DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

LOCATION: 5954 Perkins 305 Road, PERKINS	DISTRICT: Upper Peninsula
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CITY: PERKINS	COUNTY: DELTA
CONTACT: Mathew Cretens , President	ACTIVITY DATE: 01/11/2016
STAFF: Joe Scanlan COMPLIANCE STATUS:	Compliance SOURCE CLASS: MINOR

FACILITY: CRETENS FURNITURE

P.O. Box 175

5954 Perkins 30.5 Rd.

Perkins, MI. 49872-0175

Office: (906) 359-4033

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www.cretensfurniture.com

INSPECTION DATE: 1/11/2016

MDEQ-AQD STAFF

Joseph Scanlan, EQA

FACILITY REPRESENTATIVE

Matthew L. Cretens, President

LOCATION

Cretens Furniture is located on Perkins Road about ¼ mile east of the M-35 intersection in the community of Perkins and is situated in a small residential development surrounded by rural lands. The facility is located in the former Perkins school and associated outbuildings.

SOURCE DESCRIPTION

Cretens Furniture is a furniture-making business that focuses mainly on custom kitchen cabinetry and has a single permit, PTI# 1327-91, for a wood-waste collection system. The facility also has a spray booth for stains and lacquer with a dry filter for overspray control that is exempt from an air use permit under the provisions of 287(c), which applies to surface coating lines that use less than 200 gallons per month. The buildings are heated with two newly installed high-efficiency Garn outdoor wood-fueled heaters, each with a 4000 gallon water capacity which is pumped to the buildings for radiant heat.

INSPECTION

On 11/06/2015 I conducted an unscheduled visit of Cretens Furniture. PPE worn during this inspection included steel-toed boots. I met Cretens Furniture's president, Mr. Matthew Cretens, upon first arrival at the facility. Mr. Cretens provided me with a tour through the production area and allowed me a visual inspection of the wood waste collection system (wood chip handling system), which appeared to be operating efficiently. The wood waste collection system is pneumatically powered (negative pressure) and the main duct is mounted overhead with smaller collection ducts connecting to the various pieces of production equipment in the shop (i.e., bandsaw, jointer/planer, etc.). Wood waste is moved via the duct system from inside the shop to a fully-enclosed repurposed

truck cargo box outside (chip bin), where it is stored until further use. The collection system is then ducted from the chip bin back inside the production area and into a bag-type filter which captures leftover fines.

I also observed the stain spray booth, which was not in use at the time of inspection. The booth had filters in place which are maintained on a regular basis, as needed. Air from the booth exhaust is discharged into the building and not vented outside the facility.

Mr. Cretens also gave me a tour of the garage housing the newly installed Garn wood-fueled hydronic heaters. The heaters were installed late 2015 and are performing very satisfactorily. These units are certified to meet EPA Phase II and New Source Performance Standard emission limits for hydronic wood heaters.

APPLICABLE SPECIAL CONDITIONS PTI# 1327-91

- 15. Visible emissions from the wood chip handling system shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a);
- 16. Rule 331 The particulate emission from the wood chip handling system shall not exceed 0.10 lbs per 1000 lbs of exhaust gases, calculated on a dry gas basis;
- 19. Applicant shall not vent any exhaust from the sanding machines to the wood chip handling system;
- 20. All chip bin external access doors shall be kept in place at all times except when the chip bin is being emptied;
- 21. The disposal of collected air contaminants shall be performed in a manner which minimalizes the introduction of air contaminants to the outer air.

APPLICABLE EXEMPTION RULE 287(c)

R 336.1287 Permit to install exemptions; surface coating equipment.

Rule 287. The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:

- (c) A surface coating line if all of the following conditions are met:
 - (i) The coating use rate is not more than 200 gallons, as applied, minus water, per month.
- (ii) Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
- (iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.

SUMMARY

The wood waste handling system appears to meet the applicable requirements set forth in Special Conditions #'s 15 through 20. In regards to Special Condition #21, permittee needs to maintain better housekeeping where the wood waste is removed from the chip bin outside; with certain dry, windy conditions in the summer months the excessive amount of sawdust on the ground can become airborne fugitive dust. This is an easily correctable situation.

To maintain their 287(c) exemption for the spray booth, permittee supplied AQD district staff with monthly purchase records for stain and/or solvent for 2014/15. Usages are not exceed 200 gal/month, however in October of 2015 there was an exceedance of 7.25 gallons (207.25 gallons total for October 2015). Permittee needs to be more aware of monthly usages; all other exemption requirements are being met adequately.

The two Garn high-efficiently gasification heaters newly installed in an adjacent outbuilding are certified to meet EPA Phase II and New Source Performance Standard emission limits for hydronic wood-fueled heaters. These units were installed in late 2015 and are performing ideally.

No major violations of PTI#1327-91 were observed.

