

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

P0177

P017736239

FACILITY: STERLING MILLWORK, INC. (MDCS Misc-1566)		SRN / ID: P0177
LOCATION: STERLING CONTRACTING, INC., FARMINGTN HLS		DISTRICT: Southeast Michigan
CITY: FARMINGTN HLS		COUNTY: OAKLAND
CONTACT: Mark Bolitho, President and owner		ACTIVITY DATE: 08/25/2016
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY 2016 inspection of Sterling Millwork, Inc., Sterling Contracting, Inc.		
RESOLVED COMPLAINTS:		

P01 77 - SAR 2016 08 25

Sterling Millwork, Inc. (P0177 MCDS Misc-1566)
Sterling Contracting, Inc.
23350 Commerce Drive
Farmington Hills, Michigan 48335-2726

Phone: (248) 427-1400

On August 25, 2016, I conducted a level-2 self-initiated inspection of Sterling Millwork, Inc., Sterling Contracting, Inc. ("the company" or "Sterling") located at 23350 Commerce Drive, Farmington Hills, Michigan 48335-2726. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) rules.

During the FY2016 inspection, Mr. Jerry Schueler (Phone: 248-427-1400-ext. 23; Mobile: 248-514-6824; Fax: 248-427-1386; E-mail: jschueler@sterlingmillwork.com), Shop Foreman, assisted me. Mr. Mark Bolitho (Phone: 248-427-1400-ext. 11; Mobile: 248-514-6800; Fax: 248-427-1300; E-mail: mbolitho@sterlingmillwork.com), President and Owner, was on his way out as I arrived.

Sterling Millwork is in the business of commercial carpentry; no residential contracts. Sterling manufactures wood partitions & fixtures; manufactures wooden entertainment cabinets; manufactures wooden kitchen cabinets; commercial & office building renovation & repair services; millwork. The carpentry work involves cutting, sawing, grinding wood and wood products. These activities produce saw dust. All saw dust emissions are ducted via common manifold to one common baghouse located just outside the building.

Rule 285 Wood Cutting Machines

There are one dozen (12) wood cutting machines. Each machine is equipped with a saw dust capture device and a ventilation device that connects to a manifold. Saw dust exhaust manifold transports saw-dust-contaminated air to a baghouse located outside the building. While filtered exhaust air is discharged outside towards ground (downward) in a non-heating season (summer), filtered air is recycled into the plant in a heating season (winter).

The baghouse consists of 108 bags. Pulse-jet air cleans the bags once every 15 minutes. When the air blower for the baghouse is turned off, several air pulses occur in quick succession so that all dust cake is purged off bag walls. Inspection and replacement of bags, if necessary, takes place towards the end of a calendar year to get ready for a heating season.

Saw dust collected by the baghouse is dropped into an open hopper, which spilled contents in the past. During FY2007 inspection, I pointed out dust fall-out in the vicinity of the baghouse to Mr. Bolitho. I asked him to cover both hopper and dumpster, where, when full, hopper saw dust is transferred to, in order to prevent saw dust becoming air-borne. During August 21, 2007, inspection, Mr. Liss showed me a hopper cover. It appeared that the hopper cover was not working properly. Mr. Liss stated that he could not find a cover for the dumpster. I asked him to ensure that the dumpster was not over-filled lest saw dust be blown away.

On November 4, 2010 (3 p.m.) the baghouse was operating based upon the fan sound but the collected saw dust was spilled in the neighborhood of the hopper indicating bad work practice.

Based upon July 2007 inspection by Fire Marshal Steve Hume, Farmington Hills FD, my FY 2007 complaint investigation and FY 2011 (Nov 4, 2010) inspection, AQD issued Violation Notice (Rule 336.1910) dated November 15, 2010. Please see VN for additional details.

AQD received on December 15, 2010, the VN response letter dated December 6. The letter from Mr. Bolitho stated that the hopper would be enclosed by December 17, 2010, such that saw dust would not be blown away.

During January 14, 2011, VN follow-up inspection, I confirmed that the hopper was surrounded by blue tarp such that wind would not be able to blow away saw dust from the hopper. Mr. Bolitho said to Mr. Schueler that Good Engineering Practice (GEP) stack as suggested by Nov 15, 2010, VN would not be built due to costs. At this time, downward discharge may be acceptable; if additional complaints are received and AQD confirms the nuisance, GEP stack shall be required.

Based upon FY 2016 inspection, the hopper for the baghouse is operating properly and no tarp is used. No saw dust spills. If no saw dust spills, tarp is not needed.

The wood cutting, drilling, sanding machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(I).

Rue 287(c) Spray Booth

One "15 feet W* 30 feet L * 12 feet H" varnish, stains, lacquers coating booth is present. The booth is equipped with a back-draft dry filter system consisting of 12 filter panels. Intake air to the booth is filtered to obtain high quality finish. During August 2007 inspection I pointed out leaks in one of 12 filters. I asked Mr. Liss to make sure the filters were installed snug and tight in a leak-tight manner.

By October 2012, Sterling converted all coatings (both basecoat and clearcoat) to water-based coatings. All coatings are lacquer, oil paints, latex, clearcoat, etc. coatings. Although coating usage records are not kept, Sterling uses about 100 gallons of water-based coatings per month based upon purchase records.

