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

U07160107435006

FACILITY: M.A. Energy Resources, LLC		**SRN / ID:** U071601074
LOCATION: 17691 U.S. Hwy 41, L'Anse		**DISTRICT:** Upper Peninsula
CITY: L'Anse		**COUNTY:** BARAGA
CONTACT: Steve Puhl , Manager		**ACTIVITY DATE:** 05/02/2016
STAFF: Ed Lancaster	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:**
SUBJECT: Meeting was to gather more information on MA Energy's relationship to LWEC and to determine if pentachlorophenol treated railroad ties were still on the property.		
RESOLVED COMPLAINTS:		

I arrived at M.A. Energy Resources (MAER) and met with Steve Puhl, Fuel Yard Manager, and Mindy Raymond, Office Manager, to discuss a number of issues regarding their operation and relationship to L'Anse Warden Electric Company (LWEC).

I began by asking for manifests of the disposal of pentachlorophenol railroad ties and/or their return to Canadian National Rail (CN). Ms. Raymond provided me with a list of six railcar numbers and the number of penta-ties in each car, that were shipped back to CN on March 26, 2016. The total number of ties was 3,902. Ms. Raymond reported these are the only ties that have been shipped back to CN. The remainder of the penta-ties have been sent to K&W Landfill in Greenland, MI. Manifests for the month of April showed 57 loads of ties were taken to K&W, carrying a total of 1,493.16 tons of material. Mr. Puhl said the 57 loads were not all penta-ties, some of the material included "out of spec" materials, such as creosote treated ties imbedded with metal, and yard waste (soil and treated chips mixed together). Mr. Puhl said you can tell the difference between Canadian and U.S. ties, because the Canadian ties are processed to remove the metal for recycling. Approximately 50% of U.S. ties have some metal attached to them.

I then requested the monthly analysis of fuel samples. Ms. Raymond said she has not received the April sample results and provided me with copies of January through March. The TDF results were a single sample composited over the first three months of 2016. There was no analysis of the penta-ties in January. Wood chip and creosote tie analysis was provided for all three months. MAER had each fuel type analyzed for percentages of moisture, ash, sulfur, chlorine, and btu/pound of fuel.

Mr. Puhl and I then walked into the fuel yard where he showed me a row of "legacy ties" that he estimated to contain 30,000 ties. He explained these ties are a mix of creosote and penta-ties and his employees are monitoring each one for chlorine content using the two XRF monitors they have on site. He estimated it would take at least a month to measure all the ties. Mr. Puhl said typically the end of the ties will give a higher chorine reading than the middle section of the tie. While we were observing the employees, I asked if they could monitor the ends and middle of three random ties for.

	Chlorine (ppm)			
Tie	**End**	**Middle**	**Interior**	**Under plate**

1	159	480		
2	3384	448		
3	4672/5319	1333	ND/125	ND

Readings were taken at both ends of Tie #3. The tie was then broken in two and each interior end was sampled. A final reading was taken at the point where a metal plate had been removed from the tie.

We were joined by Mr. JR Richardson at this point. We continued around the fuel yard to the rail tracks where Mr. Puhl pointed out the difference between the two gondola rail cars, railroad ties are delivered in. The large gondola holds approximately 1,000 ties, and the small one 400.

We finished the meeting by observing the grinding of the ties. No visible emissions were observed and Mr. Puhl stated there is a spray bar on the grinder and they use approximately 3,500 gallons of water per day to control the dust.

Image 1(Tie #3) : View of random tie chosen for XRF monitor chlorine analysis, prior to be broken in half by grappling arm.

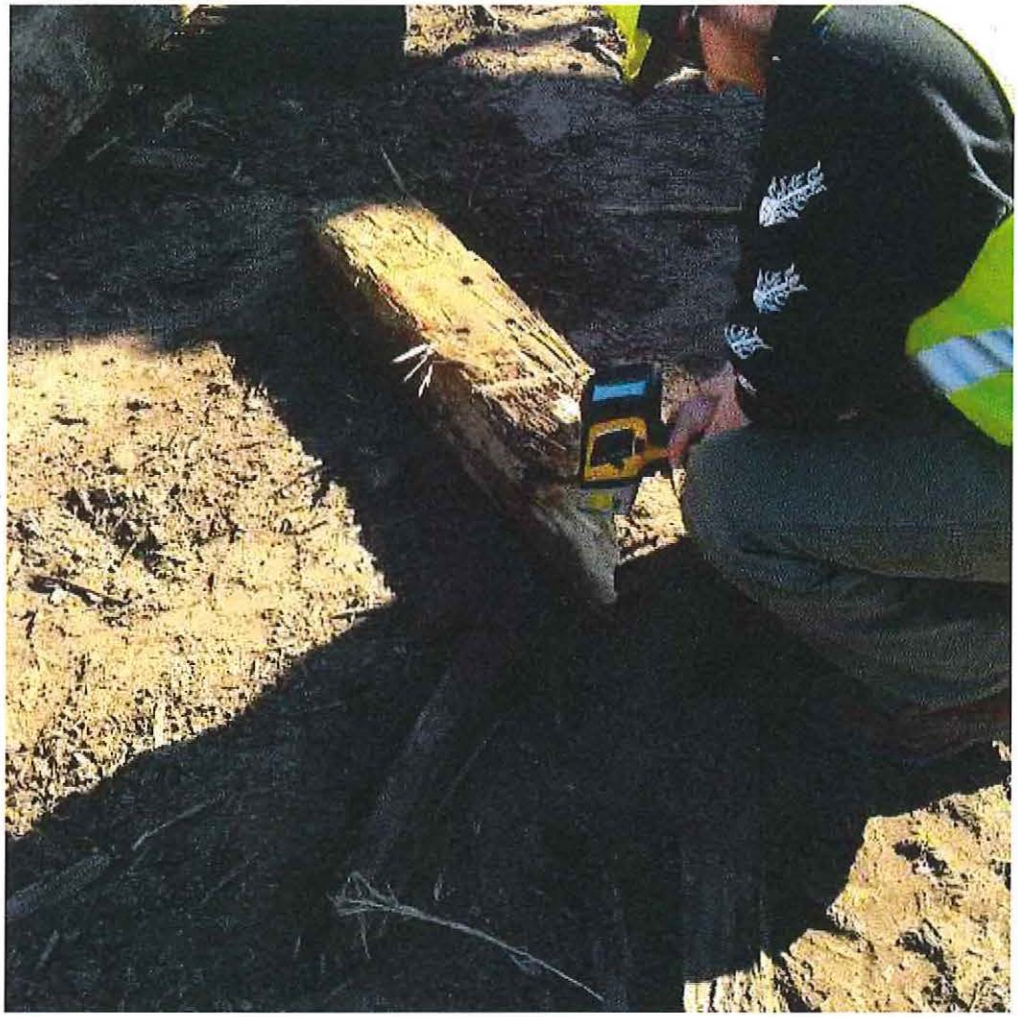

Image 2(XRF of Tie #3) : MA Energy employee using an XRF to monitor the chlorine content of the interior of Tie #3.

Image 3(Legacy pile) : View of "Legacy Pile" of railroad ties on May 2, 2016.

Image 4(Legacy Pile vs 2) : Second view of "Legacy Pile" on May 2, 2016.

Image 5(Waste pile) : View of "off-spec" material MA Energy sends to landfill.

Image 6(RR tie grinder) : View of MA Energy's RR tie grinder in operation on May 2, 2016, at 10:45 AM.

NAME Ed Lancaster DATE 6/17/16 SUPERVISOR Dan W. Mahi