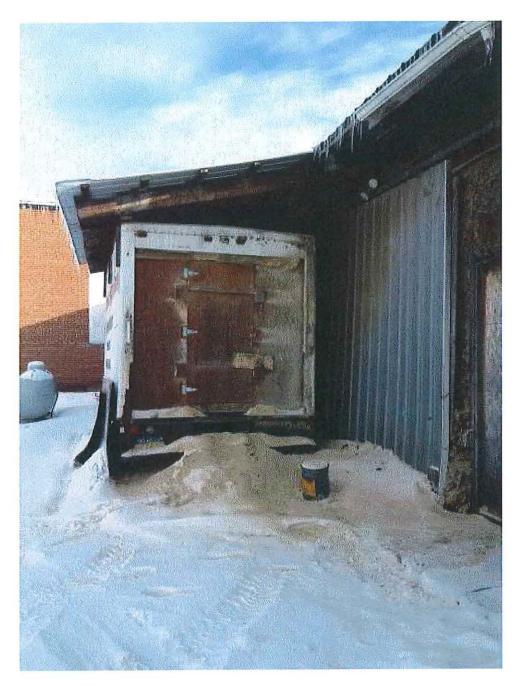


Image 1(CF6): Chip bin for wood waste

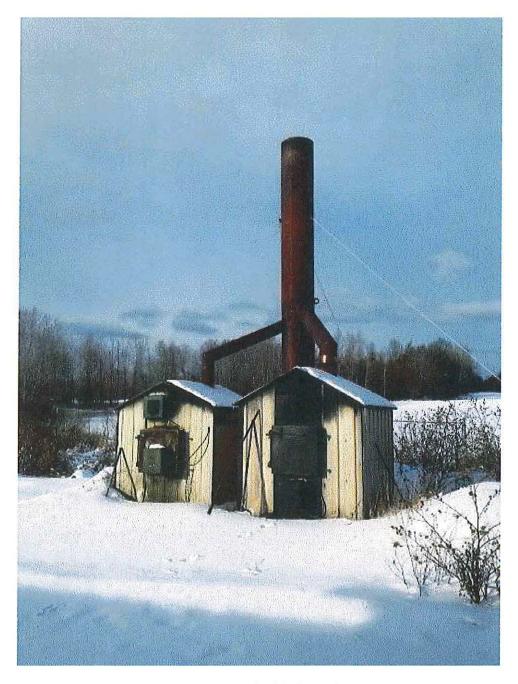


Image 2(CF7): Retired hydronic heaters

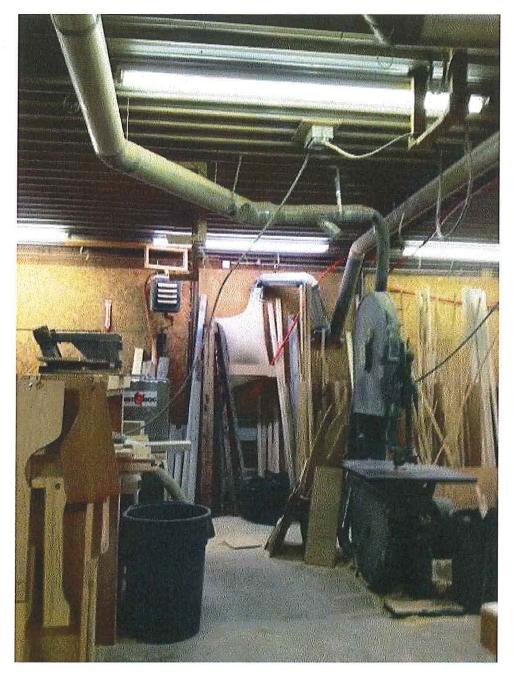


Image 3(CF1): Wood waste collection system



Image 4(CF2): Wood waste collection system

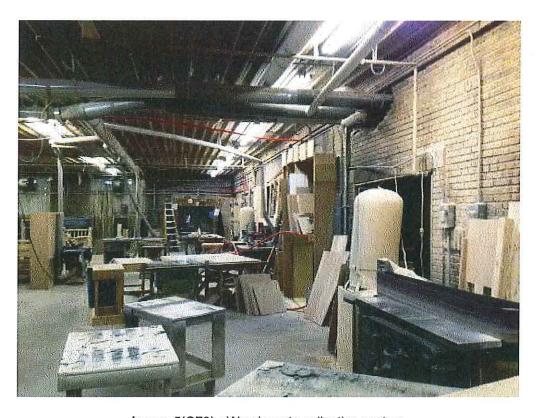


Image 5(CF3): Wood waste collection system



Image 6(CF4): Spray booth for stains & lacquers



Image 7(CF5): Two Garn wood-fueled hydronic heaters

NAME DATE 1 20 16 SUPERVISOR