

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

U63180160944143

FACILITY: Terminal Supply Co.		SRN / ID: U631801609
LOCATION: 1800 Thunderbird, Troy		DISTRICT: Southeast Michigan
CITY: Troy		COUNTY: OAKLAND
CONTACT: John Grant , Manufacturing Research Supervisor		ACTIVITY DATE: 03/20/2018
STAFF: Lauren Magirl	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: On-site inspection		
RESOLVED COMPLAINTS:		

On Tuesday, February 27, 2018, I, Lauren Magirl, Joe Forth, and Adam Bognar, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) inspectors, conducted an unannounced self-initiated inspection at Bendix Corporation located at 1746 Thunderbird, Troy, Michigan. The purpose of this inspection was to determine the compliance of Bendix Corporation with the Federal Clean Air Act: Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended; and Michigan Department of Environmental Quality, Air Quality Division rules. When we arrived on-site, we observed that the building was now occupied by Terminal Supply Company (TSC).

We arrived at the facility at about 10:45 am and met with Fred. We identified ourselves, provided our credentials and stated the purpose of our inspection. He denied us entry for the inspection and stated he would call me back with more information regarding the inspection. I gave him my business card and the "Rights and Responsibilities" handout. He called me back with the correct person to arrange the inspection.

On Tuesday, March 20, 2018, I, Lauren Magirl and Sebastian Kallumkal, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) inspectors, arrived at TSC at about 10:00 am to conduct the self-initiated inspection with Jennie Arney, Manufacturing Operations Manager, and John Grant, TSC Research Supervisor. We identified ourselves, provided our credentials and stated the purpose of our inspection.

During the pre-inspection meeting, John stated TSC had three buildings for distribution, warehousing, and assembling their product. TSC constructs wire harnesses and cable assembly mostly for automotive industry. They do not manufacture anything in their facility. Everything comes manufactured and they build the wire harnesses. TSC has 200 employees and work 1 shift in the warehouse and distribution buildings and two shifts in the assembly building.

1800 Thunderbird Drive is the distribution building which is used for receiving, shipping and the main office building. This area receives the materials and sort them before they go into the assembly building and where the final product is shipped out.

1782 and 1780 Thunderbird Drive is one building which is used for warehousing for the large spools of wire and contains offices. The large spools are rewired into smaller spools to be used in the assemble process.

1746 Thunderbird Drive is the assembly building and where Bendix Corporation used to be. The assembly process starts with preassembled kits. The employees take these kits to their building stations to build the wire harnesses. Depending on the product, the wire harness could get soldered at the terminal for corrosion protection. The

soldering crucible is in a booth, the terminal is dipped into a flux then into the alloy. The booth was not in operation during the inspection; however, John illustrated how the booth works. The booth is only operational when necessary for operations. The booth was equipped with a fan and a filter. The filter is changed about every three months and the booth is used at a minimum every other day. TSC uses 200 pounds a year of the solder alloy 63Sn/37Pb.

Lead % by weight: 40

Cable covering in AP-42 chapter 12 in Table 12.17-2.: .5 lb/ton lead (Pb) processed

$$(200\text{lb/year}) \times (.4 \text{ lb Pb} / 1 \text{ lb}) \times (.5 \text{ lb Pb} / 1 \text{ ton Pb processed}) \times (1 \text{ ton} / 2000 \text{ lb}) = .02 \text{ lb Lead/year}$$

Soldering appear to be exempt from permit to install requirements pursuant to Rule 291. Rule 285(2)(i) appears to be for a soldering gun and not for soldering pots or crucibles. During the building stage TSC uses ultra-sonic welders that use vibration and heat to weld the wires together instead of using a terminal, which appears to be exempt from permit to install requirements pursuant to Rule 285(2)(i). Also, TSC has 6-ton electric presses, electric braiders to protect the wire harnesses, and an electric wiring cuter which appear to be exempt from permit to install requirements pursuant Rule 285(2)(I)(i) & Rule 285(2)(I)(vi)(B). TSC has a 500° electric oven that appear to be exempt from permit to install requirements pursuant Rule 282(2)(a). Once the wire harnesses are completed they are reviewed by the quality control department before arriving to the shipping department.

**Conclusion:**

Based on the inspection, Bendix Corporation no longer operates at this location. Terminal Supply Company currently operates at this location and appears to be in compliance with applicable air quality regulations.

NAME Lauren McGill

DATE 5/22/18

SUPERVISOR SK