

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

N553529845

FACILITY: Andronaco Industries	SRN / ID: N5535
LOCATION: 4242 44TH ST SE, KENTWOOD	DISTRICT: Grand Rapids
CITY: KENTWOOD	COUNTY: KENT
CONTACT: Adam Hanson , Quality Manager	ACTIVITY DATE: 06/17/2015
STAFF: David Morgan	COMPLIANCE STATUS: Compliance
SUBJECT:	SOURCE CLASS: SM OPT OUT
RESOLVED COMPLAINTS:	

At 2:00 P.M. on June 17, 2015, Air Quality Division staff Dave Morgan conducted a scheduled inspection of Andronaco Industries, Plant 3 located at 4242 44th Street in Kentwood. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations as well as Permit to Install (PTI) No. 108-13. Accompanying AQD staff on the inspection was Adam Hanson, Quality Manager and Chris Bossardet, Engineer.

FACILITY DESCRIPTION

The Andronaco Industries - Plant 3 facility manufactures valves, fittings, joints, sleeves, and other piping products for the pharmaceutical, chemical, steel, wastewater and energy markets utilizing reinforced fiberglass resin (polystyrene resins). The company conducts molding of reinforced fiberglass (RF) products through various molding techniques. The company also has other facilities, Plant 1 located at 4855 Broadmoor in Kentwood and Plant 2 located at 4617 East Paris in Kentwood. This facility is a synthetic minor source of hazardous air pollutant (HAP) emissions.

COMPLIANCE EVALUATION

Overall, there are five emission units at Plant 3 which make up FGPLANT3. It is noted that PTI No. 108-13 was issued in January 2014. The emission units covered under FGPLANT3 are:

Pultrusion Molding (EUPULTMOLDING):

In this process, pipes are made out of RF utilizing a series of dip tanks and filament winding. According to Mr. Hanson, the unit is used on a limited basis (approximately 10% of maximum production). The company uses fiberglass and vinyl ester resins which contain styrene.

Hand Lay-up (EUHANDLAYUP):

At the time of the inspection, a RF hand layup operation was installed and operating. This process uses fiberglass and vinyl ester resins to build a valve body to a certain thickness. This is an open-mold process.

Resin Transfer Molding (EURTM):

This line consists of various dies used to form parts in a closed mold process. Essentially fiberglass is placed into a mold and a resin injected into the closed mold cavity encapsulating the fiber.

Filament Winding (EUFILWINDING):

This emission unit is in the process of being installed. Once installed, the process would entail the manufacturing of larger scale parts made of RF.

Composite Mixing (EUCOMPMIXING):

This emission unit consists of the resin mixing operations moved from Andronaco Plant 2 on East Paris Avenue in Kentwood. The mixed composite fiberglass product is used in the compression molding operation at Plant 1 and also at Plant 3.

Miscellaneous Solvent Usage:

It is noted that the company uses acetone and a small amount of cleaning solvent for tooling and dies.

Records maintained by the company for May 2014 through April 2015, show the following:

Emission Unit/Flexible Group	Parameter	Limit	Actual	Compliance
FGPLANT3	VOCs and acetone	24.0 tpy	acetone 2.76 tpy + VOC 2.1 tpy = 5.0 tpy	Y

FGPLANT3	Styrene	53% wt. applied	<53% by wt.	Y
FGFACILITY	Individual HAP	< 9.0 tpy	<2.1 tpy	Y
FGFACILITY	Aggregate HAP	< 22.5 tpy	<2.1 tpy	Y
FGFACILITY	Styrene	17,270.1 lbs/yr	4,148 lbs/yr	Y

It is noted that the resin mixtures contain small amounts of VOC and even lesser amounts of HAPs that are less than 1% by weight of the total resin mixture. These constituents do not affect the facility's ability to comply with permit emission limits. The company is in the process of updating records for VOC and HAPs.

SUMMARY

Andronaco Industries is in compliance with all applicable requirements. Records are attached.

NAME



DATE

7/10/15

SUPERVISOR

PARB