

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

N681438416

FACILITY: Paladin Ind Inc		SRN / ID: N6814
LOCATION: 4990 W Greenbrook Dr, KENTWOOD		DISTRICT: Grand Rapids
CITY: KENTWOOD		COUNTY: KENT
CONTACT: Craig Bell , President		ACTIVITY DATE: 01/19/2017
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, unscheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection. Accompanying me was Phil Salinas, Program Manager for the Emergency Management and Homeland Security Training Center. Mr. Salinas is assisting the Air Quality Division on Safety Training, and was observing the inspection activities from a training perspective. Mr. Salinas and I met with Craig Bell, President, and I informed him of my purpose as well as Mr. Salinas'.

#### FACILITY DESCRIPTION

Paladin Industries, Inc. is a wood office and audio visual furniture manufacturer. The facility file includes Permit to Install (PTI) No. 306-90 for a 20,200 CFM baghouse. This baghouse was replaced in 2008, with a 60,000 CFM which is documented in AQD files due to a tax exemption review and approval. The documentation indicates that the baghouse was exempt from permitting pursuant to Rule 285(d), however this is incorrect. The potential to emit from this baghouse is larger than the level allowed to utilize the permit exemptions, therefore it requires a PTI. I explained this to Mr. Bell, and told him I'd provide him with the means to submit a permit application for the current system, which is free. I indicated that technically this means that the facility is in non-compliance; however no Violation Notice will be issued at this time. Mr. Bell stated a willingness to get an application submitted. PTI No. 306-90 has been voided.

As we initiated the physical inspection, we were joined by Steve Swanson, Plant Manager. One paint spray booth was observed, and I made a comment about filter placement and a gap observed. Mr. Swanson reminded me that once the booth air flow is turned on, the gap seals right up. Mr. Bell provided paint usage information and this booth currently uses around 15 gallons per month, which qualifies for the Rule 287(c) exemption, which limits use to 200 gallons per month.

The paint dip tank is present in this area, but is no longer in use.

Paladin operates two adhesive application booths that combined use less than 200 gallons per month of a water based adhesive. Mr. Bell provided records to verify this, and we discussed during the inspection that technically each booth can use 200 gallons of adhesive, minus water. I recommended that if/when usage increases to over 200 gallons minus water combined; they should separate usage per booth to demonstrate each is in compliance with the limit. I did not have the Rule 287(c) guidance with me at the time of the inspection, but did e-mail it to Mr. Bell the following week for his reference.

The inspection included a newer roll coating line that also utilizes an adhesive application of less than 200 gallons per month. Data provided was in pounds, and the usage of materials is less than 400 pounds per month. If an assumption is made that each material weighs a conservative 7 pounds per gallon that would equate to less than 60 gallons per month. It is suggested that this method of usage is maintained by Paladin going forward.

We observed the 60,000 CFM baghouse, that controls the eleven CNC routing machines and which utilizes a pulsed air system to clean the bags. The unit is equipped with an Ecogate system which operates on a variable speed fan. Depending on what woodworking equipment is in operation, the fan operates at different speeds to save energy. Additionally, this baghouse vents internally during the winter months to conserve heat. Paladin changed out all bags recently. The unit does not appear to be equipped with a pressure drop gauge, which I noted to Mr. Bell and Mr. Swanson. I stated that the permit will likely require that one be present and used to monitor the condition of the bags. They agreed to have one installed.

**CONCLUSION**

Paladin will submit a Permit to Install application for the 60,000 CFM baghouse, and information on how to go about doing so has been provided. It is recommended that the application be submitted no later than March 30, 2017.

NAME April Sanyal

DATE 1-26-17

SUPERVISOR [Signature]