

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

N094944387

FACILITY: Michigan Pallet Incorporated		SRN / ID: N0949
LOCATION: 1225 N SAGINAW ST, SAINT CHARLES		DISTRICT: Bay City
CITY: SAINT CHARLES		COUNTY: SAGINAW
CONTACT: Mark Roosa ,		ACTIVITY DATE: 04/24/2018
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of PTI 45-73 and 17-85.		
RESOLVED COMPLAINTS:		

I (glm) met with Mr. Mark Roosa and Ms. Jennie Kline of Michigan Pallet to perform an unannounced, scheduled, inspection. The facility builds new pallets, reconditions used pallets and remanufactures pallets for their customers. The pallets are heat treated to kill insects and larvae that may be in the wood. All pallets sent overseas require heat treatment. The facility uses untreated wood in their pallets. At the time of the inspection the facility was in compliance with the applicable air quality regulations.

The facility has two active permits. Permit # 17-85 was issued for a wood fired furnace and PTI #45-73 for a cyclone dust control system. The equipment associated with both of these permits no longer exists. A void request letter was sent.

I toured the facility with Mr. Roosa. They have (3) three lines that cut boards. A 4"X4" piece of lumber is cut into several smaller pieces that are later assembled into a pallet. Each of the lines has a pick up point for sawdust, which is blown into semi-truck trailers. They load approximately (5) five semi-tuck trailers a day that are hauled off site for use as bedding at local farms. We viewed the cyclone system and associated piping. The system is controlled by a cartridge filter collector.

The wood kiln, manufactured by Kiln-Direct, is natural gas-fired, and has a heat input of 2.5 MMBTU/hour. The natural gas-fired burner would appear to be exempt from permitting per the provisions of Rule 282(b)(i). However, there is no specific provision in the exemption rules (Rules 278 through 290) that exempts the operation of wood kilns from AQD permitting requirements. There have been several permits issued by DEQ-AQD for lumber and wood drying kilns; these permits address VOC emissions from the kilns. It should be noted that much of the wood kiln equipment that has been permitted seems to involve kilns with much larger charging capacities and drying cycles than with the pallet kilns at Michigan Pallet. Additionally, the requirement to permit seems to hinge on whether the fired wood is hard wood or soft wood. According to a document titled "Factors Affecting Lumber Kiln VOC Emissions", authored by M.R. Milota of Oregon State University; this reference has been used as the basis of estimating VOC emissions from wood kilns for all of the AQD permits that I found, VOC emissions are greater when the fired wood is a softwood. Per Mr. Rossa, Michigan Pallet uses mostly hardwood. He pointed out a small, approximately 4'X4'X5' section of pine (softwood) that would be used as requested from client. The rest of the wood appeared to be hardwood.

Also, the document titled "Factors Affecting Lumber Kiln VOC Emissions", authored by M.R. Milota of Oregon State University provides that the worst case VOC emission factor is 4.3 pounds of VOC as carbon per thousand board feet (or 4.3 lbs C/MBF). Michigan Pallet operates pallet kilns at a couple of other locations in Michigan; these kilns were not issued permits by AQD. This estimate was conservatively applied against the exemption threshold criteria put forth in Rule 290(a)(ii)(c) - 10 pounds of carcinogenic air contaminants with an IRSL greater than or equal to 0.04 micrograms per cubic meter per month – to demonstrate that typical usage of that kiln met this exemption criteria.

At the most, the facility would need to comply with R290, and would have the appropriate production records to show compliance with it. At the time of the inspection, the facility is considered to be in compliance with applicable air quality regulations.

NAME _____

DATE _____

SUPERVISOR_____