

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

U78180051244146

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| FACILITY: William's Furniture & Cabinets Manufacturing | | SRN / ID: U781800512 |
| LOCATION: 510 s. Main, Perry | | DISTRICT: Lansing |
| CITY: Perry | | COUNTY: SHIAWASSEE |
| CONTACT: William Scott Neros , Owner | | ACTIVITY DATE: 03/20/2018 |
| STAFF: Julie Brunner | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: |
| SUBJECT: Self-initiated inspection due to odor complaints | | |
| RESOLVED COMPLAINTS: | | |

On March 20, 2018, I conducted an unannounced, self-initiated inspection of William's Furniture Kitchen and Bath located at 510 S. Main Street in Perry. This inspection was initiated due to odor complaints.

Contact:

William Scott Neros, Owner, 517-625-3570, scottneros@yahoo.com
Tyler Scott Neros, 517-625-3570, tylerscottn@yahoo.com

Facility Description:

William's Furniture Kitchen and Bath (William's FKB) manufactures solid wood custom cabinets for the kitchen and bath specializing in stained and painted cabinetry. This is a family owned business and they have been in business at this location for 30 years. The facility has wood machining, assembly, and staining and paint coating of wood.

William's FKB is located on just south of downtown Perry. The north and west is primarily residential. To the south and east is a mix of commercial, residential and agricultural land.

William's FKB is a minor source and has not been issued any air permits. They have been inspected before, but it was many years ago and the inspection report is not in AQD records.

Michigan Air Emissions Reporting System (MAERS):

The facility does not have to report to MAERS.

Inspection:

Arrived: 9:00 am

Departed: 10:00 am

Weather: 24°F, wind NNE @ 11 MPH, UV 0 Low

No visible emissions (VEs) were observed from any of the facility exhaust stacks upon arrival. No odors were identified surrounding the facility.

A pre-inspection meeting was conducted with Mr. William Scott Neros (owner). The facility operations were discussed and then we met up with Tyler for the facility tour. The facility was operating during the inspection but not at full production.

There are no emergency generators, and the office and showroom is heated by a residential sized natural gas-fired furnace (exemption Rule 282(2)(b)(i)).

Machining Processes, Rule 285(2)(l)(vi) –

In the production areas, wood machining includes several planers, joiner, sander planer/molder, shapers, radio arm saw, table saws, rip saw, and band saw that vent to a dust collection system. Pickup vents in the area of the equipment direct the wood dust to a 3-phase dust collector that moves 3000 cfm of air. The dust is collected in three (3) cyclones with filters on top that direct the saw dust into bags with a total storage capacity of 45 cf. The system is approximately 20+ years old and is located in a shed along the outside wall of the production area. The exhaust air vents into the shed which has a hole in the roof. There was a lot of saw dust on the ground in the shed. The saw dust on the ground is from changing bags and a hole in the system. The saw dust is sweep

up at the end of the week and put in the bags. The saw dust is sold to farmers for bedding material. Housekeeping needs to be improved, and repairs to the shed and system need to be made.

Rule 285(2)(l)(vi) exempts equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:

(A) Equipment used on a nonproduction basis.

(B) Equipment that has emissions that are released only into the general in-plant environment.

(C) Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner

Holes need to be repaired in the dust collection system, but generally it complies with exemption by Rule 285(2)(l)(vi)(C).

Paint Booth, Exemption Rule 287(2)(c) –

A paint room with external exhaust out the sidewall is where coating and paint is applied to cabinets. A high volume low pressure (HVLV) spray gun is used to manually apply paint coatings. A quart or 2.5-gallon pressure pot feeds paint to the spray gun. About 2 to 5 gallons per week of coating is used so it is estimated by AQD staff that approximately 25 gallons of paint coats are used per month at maximum. The room/booth does not have particulate control. There was paint all over the fan blades, and on the louvers and ground outside. Particulate control needs to be installed. I also discussed the need for a vertical stack and recommended it be at least 1.5 times the building height. (It should be 1.5 times the highest building on-site which will help address the odor complaints.)

The paint booth/room and coating equipment could operate under exemption Rule 287(2)(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 dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the owner or operator develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.

(iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the department upon request.

Tyler agreed to install particulate control and investigate installing a stack (highly recommended). Follow-up is needed to assure compliance with exemption Rule 287(2)(c).

Rule 282(2)(b)(iii) -

Two (2) 139,000 Btu/hr Hotblast (Model 1300) wood-burning stoves are used to heat the shop. One is located in the assembly area and the second is located by the paint booth/room. The stoves are started with kiln dried lumber scrap and then clean wood logs are used. The stack vents for the stoves are located on the north and south buildings. Rule 285(2)(b)(iii) exempts fuel-burning equipment which is used for space heating, service water heating, electric power generation, oil and gas production or processing, or indirect heating and which burns only wood, wood residue, or wood waste that is not painted or treated with wood preservatives, which does not contain more than 25% plywood, chipboard, particleboard, and other types of manufactured wood boards, that is not contaminated with other waste materials, and the equipment has a rated heat input capacity of not more than 6,000,000 Btu per hour.

Summary:

The facility will be in compliance with the applicable rules and regulations once improvements are made. Follow-up is needed on the repairs to the dust collection system and installation of particulate control in the paint room.

