

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

N350733090

FACILITY: KRIST OIL CO		SRN / ID: N3507
LOCATION: 303 SELDEN RD, IRON RIVER		DISTRICT: Upper Peninsula
CITY: IRON RIVER		COUNTY: IRON
CONTACT: Krist Atanasoff , President		ACTIVITY DATE: 01/22/2016
STAFF: Joel Asher	COMPLIANCE STATUS: Unknown	SOURCE CLASS:
SUBJECT: Waste oil furnace permitted under PTI #45-02.		
RESOLVED COMPLAINTS:		

On 1/22/2016 I conducted an unannounced visit to this facility. This was in response to sample results received from samples taken during my last visit on 12/22/2015.

A summary of activities to date:

11/10/15 I conducted an unannounced inspection and took a sample of Waste oil (Krist 1).

11/24/15 received results from ALS Environmental showing sample Krist 1 to be in compliance for all parameters except flash point. The results showed a flash point of 68 degrees F. The permit requires the flashpoint to be >100 degrees F. This information is provided to Mr. Atanasoff.

12/17/15 Mr. Atanasoff forwards a copy of a laboratory report from White Water Associates of a sample of waste oil he took on 12/7/15 showing the flash point to be >176 degrees F.

12/18/15 I visited the facility and took 2 waste oil samples to send to 2 different laboratories. KRIST1 was sent to ALS Environmental and KRIST2 was sent to Merit Laboratories.

1/7/16 the results were received from ALS Environmental showing the flash point to be <60 degrees F.

1/8/16 the results were received from Merit Laboratories showing the flash point to be <72 degrees F.

1/22/16 I visited the site again. I discussed the laboratory results received on 1/7 and 1/8 with Mr. Atanasoff. It was agreed we should conduct a split sample. Waste oil was collected in a plastic bowl (the bowl typically used for collecting the samples out of the drain valve at the bottom of the tank. A screwdriver was used to stir the oil in the bowl to create a uniform mixture. Three glass sample collection jars (the same as I used previously) were used. The oil was poured from the bowl into each of the collection jars. Mr. Atanasoff poured the oil while I held the jars. After each jar was full I screwed on the cap and placed a tamper-proof seal across the lid and side of the jar. Mr. Atanasoff observed the seals being placed on the jars.

The tamper-proof seals were pre-printed with identification numbers. Sample ID #K324530 was given to Mr. Atanasoff. He had an employee - Carl - take the sample to White Water Associates for analysis. Sample ID #K324529 and sample ID #K324528 were taken with me.

On 1/25/16, sample ID #K324529 was sent to Merit Laboratories and sample ID #K324528 was sent to Fibertec.

Determination of compliance will be made upon receipt of all three laboratory results.

3/21/2016

Results were received as follows:

2/2/16 Fibertec 80 deg F

2/3/16 White Water >176 deg F

2/4/16 Merit 72 deg F

The results received provided difficulty in determining compliance. Based on ambient temperature in the boiler room it would seem a true flash point of <80 degrees F would present an explosive potential. Mr. Atanasoff had previously explained he drew a sample from the tank and held a lit propane torch to it and it would not light. It would seem a material with a low flash point would immediately ignite or flash with a lit flame held to it.

The discrepancy in the lab results indicated there may be some issue with the different laboratories and their abilities. It was determined to conduct a blind test with all laboratories involved. On 2/26/16 a sample of pure kerosene was obtained and transferred to four sample jars. Each jar was secured with a tamper proof label. Sample #K324524 was sent to Fibertec, Sample #K324525 was sent to Merit Laboratories, Sample #K324526 was sent to White Water Associates, and Sample #K324527 was sent to ALS Environmental. The results were as follows:

Fibertec 120 deg F

Merit 130 deg F

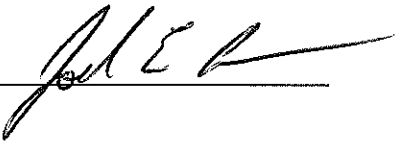
White Water 124 deg F

ALS 124 deg F

The flash point of kerosene is between 100 to 162 degrees F. All four labs analyzed the samples to relatively the same result and within an accurate range expected for kerosene.

Based on the unexplained inconsistency with analysis of the waste oil and the relative accuracy of the analysis of the blind kerosene samples, enforcement discretion will be utilized. Additional samples will be obtained at the next compliance inspection and compared to the required annual sample analysis the facility provides. No further action will be taken at this time.

NAME



DATE

3/21/16

SUPERVISOR