I confirmed that the filters were installed properly (snug and tight in a leak-tight manner). I asked Mr. Schueler to install and inspect the filters such that they fit, at all times, snugly without gaps and holes. I also asked him to keep records of paint and solvent usage according to Rule 336.287(c).

The booth is exempt from Rule 336.1201 pursuant to Rule 336.1287(c) provided all the

requirements of exemption are met.

287(c) Superfici spray machine

One (6 ft. W. * 4 ft. D. * 4 ft. H) Superfici spray machine, which Sterling bought from Brunt Associates of Wixom (Brunt Associates Carpentry and Millwork (P0577)), is present. The machine is equipped with paint spray arms and it is enclosed. Air flow is downdraft. The machine is equipped with a filter system for paint overspray. The filtered exhaust air is discharged to outside ambient air. About 50 gallons of water-based coatings per month are used based upon purchase records.

The spray machine (enclosed booth) is exempt from Rule 336.1201 pursuant to Rule 336.1287(c) provided all the requirements of exemption are met.

2007 Complaint – saw dust fall-out

AQD received complaint (C-07SE-136: Ms. Tracy Slintak (248-871-2555), Environmental Coordinator, and Mr. Steve Hume (248-871-2826), Fire Marshal, both of City of Farmington Hills) regarding saw dust fall-out in the Commerce Drive neighborhood). The saw dust fallout is resolved by proper management of saw dust hopper for the baghouse.

Conclusion

The wood-cutting, drilling, sanding machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l). The booth is exempt from Rule 336.1201 pursuant to Rule 336.1287(c)

FYI: Nov 15, 2010, VN

November 15, 2010

Mr. Mark Bolitho
 Sterling Millwork, Inc.
 23350 Commerce Drive
 Farmington Hills, Michigan 48335-2726

SRN: P0177, Oakland County

Dear Mr. Bolitho :

VIOLATION NOTICE

On November 4, 2010, the Department of Natural Resources and Environment (DNRE), Air Quality Division (AQD), conducted an inspection of Sterling Millwork, Inc. ("Sterling") located at 23350 Commerce Drive, Farmington Hills, Michigan. The purpose of this inspection was to determine Sterling compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules.

During the November 4, 2010, inspection, staff observed the following:

Process	Rule/Permit	Comments
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Description	Condition Violated	
Wood cutting machines	Rule 336.1910.	I observed on November 4, 2010, the baghouse and associated hopper serving wood cutting machines (about one dozen) were not operating properly.
<p>In July 2007, Mr. Steve Hume, Farmington Hills Fire Marshal, confirmed sawdust fallout in the vicinity of the baghouse during his citizen complaint investigations. During August 2007 complaint inspections, I pointed out sawdust fall-out in the vicinity of the baghouse to Mr. Bolitho, who promised to take corrective action. Again, on November 4, 2010, sawdust was backed up into the baghouse because the hopper was not emptied when full. Hopper must be emptied promptly to ensure proper operation of the baghouse that serves about one dozen wood cutting and grinding machines. Proper work practice must be implemented and periodic training must be imparted to appropriate employees. On November 4, sawdust was spilled in the vicinity of the baghouse's hopper.</p> <p>The sawdust exhaust manifold transports saw-dust-contaminated air from the wood cutting machines (about one dozen) to a baghouse located outside the building. Based upon current design, while filtered exhaust air is discharged outside towards ground (downward) in a non-heating season (summer), filtered air is recycled into the plant in a heating season (winter). Good Engineering Practice (GEP) requires the discharge ductwork (stack) to be designed such that exhaust gases are discharged unobstructed vertically upwards at an exit point height about 1.5 times the building height. GEP stack design ensures enhanced atmospheric dispersion of air pollutants resulting in acceptable concentrations of air contaminants in the immediate vicinity.</p>		

On November 4, 2010, AQD staff observed operation of woodcutting machines while the baghouse and associated hopper serving wood cutting machines were malfunctioning as indicated by spilled sawdust in the vicinity.

This constitutes a violation of Act 451, Rule 910, which requires that an air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the administrative rules and existing law.

Please initiate actions necessary to correct the cited and submit a written response to this Violation Notice by December 6, 2010 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the occurred; an explanation of the causes and duration of the ; whether the ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If Sterling believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the cited above and for the cooperation that was extended to me during my inspection of Sterling. If you have any questions regarding the or the actions necessary to bring this facility into compliance, please contact me at the number listed below or the DNRE, AQD, SEMI (Warren), 27700 Donald Court, Warren, Michigan 48092-2793.

Sincerely,

Iranna Konanahalli
 Sr. Environmental Engineer
 Air Quality Division

586-753-3741

ISK / VLL

cc: Mr. Gerald Avery, DNRE
Mr. Thomas Hess, DNRE
Ms. Teresa Seidel, DNRE
Mr. Christopher Ethridge, DNRE
Mr. Richard Taszreak, DNRE

NAME *J. Brennan Hall* DATE *08/31/2016* SUPERVISOR *Joyne SL*

