

A8019

MAWILT

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

A801927859

FACILITY: UNISTRUT INTERNATIONAL CORPORATION		SRN / ID: A8019
LOCATION: 4205 Elizabeth Street, WAYNE		DISTRICT: Detroit
CITY: WAYNE		COUNTY: WAYNE
CONTACT: Brian Bradley , Project Manager		ACTIVITY DATE: 11/21/2014
STAFF: Usama Amer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Inspection of an Opt-out Source		
RESOLVED COMPLAINTS:		

On November 21, 2014, I conducted a Scheduled Inspection at Unistrut, a part of Atkore International (facility), located at 4205 Elizabeth St., Wayne, Wayne County. The inspection was to determine the facility's current compliance status with the federal Clean Air Act of 1990, as amended; Part 55 of Michigan Public Act 451 of 1994, as amended; the administrative rules, and the conditions of AQD PTI No. 180-02. Mr. Brian Bradley, Project Manager, represented the facility during the inspection.

### BACKGROUND & PROCESS DESCRIPTION

The facility is a manufacturer of metal shelving and brackets for architectural and industrial work using stamping and heat-treating, and also zinc plating. Light assembly, packaging, storage, and shipping of parts is also done at this site. It around has 120 employees, and operates 2 shifts per day, and 6 to 7 days per week.

PTI No. 180-02 was issued to the facility for the following processes:

- 1) EUBLU-SURF-OVENS: Two (2) paint burn-off ovens
- 2) EU-HEATTREAT: Heat treat furnace with oil quenching
- 3) EU-ZNPLATING: Plating bath process for small metal parts controlled by a wet scrubber
- 4) EU-SKINNYDIPPER: Parts preparation, electro-coat dip tank, and two (2) bake ovens
- 5) FG-FACILITY: All equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.

### THE INSPECTION

#### AQD PTI No. 180-02

The following processes have been eliminated and removed from the facility:

- 1) EUBLU-SURF-OVENS: Two (2) paint burn-off ovens
- 2) EU-HEATTREAT: Heat treat furnace with oil quenching
- 3) EU-SKINNYDIPPER: Parts preparation, electro-coat dip tank, and two (2) bake ovens

The only remaining process at the facility is EU-ZNPLATING.

#### Special Conditions (S. C.) of EU-ZNPLATING

\* S. C. #3.1 stipulates that the facility shall equip and maintain the scrubber portion of EU-ZNPLATING with a liquid flow meter.

\* S. C. #3.2 stipulates that the facility shall record at least once per calendar day and keep, in a satisfactory manner, records of whether or not flow is within manufacturer's specifications and record any corrective action taken to return flow to manufacturer's specifications for the scrubber portion of

## EU-ZNPLATING.

- I agree with the following analysis, which was formulated in Jon Lamb's (previous AQD inspector) Inspection Report of 6/21/11:

"The Zinc Plating Line (EU-ZNPLATING) uses a series of dip tanks to coat metal parts. The process, in order: Soap 1 --> Soap 2 --> Rinse --> Electroclean --> Surface Activation (HCl, to improve adhesion) --> Zinc Plating --> Rinse --> Brightener (acid solution) --> Sealer. Emissions from the tanks are collected in vents and sent through a scrubber located on the roof. The major HAP emitted in this process is HCl, but actual HCl emissions are small. Wastes from the unit are run through an on-site wastewater treatment before disposal into the city sewer system.

A hot dip galvanizing line was installed in 2008. This line also uses a series of heated dip tanks for "prep coating". The process, in order: Soap --> Rinse --> Surface Activation (HCl) --> Rinse --> Flux (inorganic salt, improves adhesion). The parts are dried and then put in the zinc pot for galvanizing. The facility has submitted demonstration showing that the process is exempt from permitting under R.290. Emissions are controlled with a scrubber and are expected to be under 500 lbs/month as required by the exemption (conservative estimates are 306 lbs/month of HCl and 34 lbs/month of ZnO). The R.290 demonstration can be found in the facility file".

## FG-FACILITY

Special Conditions (S. C.) of FG-FACILITY

The only remaining process in this table, which emits an insignificant amount of HCl, is EU-ZNPLATING. No significant VOC emissions are emitted.

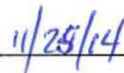
## CONCLUSION

Unistrut appears to be in compliance with the conditions of PTI No. 180-02, and the applicable Air Pollution Control Rules. PTI No. 180-02 may be voided upon the facility's request.

NAME



DATE



SUPERVISOR