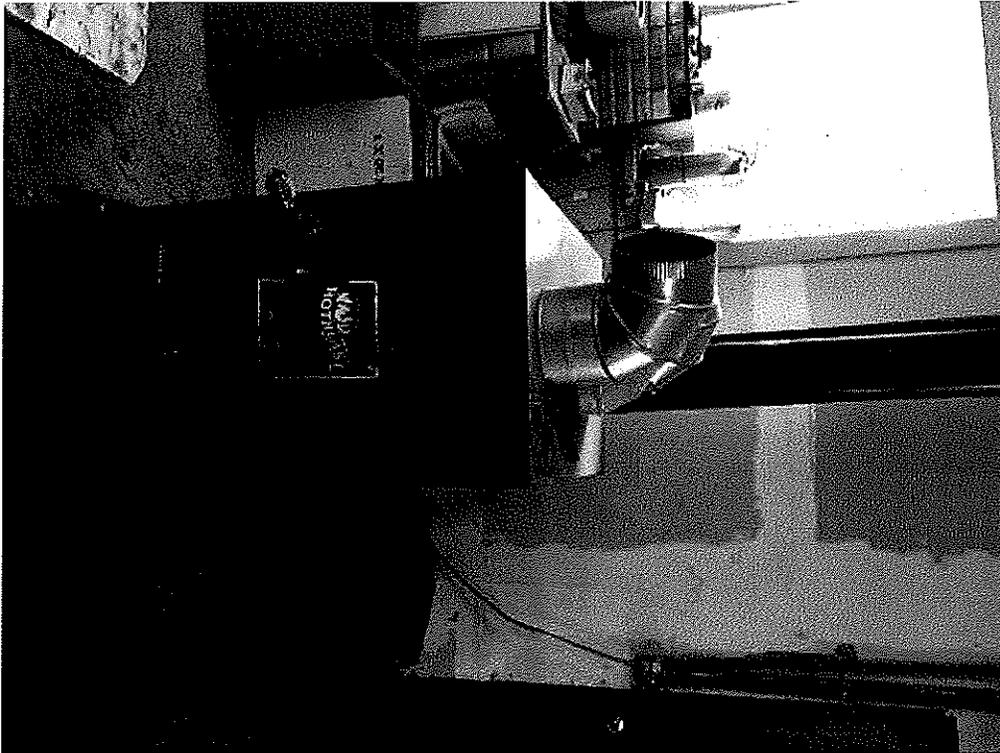


Image 1(1) : Wood burning stove



Image 2(2) : Stove stack on south side



Image 3(3) : Machining area and vents

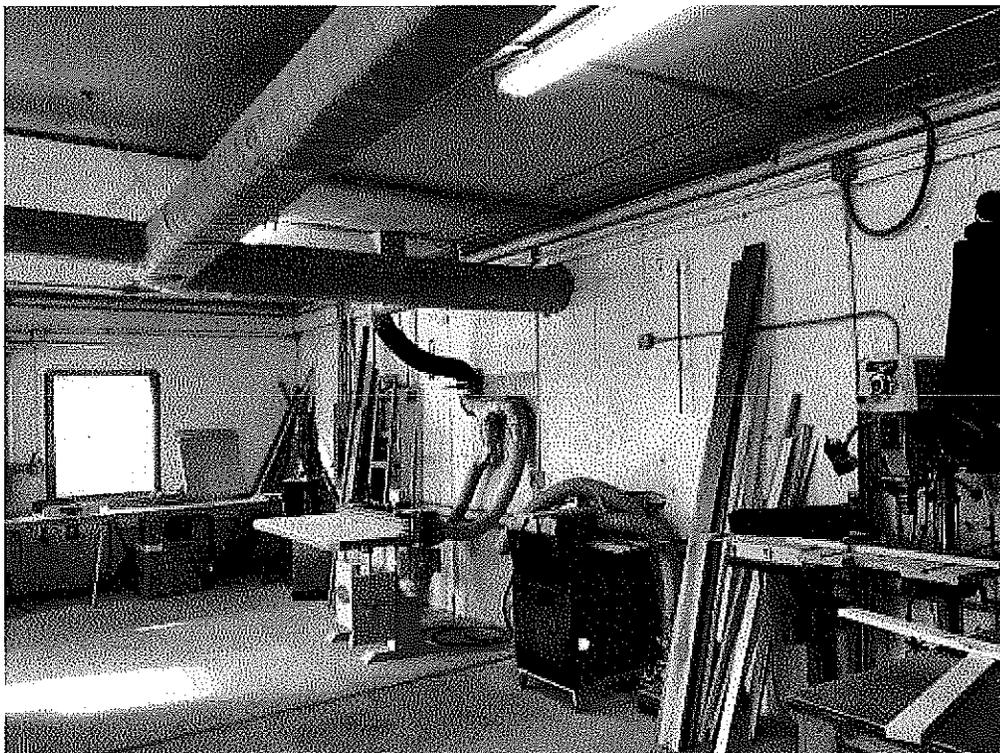


Image 4(5) : Vent out the wall to the dust collection system



Image 5(6) : dust collection system



Image 6(7) : Dust collection system bags



Image 7(9) : Dust on ground from dust collection system



Image 8(11) : External exhaust vent from the paint room

NAME Judith L. Bruner

DATE 4/18/18

SUPERVISOR B.M.

