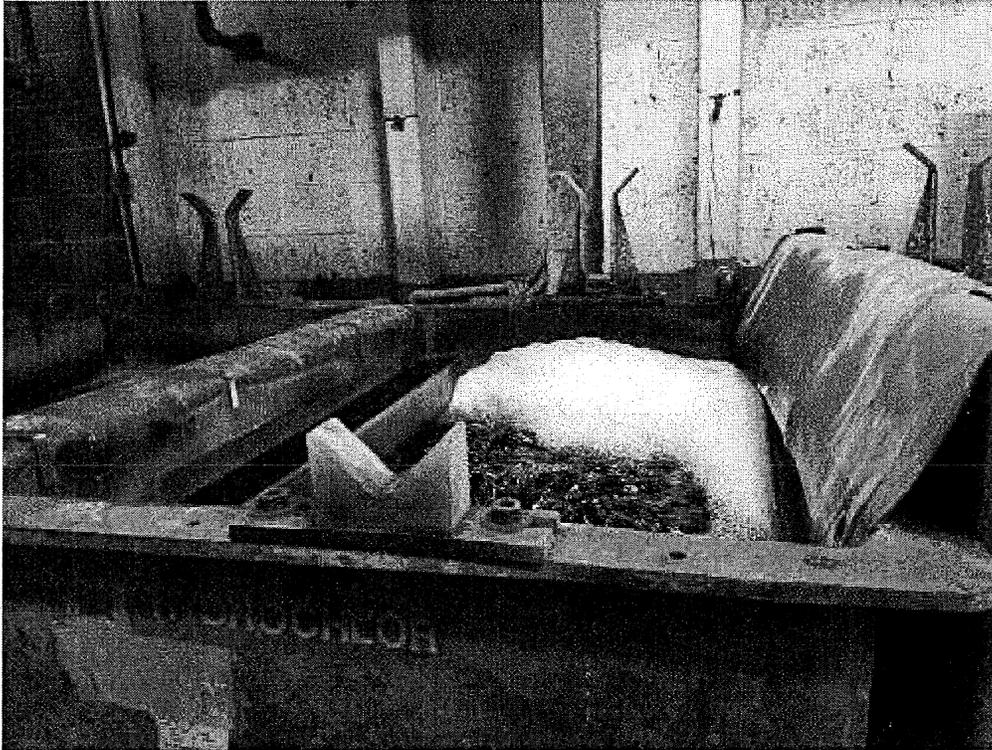


Image 4(Chrome conversion) : Chrome conversion tank

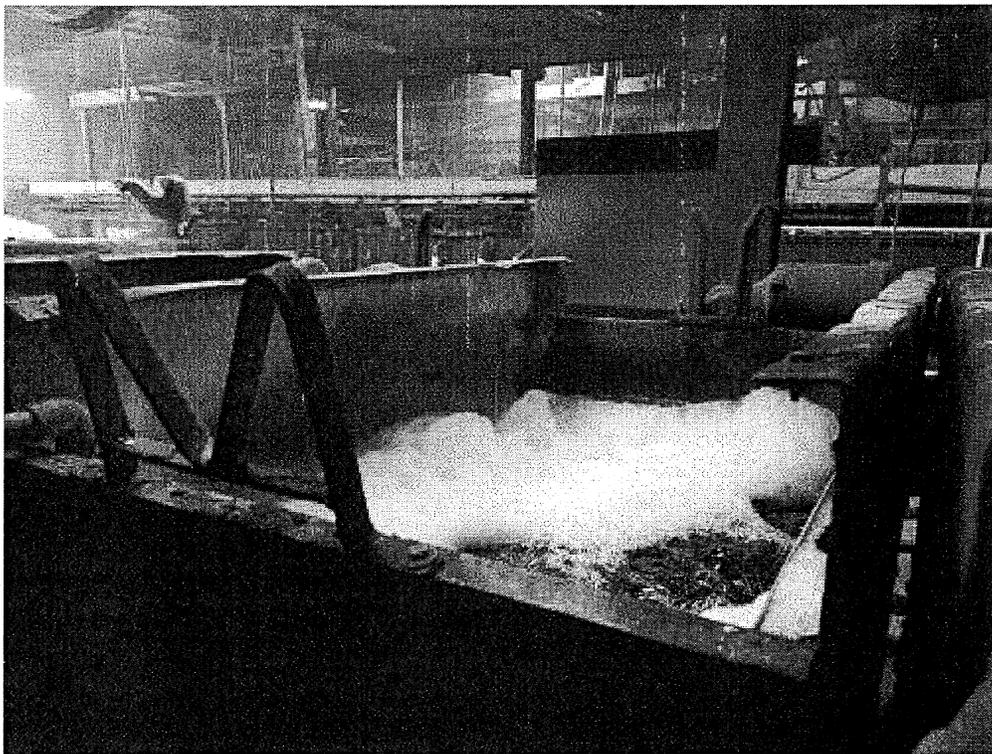


Image 5(Chrome conversion) : Chrome conversion tank

NAME M. Kozluch

DATE 2/7/2018

SUPERVISOR 