# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Self Initiated Inspection** 

1	150	160	127	23/	1576
L	JOU	IOU	427	a	+O/O

FACILITY: Elite Fence Products	Inc	SRN / ID: U501604278			
LOCATION: 50925 Richard W B	lvd, Chesterfield, MI 4, Chesterfield Township	DISTRICT: Southeast Michigan			
CITY: Chesterfield Township		COUNTY: MACOMB			
CONTACT: Harry Stinson, Own	er	ACTIVITY DATE: 04/28/2016			
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS:			
SUBJECT: Self initiated inspection.					
RESOLVED COMPLAINTS: C-16-01369					

On April 28, 2016, AQD staff Mr. Tyler Salamasick and I conducted an unannounced, self-initiated, level 2 inspection of Elite Fence Products Inc. (Elite Fence), located at 50925 Richard W Boulevard in Chesterfield Township, Michigan. I conducted a follow-up visit to the facility on Friday May 20<sup>th</sup>. The initial inspection was prompted because of an odor complaint allegedly attributed to Elite Fence. The purpose of this inspection was to determine the facility's compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

### Odor Investigation

AQD staff arrived on site around 2:10 pm. Wind was east by northeasterly (headed in a west by southwesterly direction). We traveled on Richard R. Boulevard upwind of the facility and detected no odor. We traveled along Fairchild Road downwind of the facility and observed no odor. We entered the Fairchild Lake subdivision southwest of the facility, generally downwind of the facility, and detected no odor.

We met with complainant. According to the complainant, when odors occur, they appear to be coming from the east/southeast side of the building. The smell began in 2013. It is a burning, chemical smell. There are small bursts of odor during which she can't sit outside. We advised her to call whenever odors are intense.

#### Facility Inspection

At the facility, Mr. Salamasick and I met with Mr. Harry Stinson, Owner. I provided my contact information and a copy of the pamphlet "DEQ Environmental Inspections: Rights and Responsibilities". Mr. Stinson provided a site walkthrough and explained equipment and operations.

During my follow-up visit on May 20<sup>th</sup>, Mr. Karl Stinson, Operations Manager, provided a supplemental walkthrough of the facility pretreatment process.

## **Opening Meeting**

Elite Fence pretreats and paints aluminum fences. This location opened in 2013. The facility has approximately 100 employees and typically operates from 6:00 am to 5:00 pm Monday through Friday. The facility operates on several Saturdays a year when needed. From September through April, the facility may not operate on Fridays.

#### Facility Walk-Through

#### Pretreatment

The facility receives aluminum fencing in the shape of a tube. At the facility, this fencing undergoes four stages of pretreatment before being powder coated. Stage one involves spray application of Bulk Kleen 745, a basic solution composed of 54.4% water and 25-50% sodium hydroxide, and further diluted prior to application.

A stack is within the vicinity of Bulk Kleen application so that exemption 285(r) does not apply. Mr. Karl Stinson provided purchase records of Bulk Kleen for 2015. The most purchased appears to be 5440 pounds in March of 2015. Because Bulk Kleen does not contain volatile organic compounds (VOCs), it is unlikely that more than a small percent of purchased Bulk Kleen is emitted into ambient air. A majority discharges to city water. According to the Bulk Kleen MSDS provided by Mr. Harry Stinson, 54.4% of Bulk Kleen 745 is water, and 25-50% is sodium hydroxide. Application of Bulk Kleen appears to be exempt from obtaining a Permit to Install (PTI) per R 290(a)(ii).

Stages two and three of pretreatment involve a reverse-osmosis rinse, and an application of acid to water to adjust its pH before discharging to city water. These stages do not appear to emit to ambient air. Water treatment appears to be exempt from obtaining a PTI per R 285 (m).

Stage four involves application of E-CLPS 2101, a solution comprised of 79.2% water and 2.5 – 5% fluotitanic acid. The solution contains no volatile organic compounds so that it is unlikely more than a small percent of E-CLPS2101 is emitted into ambient air. A stack is within the vicinity of E-CLPS application. A literature review by Air Quality Toxics staff Keisha Williams of fluotitanic acid (CAS#17439-11-1) and ammonium bifluoride (CAS#1341-49-7) determined that these chemicals are not classified as carcinogens and their potential initial threshold screening levels would be greater than 2.0 ug/m³, annual averaging time. Purchase records provided for 2015 provided by Mr. Karl Stinson provided that the most E-CLPS 2101 purchased was 3720 pounds in June of 2015. Application of E-CLPS 2101 appears to be exempt from obtaining a PTI per R 290(a)(ii).

## Powder Coating Booth

The facility has one powder coating booth on site which was constructed in 2013. Powder is applied automatically. The booth has cartridge primary filters and mesh final filters. Filters are replaced as needed based upon the pressure across the primary and final filters. I did not observe a pressure reading during the April 28<sup>th</sup> inspection, and the powder booth was not operating during my facility visit on May 20<sup>th</sup>.

Cartridge booths are pulsed periodically. Powder collected from cartridge filters may be collected and reused. The powder coating booth exhausts into the general in-plant environment. The powder coating booth and associated natural-gas fired oven appear to be exempt from obtaining a PTI per R 287(d).

A second similar pretreatment and powder coating line is present at the facility, but it is currently not operational.

#### Miscellaneous Equipment

The facility also houses several presses and several mig welders for hole punching and for applying decorative ends to fencing. I did not observe this equipment on site. According to Mr. Karl Stinson, this equipment does not emit to ambient air. Presses appear to be exempt from obtaining a PTI per R285(I)(vi)(B), and welding equipment appears to be exempt per R 285(i).

According to Mr. Harry Stinson and from the site walkthrough, the facility does not contain cold cleaners, boilers, or emergency generators.

# Conclusion

Based on the AQD inspection and records review, it appears that Elite Fence is in compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

DATE 6/21/16 SUPERVISOR