

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Self Initiated Inspection

FY 2015 Insp-

P015327589

FACILITY: JESSUP ENGINEERING INC	SRN / ID: P0153
LOCATION: 2745 BOND ST, ROCHESTER HLS	DISTRICT: Southeast Michigan
CITY: ROCHESTER HLS	COUNTY: OAKLAND
CONTACT: Ran Jessup, President	ACTIVITY DATE: 10/16/2014
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance
SUBJECT: FY 2015 inspection of Jessup Engineering, Inc.	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

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Jessup Engineering, Inc. (SRN P0153)
2745 Bond Street
Rochester Hills, Michigan 48309-3513

FY2010 Complaint: C-10-01325; USEPA-CAA-FY10-77105-3714-CV

On October 16, 2014, I conducted a level 2 self-initiated inspection of Jessup Engineering, Inc. ("Jessup") located at 2745 Bond Street, Rochester Hills, Michigan 48309-3513. 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.

Mr. Jeff Dellach (Phone: 248-853-5600; Fax: 248-853-7530; E-mail: jdellach@jessupengineering.com), Director of Engineering, assisted me during the FY 2015 inspection.

Mr. Jerry Romito (Ph: 248-853-5600; Fax: 248-853-7530; E-mail: jromito@jessupengineering.com), Director of Engineering, retired about 2012.

Mr. Ran Jessup (Ph: 248-853-5600; Fax: 248-853-7530; E-mail: ranjessup@jessupengineering.com), President, was present but did not participate.

Jessup makes parts finishing process equipment for electro-plating industry such as electro-plating tanks. Structural components for the process equipment used to be painted in an open factory space; i.e. there was no paint spray booth with filters. The process did not comply with Rule 336.1287(c) exemption conditions.

As a result of the September 23, 2010, Violation Notice, Jessup installed a 24 ft. wide * 10 ft. high * 8 ft. deep paint spray booth with two layers of dry filters to control paint overspray particulate matter. While the first layer is inexpensive protective filter system, the second layer is pleated filter system. The pleated design increases area of air flow and consequently decreases pressure drop across the filters. The booth is equipped with two 36-foot stacks with vertical discharge. The filter system is equipped with an inclined manometer to measure pressure drops across the filter media so that a judicious decision to change the filters can be made.

I asked Mr. Dellach to start the booth fan and I observed a pressure drop (ΔP) of 1 inches water. Some parts are painted outside the booth but near it. The booth has very high air flow of 30,000 cfm. Slightly less make-up air (about 29,500) is supplied through a bag air

distribution system. I observed at the door air leaking into the factory floor indicating all VOC are exhausted via two 36-ft stacks.

All paints are either water or solvent based (orange, yellow and blue). Almost entire factory floor is covered with these paints. About 50-125 gallons of paint per month is used based upon the usage records.

The booth may be deemed to meet the Rule 336.1287(c) requirements:

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.

During my inspection, there was no painting and therefore there was no potential for odor.

Misc. particulate operations

Cutting, welding and grinding equipment with two portable Donaldson Torrit Filters are exempt from Rule 201 pursuant to Rule 285 because filtered exhaust is recycled into the building.

Conclusion:

Special exemption of the booth pursuant to Rule 287(c) considering the entire plant as booth.

FYI: VN

September 23, 2010

Mr. Ran Jessup
Jessup Engineering, Inc.
2745 Bond Street
Rochester Hills, Michigan 48309-3513

SRN: P0153, Oakland (63) County

Dear Mr. Jessup :

VIOLATION NOTICE

On September 8, 2010, the Department of Natural Resources and Environment (DNRE), Air Quality Division (AQD), conducted an inspection of Jessup Engineering, Inc. ("Jessup") located at 2745 Bond Street, Rochester Hills, Michigan. The purpose of this inspection was to determine Jessup'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); the administrative rules; and to investigate a recent complaint (MDNRE-AQD C-10-01325; USEPA-CAA-FY10-77105-3714-CV) which we received on September 2, 2010, regarding solvent odors attributed to Jessup's operations.

During the inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Painting Process	Rule 336.1201 (Permit-to-Install)	Jessup installed the Painting Process without obtaining a Permit-to-Install prior to commencing the painting operation. The painting occurs in an open factory space without a control device for paint overspray particulate matter. ⁶
<p>⁶ Alternatively, Jessup may install a coating line that meets all of the Rule 336.1287(c) conditions:</p> <ol style="list-style-type: none"> 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. 		

Jessup paints structural components for the electro-plating industry process equipment. The components are painted in an open factory space; i.e. there is no paint spray booth with filters. All paints are solvent based (orange, yellow and blue). Almost entire factory floor is covered with these paints. About 25 gallons of paint per month is used although records are not kept. Very large paint spray booth with a dry filter system is necessary since some structural components of a plating line are about 20 feet. The booth enclosure may be like a shower curtain with negative pressure inside the booth with respect to the surroundings. In order to minimize nuisance odors exhaust gases must be discharged unobstructed vertically upwards (no rain cap) at a height equal to or greater than 1.5 times the height of the tallest building in the neighborhood.

During this inspection, it was noted that Jessup had installed and/or commenced operation of an unpermitted painting process/equipment at this facility. The AQD staff advised Jessup on September 8, 2010, that this is a violation of Act 451, Rule 201.

A program for compliance may include a completed PTI application for the painting operation process equipment. An application form is available by request, or at the following website:

http://www.deq.state.mi.us/aps/nsr_information.shtml#AUP

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.

Pursuant to Rule 336.1901, AQD has not yet confirmed either nuisance odor or paint overspray fall-out in the neighborhood. It may be noted that Jessup does not control paint overspray using a dry filter system or an equivalent device. When a Rule 901 nuisance is confirmed, AQD may pursue a separate action.

Please initiate actions necessary to correct the cited and submit a written response to this Violation Notice by October 14, 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 Jessup 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 Jessup. 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, Southeast Michigan District Office, Air Quality Division, 27700 Donald Court, Warren, Michigan 48092-2793. Thank you for your cooperation.

Sincerely,

Iranna Konanahalli
Senior Environmental Engineer
Air Quality Division
586-753-3741

IK:VL

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

NAME Iranna Konanahalli DATE 10/28/2014 SUPERVISOR CTE