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MANILA

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

A811733338

FACILITY: SUPERIOR METAL FINISHING		**SRN / ID:** A8117
LOCATION: 3510 MC NICHOLS E, DETROIT		**DISTRICT:** Detroit
CITY: DETROIT		**COUNTY:** WAYNE
CONTACT: Robin Petty , Owner/Manager		**ACTIVITY DATE:** 02/22/2016
STAFF: Terseer Hemben	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** Minor
SUBJECT: Zinc Plating lines(2) and Zinc Phosphating Lines (2)		
RESOLVED COMPLAINTS:		

Scheduled Inspection: Superior Metal Finishing, Inc.

INSPECTOR: Terseer Hemben (DEQ)

PRESENT: Robin Petty (Owner)

Phone: 313-893-1050

Date of Inspection: February 22, 2016

SRN: A8117

Address: 3510 East McNichols Ave, Detroit, MI 48212

Regulatory Rules: Permit # WC C-8954, C-9960, and C-9961 State: R 336.1201; R 336.1910; R 336.1901.

FACILITY BACKGROUND: A Zinc Plating and Phosphating Process lines

The Superior Metal Finishing (SMF) operates metal coating lines: the zinc plating and zinc phosphating lines for auto parts at the 3510 McNichols Avenue, Detroit, MI. The company is located in the city of Detroit. The SMF facility was permitted in (April 20) 1990 and 1992 by the Wayne County Environmental Pollution Control Department to operate dip spin tanks for paint-coating nails, nuts, bolts, rivets, etc. The facility downsized its operations by eliminating the paint dip tank that was permitted and regulated under C-8954. The first dip spin process was removed and a new dip spin tank line installed in 1992 under WC permits C-9960 and C-9961. The new owner of the facility, Ms Robin Petty, a daughter of the previous owner, Mr. Hazelman informed the dip spin tanks were completely uninstalled and dismantled from the facility. The facility currently operates 2 zinc plating and 2 phosphating lines. The Air Quality Division had no knowledge of this change until a scheduled inspection was conducted. All current processes operated at the facility involve water base plating and phosphating chemicals. All baths, tanks and curing ovens are heated using natural gas fuel firing with single burners. The new installed process was not permitted nor a permit to install application was filed with the AQD. At the time of inspection it was not clear whether the facility qualified for exemption under AQD rule 285(r) since the emissions from the phosphating tanks and zinc plating were known. The facility did not keep records relating to appropriate permits. The Owner stated all emissions from the new process are discharged inside the building, and there are no VOC emissions involved in the plating process. Exhaust gases from combustion of natural gas are vented through the stack.

INSPECTION NARRATIVE:

I arrived at the facility location, 3510 McNichols, Detroit, MI on February 22, 2016 at 1140 hours. The purpose of visit was to perform a scheduled compliance inspection for evaluation of compliance with applicable exempt rules regulating zinc plating and phosphating processes at the facility. Temperature at the hour was 32 F with wind speed 9.2 mph coming from the NE. Humidity was 64%. I was admitted into the building by Ms. Robin Petty, the owner and president of SMF. We held a pre-inspection conference and went over the inspection agenda items. Ms. Petty informed the facility had downsized the process to 2 lines of operation: zinc plating lines 1 & 2, and Zinc phosphating lines 1 & 2. No VOC

emissions were associated with the entire water base reactions of the processes. We walked through the plating tanks area and observed the cleaning, plating and phosphating. Ms. Petty and I observed how the process tanks were heated with steam generated from single gas fired burners in operation. The oven system was heated with natural gas fired single burners. We finally returned to the office for a post-inspection conference. I stepped outside the building and checked the opacity on the stack. I left the area at 1230 hours

COMPLAINT/COMPLIANCE HISTORY:

The SMF has not been a source of citizen air quality complaints. .

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOV'S:

None

OPERATING SCHEDULE/PRODUCTION RATE:

The facility operates a one 10 hour shift from Monday to Friday depending on production load.

PROCESS DESCRIPTION:

The SMF facility was originally permitted to operate with controls on VOC emissions in 1990. For the purpose of reducing VOC emissions from the process, the facility eliminated all VOC base raw materials and operated the process using water base reactions.

EQUIPMENT AND PROCESS CONTROLS:

The initial equipment used for the process was installed on April 20, 1990. The equipment was permitted by Wayne County under permit# 8954. The permitted process was replaced with another dip spin tank plating process that was VOC based. The Permits C-9960 and C-9961 were approved in 1992 for the new dip spin tanks while the previous dip spin tank line was uninstalled (permit C-8954). The new zinc plating and phosphating lines replaced the VOC based ones. The phosphating lines are not permitted and their exempt status is yet to be determined.

APPLICABLE RULES/PERMIT- 00:

The SMF was required to keep the DEQ-AQD Rule 336.1910 with respect to Air pollution control equipment operation for purposeful control of VOC emissions. However, by changing the process to water base reactions, there was no need for add-on control devices. The facility operated in compliance with this rule.

The SMF operated water base reaction processes that generated insignificant visual volatile compounds in the process. The material is discharged inside the building. SMF was advised to contact the AQD permitting department for directives on how to apply for a permit to install for official evaluation of emission levels.

This Inspector did not find violations pertaining to Rules 301 relative to Particulate material emissions. There were no unusual odors outside the building or boundaries of the property during the inspection. The water base zinc plating and phosphating reactions generated minimum wastes. but yet to be quantified. Fuel consumption records were not available. Wastes generated were managed in a proper and satisfactory manner. The opacity of gases vented through the stacks was not visible. There was no odor coming from the operation of facility. There was no cause for rule 901 concern..

Active permits: Ms. Robin Petty sent a written request to void the active WC permit# C-8954, C-9960 and C-9961 that did not apply to the current operations at the facility. The current plating and polishing operations appear to be exempt under Rule 285(r), and the oven appears to be exempt under a provision of Rule 282. These determinations will be further evaluated during the next inspection cycle in fiscal year 2017.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

This facility did not have nor was in need of a fugitive dust plan.

FINAL COMPLIANCE DETERMINATION:

This inspector reviewed the information obtained from the visit to SMF during the scheduled compliance inspection. The facility changed the process permitted dip spin process by switching from use of paint coatings to zinc plating and phosphating water base reactions. The major change was not approved by the Air Quality Division. The WC permits that covered VOC paint coating are no longer required and will be voided.

NAME _____ DATE 9/28/16 SUPERVISOR JK