

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N650332760

FACILITY: M ONE HOUR CLEANERS		SRN / ID: N6503
LOCATION: 2083 HILLER RD, W BLOOMFIELD		DISTRICT: Southeast Michigan
CITY: W BLOOMFIELD		COUNTY: OAKLAND
CONTACT: Rem Simonovski , Owner		ACTIVITY DATE: 12/17/2015
STAFF: Francis Lim	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT:		
RESOLVED COMPLAINTS:		

On December 17, 2015, Jong Yu and Francis Lim conducted an inspection at GM One Hour Cleaners located at 2083 Hiller Road, Bloomfield Hills Township. During the inspection, staff was assisted by Rem Simonovski, the new owner. Ownership changed on July 1, 2015. This facility used to be known as M One Hour Cleaners.

The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules.

A dry cleaning machine consists of four basic components: holding tank for the perc (perchloroethylene), a pump used to circulate the perc through the dry cleaning machine, filters to trap the solid impurities before the perc goes to the cylinder, and a cylinder (where the garments are placed) that spins. During the cleaning cycle, perc temp is maintained at °86 F.

After the dry cleaning cycle, the perc leaves the cylinder through a bottom trap and goes back to the holding tank. An extract cycle is run to remove the excess perc from the garments. During the extract cycle, the rotation of the cylinder increases (just like in a regular washing machine) in order to remove the perc from the clothes. After extraction, the garment is dried using warm air circulated through the cylinder to vaporize the solvent left on the clothes. Modern enclosed machines incorporate a computer controlled drying sensor, which automatically senses when all detectable traces of perc have been removed.

The used perc is purified in a distillation still (referred to as cooker). The used perc is heated and separated from the water and sludge, and condensed back to a liquid leaving behind all impurities in the still. The clean perc is pumped back into the holding tank.

The dry cleaning machine used at this facility is a dry-to-dry closed loop system where the clothes are dried in the same cylinder (garments do not have to be taken out and transferred to a separate cylinder) and solvent recovered during the drying process is returned, condensed, and distilled. The machine appears to be a 1999 model. The machine has an internal refrigerated condenser.

This machine is relatively small with a capacity of 30 pounds. The machine has two perc holding tanks, compared to three for other machines. The water separated by the distillation column is collected and stored in the enclosed waste solvent tank. The waste solvent tank contains the sludge and water collected from the still. The still is operated twice a month. Jong suggested that Rem do a more frequent distillation to improve the quality of the perc.

Jong has a perc monitor, but since the equipment is not running, we could not verify if there is a perc leak during the process. Jong requested to have the cylinder operated in the drying mode to "feel" if there are any leaks around the cylinder gasket. Dry cleaners are supposed to have a perc monitor that beeps to alarm hazardous levels of perc. ACGIH 8 hour TWA limit is 25 ppm.

Staff also inspected the small boiler. The gaskets look OK. Staff noticed that the annual boiler safety inspection has not been done yet for this year as required by the state (LARA). Last boiler inspection was conducted June 24, 2013. The owner said inspection will be done by the end of December. A CSD-1 inspection for controls and safety devices for automatically fired boilers is an annual requirement. Jong has a CO monitor. No CO was detected during the inspection.

Facility keeps a purchase log for perc. Based on the records, 15 gallons were purchased on October 15, 2015; 15 gallons, November 2014; 20 gallons, November 2013.

Attached is a Dry Cleaning Inspection Detail Report by Jong-Yu.

NAME *Jong-Yu* DATE 12-29-15 SUPERVISOR CTE