

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

N783525776

FACILITY: KAMAX LP		SRN / ID: N7835
LOCATION: 1194 ROODS LAKE RD, LAPEER		DISTRICT: Lansing
CITY: LAPEER		COUNTY: LAPEER
CONTACT: Keith Racknor , Lapeer Safety/Env. & Facility Manager		ACTIVITY DATE: 06/19/2014
STAFF: Brian Culham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Determine Compliance. Meet Kieth Racknor and inspect the plant for the first time.		
RESOLVED COMPLAINTS:		

KAMAX is a cold-heading operation, which stamps sheared metal rod into bolts, screws, and studs. They also heat treat and oil quench the metal parts.

In 2007, KAMAX was issued Permit to Install (PTI) No. 229-07, for two heat treat lines. Another permit, PTI 43-14, was issued in May of this year allowing the addition of a third heat treat line. These are the primary emission units at this source.

The pollutant of concern generate by KAMAX is particulate matter as a mist from heated oils. These particles, because they are oil droplets, are also considered volatile organic compounds (VOC). Permits restrict the majority of these particle emissions to less than 13 tons per year (tpy). The permit limits also help establish a Potential to Emit (PTE) less than 100 tons of PM, allowing KAMAX to be considered a true minor source for Title V purposes.

ID	Emission Unit Description	Permit or exemption rule	Compliance status
EU-HEATTREAT(A)	Heat treat lines, each consisting of a gas-fired washing system, a gas-fired Austenitizing furnace including oil quench, a tempering furnace, and soluble oil quench.	Permit to Install No. 229-07	Compliance
EU-HEATTREAT(B)	Not Installed.	Permit to Install No. 43-14	Not Installed
FG-STAMPING	Numerous lines for stamping and rolling of cold metals, controlled with smog hog particulate control devices	Rule 285(l)(i)	Compliance

This was an unannounced inspection to evaluate the installation of a new process that was understood to be under construction as early as March of this year. A request for a waiver was submitted at that time to start construction. The waiver was not granted because a hardship was not demonstrated.

I arrived at the facility at 8:30 AM. No visible emissions were detected as I approached the facility from the east on Bowers Road. I met with Keith Racknor; Safety, Environmental, and Facility Manager for the KAMAX Lapeer facility. I presented him with the brochure on inspection responsibilities. K. Racknor was in a walking cast so a Mr. John Hients accompanied me through the plant.

FG-STAMPING

The cold-heading machines stamp and roll parts out of metal rods. Units were directly attached to or shared ductworks that connect to smog hog mist collection units. The smog hog units all exhaust into the general, in-plant environment. J. Hients stated that the filter portion of the units can be removed, cleaned, and replaced.

The stamping and rolling processes appear to be exempt under Rule 285(l)(i). Rule 285(l)(i) exempts equipment used for bending, forming, expanding, rolling, stamping, forging, pressing, drawing, stamping, spinning, or extruding either hot or cold metals, and any exhaust or collector serving them.

EU-HEATTREAT(A)

Most of the stamped parts go through one of the heat treat lines. Washed parts go through an austenitizing furnace, and are then quenched in oil. Next, they go through a second wash, to remove the oil, and then to a low temperature furnace, which tempers the hardness to whatever level is needed.

Mr. Mark Hebert, Manager of Heat Treat, gave an overview of the heat treat recordkeeping process. I was provided with a copy of the recordkeeping for the two heat treating lines (attached for reference). This recordkeeping is required by the PTI. The net quench oil usage rate in EU_HEATTREAT is limited to no more than 2,400 gallons per year, based on a 12-month rolling time period. Particulate emissions are limited to 9.1 tons per year (TPY), over a 12-month rolling time period.

Mark Hebert explained that an internal audit had found deficiencies in the recordkeeping and he was working to resolve the issue. Specifically, some record activities occur only once over many months, and depending on their alignments to other activities, can skew results. As an example; a 12-month period contains only 4 oil addition events, but 5 oil reclamation events, results in a negative emission (January 2014, -585 gallons). Likewise; a couple of months later the records indicate a 12-month period where 5 oil addition events, but only 4 oil reclamation events occur. In these cases the emissions will be biased high (April 2014, 4273 gallons).


The records as they are being kept are not statistical representative of actual emissions over time. I do not believe that the 12 month emission rate of 2400 gallon has ever been exceeded. I totaled all emissions for the last 17 months, divided by 17 to get a monthly average, and then multiplied by 12 to get a 12 month value. The value was 900 gallons.

Kamax is following the record format as required by the Permit 229-07. I have suggested eliminating the nulls (zero) in the spreadsheet by averaging purchase values downward and reclaim values upward. As an example; instead of reporting purchases of 1878 in May, report 626 for May, June, and July. The other option is to add a flow meter and record actuals on a monthly basis.

On May 26, 2014, K. Racknor sent an e-mail stating that they will do the above. Other suggestions are included in the e-mail (attached).

EU-HEATTREAT(B)

This unit has not been installed. K. Racknor stated that they hoped to see it delivered in the next couple of weeks.

NAME 

DATE 7-2-2014

SUPERVISOR 