



Missouri Department of

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# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

SEP 10 2018

Mr. Bill Hewett  
Environmental & Safety Manager  
Paul Mueller Company  
1600 West Phelps Street  
Springfield, MO 65802

RE: New Source Review Temporary Permit Request – Project Number: 2018-08-001

Installation ID Number: 077-0052

Expiration Date: September 1, 2019

Temporary Permit Number: **092018-001**

Dear Mr. Hewett:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to spray coat two large storage tanks at Paul Mueller Company, located in Springfield, Missouri. The Air Pollution Control Program is hereby granting your request to conduct this temporary operation at this location, in accordance with Missouri State Rule 10 CSR 10-6.060(3).

Paul Mueller Company operates a stainless steel tank manufacturing facility in Greene County. Operations include machining, welding, blasting, spray coating, and assembly of metal parts. The facility is a de minimis source and currently has a Basic Operating Permit under Project No. 2015-07-053.

Normal spray coating operations at the facility take place in a paint booth, and potential particulate emissions are controlled by fabric filters; however, Paul Mueller Company has undertaken two special, one-off builds in which two much larger stainless steel tanks are being constructed. These tanks are too large to fit into the existing paint booth; therefore, the tanks will have to be painted outside.

Each tank is 165 inches in diameter and 60 feet tall, yielding an approximate surface area of 2,600 square feet. A silicone matte black product will be applied, which covers approximately 500 square feet per gallon; therefore, just over 5 gallons of coating is required per tank. To remain conservative, however, it was assumed that 10 gallons of coating will be used for each tank. The existing mechanical air-assisted HVLP spray guns currently permitted at the facility will be used.



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Potential emissions from the temporary project will include PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOCs, ethylbenzene, toluene, and xylene, which were calculated using a mass balance approach. The solids content, volatile content, and HAP content of the coating were taken from the maximum values listed in the SDS. The solids transfer efficiency of the spray guns is 65%. It was conservatively assumed that all emitted PM is PM<sub>2.5</sub> and 100% of VOCs/HAPs are emitted. Table 1 provides an emissions summary of the project. Potential emissions were calculated assuming that 20 total gallons of coating will be sprayed over the course of the project.

Table 1: Emissions Summary

Pollutant	De Minimis Level/SMAL (tons/year)	Potential Emissions of the Project (tons/year)
PM	25.0	0.016
PM <sub>10</sub>	15.0	0.016
PM <sub>2.5</sub>	10.0	0.016
SO <sub>x</sub>	40.0	N/A
NO <sub>x</sub>	40.0	N/A
VOC	40.0	0.046
CO	100.0	N/A
Ethylbenzene	10.0/10	0.014
Toluene	10.0/10	0.009
Xylene	10.0/10	0.032
Total HAPs	25.0	0.055

SMAL = Screening Model Action Level; N/A = Not Applicable

Given that the potential emissions are well below 100 tons per year for each pollutant, the proposed temporary permit is granted according to the provisions of Missouri State Rule 10 CSR 10-6.060(3). Because the potential emissions of all HAPs are below their respective SMALs, modeling is not required.

You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.165 *Restriction of Emission of Odors* and 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*.

Mr. Bill Hewett  
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A copy of this letter should be kept onsite and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this determination, please do not hesitate to contact Ryan Schott at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

*Kendall B. Hale for*

Darcy A. Bybee  
Director

DAB:rsj

c: PAMS File: 2018-08-001  
Southwest Regional Office

2018-08-001 / Paul Mueller Company / 077-0052

Coating	Density (lb/gal)	Solids Content (lb/gal)	Volatile Content (lb/gal)	HAP Constituent	HAP Content
Silicone Matte Black	9.14	4.59	4.55	Ethylbenzene	15%
				Toluene	10%
				Xylene	35%

Total amount of coating sprayed = 20 gal

Solids Transfer Efficiency = 65%

Pollutant	Potential Emissions (tons/yr)
PM	0.016
PM10	0.016
PM2.5	0.016
VOC	0.046
Ethylbenzene	0.014
Toluene	0.009
Xylene	0.032
Total HAPs	0.055