#### DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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FACILITY: Brunt Associates Carpentry and Millwork		SRN / ID: P0577		
LOCATION: 48953 Wixom Tech, Dr./WIXOM		DISTRICT: Southeast Michigan		
CITY: WIXOM		COUNTY: OAKLAND		
CONTACT: Brian Brunt		ACTIVITY DATE:	12/04/2014	
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS	: MINOR	
SUBJECT: FY 2015 inspection of Bru	int Associates Carpentry and Millwork ("Brunt")			
RESOLVED COMPLAINTS:				
PO.	577_ SAR_	2014	12	04

Brunt Associates Carpentry and Millwork (P0577) 48953 Wixom Tech Dr. Wixom, Michigan 48393-3558

<u>www.BruntAssociates.com</u> Phone: 248-960-8295 Fax: 248-960-8296

VN: AQD issued Violation Notice dated December 22, 2014, for failure to operate the booth properly as designed and intended.

Subject to: Permit (Rule 201) exemption rules 287, 285, 281; conditional exemptions.

Not Subject to: NESHAP/ MACT T, area source National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T; NESHAP/ MACT T); Correction; 29484 Federal Register / Vol. 60, No. 107 / Monday, June 5, 1995 / Rules and Regulations; amended National Air Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T); Final Rule; Page 25138 Federal Register / Vol. 72, No. 85 / Thursday, May 3, 2007 / Rules and Regulations. Solvents containing halogenated compounds are not used.

On October 24 and December 04, 2014, I conducted a level 2 self-initiated inspection of Brunt Associates Carpentry and Millwork ("Brunt") located at 48953 Wixom Tech Dr., Wixom, Michigan 48393-3558. 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) administrative rules.

During the FY 2015 inspection, Mr. Dave Adair (Phone: 248-295-4608 – Direct; Cell: NA; Fax: 248-960-8296; E-mail: Dave@BruntAssociates.com), Shop Forman, assisted me.

During the FY 2015 inspection, Mr. Brian J. Brunt (Phone: 248-295-4610 – Direct; Cell: NA; Fax: 248-960-8296; E-mail: Brian@BruntAssociates.com), Owner and President, was not present.

Brunt Associates is in woodworking business: Architectural & Cabinet Woodwork, Carpentry Contractors, Millwork, etc. Most business dealings are with institutions such as universities, churches, schools, hospitals, etc.

### Rule 287(c) Paint Spray Booth

One water-based and solvent-based collision shop style paint spray booth (15 W ft. x 20 ft. D x 10 ft. H) with a back-draft dry filter system is present. The back-draft dry filter system consists of 12 filter panels. Intake air filter system is present to enhance product finish quality. Paint and solvent usage records are not kept.

I asked Mr. Adair 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 336.1287(c). Painter's or duct tapes may be used to repair gaps and holes.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.287(c).

Upon keeping usage records and operating the booth properly as designed and intended, the coating booth meets all of the Rule 336.1287(c) conditions:

- 1. The coating use rate is not more than 200 gallons, as applied, minus water, per month.
- 2. Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
- 3. 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.

It is estimated that 10-20 gallons of coatings were used in CY 2014 as result of ongoing great recession in construction industry. Brunt used 60-70 gallons per month in 2007. Both waterbased and solvent-based coatings are used: latex paint, lacquer finishes, stains, clearcoats (CC are always solvent-based), etc. The filter system was full of gaps and holes during October 24, 2014, inspection. On December 4, 2014, the booth's doors (both entrance door and one near the filter system) were open thus affecting coating over-spray particulate matter capture and control via changed dynamics of air flow. See Violation Notice information below.

For proper air balance and control of paint / coating over-spray particulate control, the booth ought to be operated properly as designed and intended: all doors must be closed such that supplied air flow is via the intake air filter system and exhaust air flow is via the paint over-spray filter system. Such proper operation will improve finish quality as well.

# FY 2015 Violation Notice

AQD issued Violation Notice (VN) dated December 22, 2014 (Rules 336.1201 & 336.1910), for not operating the wood finish booth properly according intent and design of the booth. In addition to the filter system gaps and holes, Brunt changed dynamics of air flow (intake and exhaust) by keeping the doors (entrance door and door near filters) open during operation of the booth. As of February 15, 2015, AQD has not received VN response letter. The company, Mr. Dave Adair, agreed to respond to VN in writing as soon he could.

