

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

M4252

M425235566

FACILITY: Tri-Tec Polymers, Inc.	SRN / ID: M4252
LOCATION: 212 ELM ST, HOLLY	DISTRICT: Southeast Michigan
CITY: HOLLY	COUNTY: OAKLAND
CONTACT:	ACTIVITY DATE: 07/12/2016
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance
SUBJECT: FY 2016 inspection Tri-Tec Polymers, Inc. ("Tri-Tec")	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

M4252 - SAR - 2016 07 12

E & M Industries, Inc. (M4252)
Tri-Tec Polymers, Inc. (M4252)
209 Elm Street
Holly, Michigan 48442-1404

Files: Mark all files for E & M Industries, Inc. out of business or moved out from 209 Elm Street, Holly

SRN reassign (2016): E & M Industries, Inc. (M4252) – moved out or out of business. → Tri-Tec Polymers, Inc. (M4252) – moved into this building about 2010

PTIs denied: PTI Nos. 367-96 (01/17/1997) & 357-96 (01/17/1997)

PTI voids: PTI Nos. 238-91A (06/18/2001), 238-91 (03/05/1997), 267-85A (06/18/2001) & 267-85 (03/05/1997)

On July 12, 2016, I conducted level-2 self-initiated inspections of E & M Industries, Inc. ("E & M") and Tri-Tec Polymers, Inc. ("Tri-Tec"), a Teflon billets and seals manufacturing company, located at 209 Elm Street, Holly, Michigan 48442-1404. The inspections were conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

Tri-Tec Polymers, Inc. (M4252)

During the FY 2016 inspection, Mr. Rory J. Scheving (Phone: 248-369-8080; Cell: 810-240-8302; Fax: NA; E-mail: Rory@TriTecPolymers.com), President and Owner, assisted me.

Tri-Tec is in the business of manufacturing Teflon (poly-tetra-fluoro-ethylene, PTFE, $(C_2F_4)_n$, CAS# 9002-84-0) seals, gaskets, billets, etc.; Teflon is a Du Pont brand name for the material. Molecular formula $(C_2F_4)_n$ suggests Teflon consists only of carbon (C) and Fluorine (F) with strong C-F polar covalent bond. Tri-Tec buys generic Teflon. Tri-Tec moved into this Holly building about 2010. There are two parts to the plant: manual Teflon powder compression (low production) area and automated Teflon pellets compression (high production) area. A wide variety of molds is present for molding Teflon sealing products.

While manual compression (hand pressure) into a mold use Teflon powder and machine powered molding uses Teflon pellets. Thus pressed Teflon molds (both manual and machine compression) are baked at ≈ 700 °F in two natural-gas-fired sintering ovens (Grieve). 12-24-hour sintering results in inter-molecular bonding reaction to produce indestructible plastics;

oven hold times at the temperature of ≈ 700 °F vary with geometry and dimensions. Teflon products have resistance to corrosive reagents and offer low coefficient of friction.

Except natural gas fired sintering ovens (2), manufacturing processes and equipment do not exhaust air contaminants to outside ambient air. The processes and equipment are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rules 282, 285, etc.

E & M Industries, Inc. (M4252)

Mark all files for E & M Industries, Inc. out of business or moved out from 209 Elm Street, Holly

Conclusion

E & M Industries, Inc. out of business or moved out. Tri-Tec is in the business of manufacturing Teflon seals, gaskets, billets, etc.

NAME J. Hernandez DATE 07/18/2016 SUPERVISOR CJE