

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

N773824592

FACILITY: J.G. KERN ENTERPRISES, INC.		SRN / ID: N7738
LOCATION: 44044 MERRILL ST, STERLING HTS		DISTRICT: Southeast Michigan
CITY: STERLING HTS		COUNTY: MACOMB
CONTACT: Lester Castillo , Plant Manager		ACTIVITY DATE: 02/24/2014
STAFF: Rem Pinga	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced Level 2 Self-initiated Inspection		
RESOLVED COMPLAINTS:		

On February 24, 2014, AQD staff Samuel Liveson and I conducted a level 2 unannounced self-initiated inspection at J. G. Kern Enterprises, Inc. located at 44044 Merrill Road, Sterling Heights, Michigan 48314. The purpose of the inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), the Administrative Rules, and to investigate on odor complaints filed by a complainant working for a company near the facility.

Prior to the inspection, Mr. Liveson and I conducted odor observations downwind and upwind from the facility. We conducted odor observations from the corner of Merrill Road and 19 1/2 Mile Road going east towards Phoenix Drive. The wind was blowing towards east (westerly wind) and Phoenix Drive was downwind from the facility at that time. We observed light to intermittent oily/musty odors along Phoenix Drive directly east from the facility but the intensity is not in violation of DEQ-AQD Administrative Rule R 336.1901. We continued to conduct odor observations going north on Phoenix Drive (east of the facility) from 19 1/2 Mile Road towards Arrow Drive and proceeded west along Arrow Drive towards Merrill Road. We did not observe any odors. We drove south on Merrill Road, while conducting odor observations, towards 19 1/2 Mile Road but entered the parking lot of J. G. Kerns on the eastside and prior to reaching 19 1/2 Mile Road. We did not observe any odors at any points upwind from the facility.

At the facility reception area, we met with Mr. Lester Castillo, Plant Manager, and briefly, with Mr. Alan Kern, company Vice President. Prior to the walk through inspection, I stated the purpose of our visit and showed our ID Badges for proper identification. I gave a copy of the pamphlet "Environmental Inspections: Rights and Responsibilities" to Mr. Castillo who also accompanied us during the facility walk through.

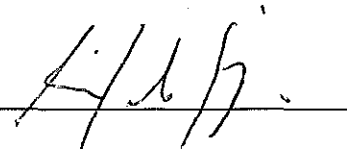
The facility manufactures mostly internal drive train parts for the automotive manufacturing industry. The manufacturing processes comprise mostly of machining equipment such as CNC lathes and broaches for cutting, grinding, turning, machining, sanding, and assembly/packaging of final product for customers. In addition, the facility has installed 2 small electric heat treat processes with open oil quenching (less than 2 years old). Per Mr. Castillo's

response e-mail to my requested equipment inventory, the facility has 32 modern CNC machines, 7 manual CNC turning machines, 23 milling machines, 8 detergent parts washers, and one Crystal Clean small parts washer. We also observed surface grinding equipment, hydraulic drilling equipment, electric drilling equipment, and other equipment including a tool room.

During the inspection, Mr. Castillo showed us the different operations/processes around the facility starting from the south side and moving towards the north side of the building. We observed a light oily/coolant odor and the "musty" odor inside and on certain sections of the facility which I pointed out to Mr. Castillo and AQD staff Mr. Liveson. Mr. Castillo mentioned that he has his staff religiously monitor the coolant for bacterial count and oil integrity to address the recent odor complaints but does not understand the continued complaints AQD is receiving. I informed Mr. Castillo to be vigilant about oil/coolant monitoring and housekeeping such as cleaning spills ASAP to avoid bacterial growth around the equipment floor area and in the pits or storage of spent coolants. I also mentioned to him that we observed a light and intermittent odor downwind from the facility prior to entering the facility earlier. Mr. Castillo explained some of the equipment and processes to Mr. Liveson (newly hired AQD staff) including the difference between a turning machine (part turning) and a milling machine (part stationary). We observed cylinder head blocks being machined in one area of the facility. The machining equipment appeared to be exempt from permit to install requirement per AQD Rule R 336.1285(l)(vi)(B). We observed a few of the detergent parts washers and the "Crystal Clean" part washer with about 1.5'x2' surface dimension. Per Mr. Castillo, the solvent used is mineral spirit and this equipment is exempt from permit to install requirements per AQD Administrative Rule R 336.1281(h). The lid was closed with safety/operating instructions posted in the lid. We also looked at 2 electric heat treat process equipment that utilize open quenching. Per Mr. Castillo, the company consumes about 55 gallon per 18 months of the quench oil/material.

After the walk through inspection, I discussed with Mr. Castillo my observations during the walk through inspection. During this post-inspection meeting, I informed Mr. Castillo about the heat treat process potentially being subject to a permit to install or Rule 290 exemption. After obtaining a copy of the MSDS for the quench material, I am unable to ascertain Rule 290 applicability and decided to send the company a Violation Notice (VN) for installing and operating the heat treat process without first obtaining a permit to install. The company can resolve the VN by either providing additional proof/documentation on Rule 290 applicability and keeping records or obtain a permit to install.

NAME



DATE

3/21/2014

SUPERVISOR

CJE