# 11wood cutting, sanding, milling, sanding machines

11 wood cutting, sanding, milling, sanding, etc. machines are present. Each machine is equipped with its own capture device for particulate matter (saw dust) emissions. The captured saw dust laden exhaust gases are transported via a common manifold to one common baghouse. The baghouse (Murphy Rogers dust collector) consists of about 100 bags. Pulse-jet air is used to clean bags. Cleaned air is recycled to the in-plant environment. Saw dust is collected in a dumpster for eventual disposal. No sign of saw dust spills. The woodworking machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(I).

## Cold-cleaner - Herkules paint gun washer

There is one Herkules paint gun washer of capacity 25 gallons. The cold-cleaners are subject rule 336.611 or 336.1707 depending on if it is new or existing. A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

The 25-gallon capacity gun cleaner is located inside the coating booth. During the inspection, the mechanically-assisted lid was closed.

The Cold-cleaner is NOT Subject to: 40 CFR, Part 63, Subpart T, NESHAP/ MACT T, since solvents containing halogenated compounds are not used.

On December 4, 2014, I gave DEQ's decals for "cold-cleaner operating procedures" for posting and complying with work-practice rules. I asked the company to follow the common sense work practice in the procedures.

Allpro lacquer thinner G22210 is used as degreasing solvent.

100% VOC solvent (20-25% MEK, 10-15% petroleum naphtha, 20-25% heptane, 10-15% cyclohexane, 5-10% toluene, xylene, benzene, etc. Flash Point (FP) = NA °F TCC. Auto Ignition = NA °F. Boiling Point (BP) = NA °F @ 760 mm Hg. Vapor Pressure (VP) = NA mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.81. Density ( $\rho$ ) @ 68 °F = 6.64 lbs. / gallon (0.81 kg /L). Flammability range = NA %v (LEL) – NA %v (UEL).

Brunt does not have a proper MSDS for the degreasing solvent.

### **Conclusion**

Paint spray booth (Rule 336.1287(c)), gun cleaner (Rule 285(r) or 281(h)) and wood cutting, milling, finishing, sanding etc. machines (Rule 336.1285) are exempt from Rule 336.1201 (Permit-to-Install). AQD issued Violation Notice dated December 22, 2014 (Rules 336.1201 & 336.1910).

FYI: VN

December 22, 2014

Mr. Brian J. Brunt Brunt Associates Carpentry and Millwork 48953 Wixom Tech Drive Wixom, Michigan 48393-3558

SRN: P0577, Oakland County

Dear Brunt:

# **VIOLATION NOTICE**

http://intranet-legacy.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityI... 2/17/2015

On October 24, 2014, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Brunt Associates Carpentry and Millwork (Brunt Associates) located at 48953 Wixom Tech Drive, Wixom , Michigan. The purpose of this inspection was to determine Brunt Associate's 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); and the administrative rules.

During the October 24, 2014, inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
15 ft. W * 20 ft. L 10 ft. H backdraft paint spray booth with a dry filter system	Rule 336.1201 (Permit-to-Install)	Brunt Associates Carpentry and Millwork (Brunt Associates) installed the Painting Process without obtaining a Permit-to-Install prior to commencing the painting operation. Filter panels (especially, two panels) were installed with gaps and holes <sup><math>\theta</math></sup>
15 ft. W * 20 ft. L 10 ft. H backdraft paint spray booth with a dry filter system	Rule 336.1910 (Air cleaning devices)	By not properly installing filter panels, Brunt Associates bypassed the filter system or disabled it. In addition, on December 4, 2014, Brunt Associates operated the booth with doors open (both doors: near the filter system and main entrance). The open doors interfere with air flow from filtered make-up air and exhaust air through the filter system. Furthermore, product quality would be diminished due to contamination by saw dust particulate matter.

<sup>θ</sup> Alternatively, Brunt Associates may install a coating line that meets all of the Rule 336.1287(c) conditions:

- 1. The coating use rate is not more than 200 gallons, as applied, minus water, per month.
- 2. Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
- 3. 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.

In addition, proper operation, as designed and intended, of the booth is mandatory. Only air flow must be from make-up air filter system (clean) to exhaust air filter system (dirty with paint overspray). This requirement helps upgrade product quality.

During this inspection, it was noted that Brunt Associates had installed and/or commenced

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operation of an unpermitted paint spray booth at this facility. The AQD staff advised Brunt Associates on October 24, 2014, that this is a violation of Act 451, Rule 201.

As stated above, according to Rule 287, a program for compliance may include installation and operation of the filter system properly, keeping monthly paint and solvent usage records to demonstrate that usage is below the threshold (200 gallons per month).

Be advised that Rule 201 requires that a permit be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

On October 24, 2014, the AQD staff observed operation of the paint spray booth while the dry filter system, which arrests paint overspray particles, was malfunctioning as a result of improper installation of the filter panels. Proper action is to inspect the filter system periodically and replace filter panels if necessary. Also, pressure drop across the filter system due to air flow may be monitored using an inclined manometer or a magnehelic pressure gauge.

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.

About one dozen wood cutting, grinding, milling, and sanding machines are exempt from Rule 336.1201 (Permit-to-Install) provided all saw dust emissions are captured by capture devices and delivered, using a common exhaust manifold, to a baghouse such as one that already exists. A pre-cleaner such as a cyclone for large particles (wood chips) may improve/extend bag life.

Please initiate actions necessary to correct the cited s and submit a written response to this Violation Notice by January 12, 2015 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the s occurred; an explanation of the causes and duration of the s; whether the ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the s and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If Brunt Associates 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 s cited above and for the cooperation that was extended to me during my inspection of Brunt Associates. If you have any questions regarding the s or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Iranna Konanahalli

Air Quality Division 586-753-3741 or konanahallii@michigan.gov cc/via email: Ms. Lynn Fiedler, DEQ Ms. Mary Ann Dolehanty, DEQ Ms. Teresa Seidel, DEQ Mr. Thomas Hess, DEQ Mr. Chris Ethridge, DEQ

lle uemahalt DATE 02/17/201 NAME SUPERVISOR



February 11, 2015

Iranna Konanahalli State of Michigan Department of Environmental Quality 27700 Donald Court Warren, MI 48092-2793

Mr. Konanahalli,

The following is in response to the violations from your inspection.

**Item 1** Rule Permit Condition Violated: Rule 336.1201 Our lead finisher has been assigned the task of inspecting our booth on a weekly basis. In addition to his inspections he will train employees that use this equipment and instruct them to check the filters prior to each use, also making sure there are no gaps in the filters. A filter replacement schedule has been implemented.

**Item 2** Rule 336.1910 The booth doors being open while in operation has been resolved. The Rotary Pneumatic Damper Actuator has been replaced so the doors will now be closed throughout booth spray operations. (See all attached documentation and pictures.)

Thank you for your patience and if you have any questions please let me know.

Sincerely,

Brian Brunt

Vice President

48953 Wixom Tech Drive • Wixom, MI 48393 (248) 960-8295 • Fax (248) 960-8296 • www.BruntAssociates.com



## BILL TO:

BRUNT ASSOCIATES INC. 40108 GRAND RIVER UNIT D NOVI, MI 48175

		P.O. NUMBER	TERMS	PROJECT
QUANTITY	DESCRIPTION		RATE	AMOUNT
the set of	CH-9679 PNEUMATIC DRIVE MOTOR		158.00 6.00%a	153 00T 948
	DHI Equipment Sales 41216 Vincenti Ct Novi MI, 48375 (248)476-7815 SALE			
	TID: 001 REF#: 00000001   Batch #: 005 02/09/15   02/09/15 12:44:02   APPR CODE: 89132G   MASTERCARD   ***********5022   ***/**	KI61		
	AMOUNT \$167.45 APPROVED	$\mathcal{H}^{\perp}$		
	THANK YOU PLEASE COME AGAIN			
	CUSTOMER COPY			
			TOTAL	\$167.49

INVOICE

DATE 2/9/2015 INVOICE #

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