

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 042016-006 Project Number: 2015-12-003  
Installation Number: 165-0028

Parent Company: Woodbridge Holdings Inc.

Parent Company Address: 4240 Sherwoodtowne Blvd., Mississauga, Ontario L4Z 2G6

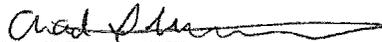
Installation Name: Woodbridge Corporation - Kansas City Foam

Installation Address: 555 NW Platte Valley Drive, Riverside, MO 64150

Location Information: Platte County, S5, T50N, R33W

Application for Authority to Construct was made for:  
Increase production by increasing VOC emissions limitation. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

- 
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

  
Prepared by  
Chad Stephenson  
New Source Review Unit

  
Director or Designee  
Department of Natural Resources

April 8, 2016  
Effective Date

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Woodbridge Corporation - Kansas City Foam  
Platte County, S5, T50N, R33W

1. Superseding Condition
  - A. The conditions of this permit supersede all special conditions found in the previously issued construction permit #0596-024 issued by the Air Pollution Control Program.
  
2. Emission Limitations
  - A. Woodbridge Corporation - Kansas City Foam shall emit less than 250.0 tons of VOCs in any consecutive 12-month period from the entire installation. The entire installation and emissions points are listed in Table 2.
  
  - B. Woodbridge Corporation - Kansas City Foam shall emit less than 25.0 tons of combined HAP in any consecutive 12-month period from the entire installation. The entire installation and emissions points are listed in Table 2.
  
  - C. Woodbridge Corporation - Kansas City Foam shall emit less than 10.0 tons of each individual HAP in any consecutive 12-month period from the entire installation. The entire installation and emissions points are listed in Table 2.
  
  - D. Attachment A or an equivalent form that was approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.
  
  - E. Attachment B and C, or equivalent forms that are approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.B and 2.C.
  
3. Record Keeping and Reporting Requirements
  - A. Woodbridge Corporation – Kansas City Foam shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

Sheets (MSDS) and purchasing/inventory records sufficient to substantiate VOC usage figures for all materials used in the equipment in this permit.

- B. Woodbridge Corporation – Kansas City Foam., Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2 .D or 2.E indicate that the source exceeds the limitation of Special Condition Number 2.A, 2.B, or 2.C.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (6) REVIEW

Project Number: 2015-12-003  
Installation ID Number: 165-0028  
Permit Number:

Installation Address:

Woodbridge Corporation - Kansas City Foam  
555 NW Platte Valley Drive  
Riverside, MO 64150

Parent Company:

Woodbridge Holdings Inc.  
4240 Sherwoodtowne Blvd.  
Mississauga, Ontario L4Z 2G6

Platte County, S5, T50N, R33W

REVIEW SUMMARY

- Woodbridge Corporation - Kansas City Foam has applied for authority to increase production by increasing VOC emissions limitation from 100 tons per year to 250 tons per year.
- The application was deemed complete on December 15, 2015.
- HAP emissions are expected from the proposed project. HAPs of concern from this process are Toluene 2,4-diisocyanate (Chemical Abstracts Service (CAS) 584-84-9), Diethanolamine (CAS 111-42-2), and 4,4'-methylene diphenyl diisocyanate (CAS 101-68-8). HAP emissions are also expected from the natural gas combustion. All HAPs are emitted in small amounts less than their respective SMAL.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC are above de minimis levels.
- This installation is located in Platte County, a maintenance area for ozone and an attainment area for all other criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed for this review. No model is

currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.

- Emissions testing is not required for the equipment.
- A Part 70 Operating Permit application is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Woodbridge Corporation produces molded polyurethane foam car seats at this installation in Platte County. Woodbridge Corporation currently has an Intermediate Operating Permit for this installation and is in the process of obtaining a Part 70 Operating Permit. Woodbridge Corporation will be taking a 250 tons per year VOC limit for this facility. Therefore, the PTE of the installation is less than 250 tons per year and the installation remains a minor facility with regards to New Source Review Permitting.

The following New Source Review permits have been issued to Woodbridge Corporation - Kansas City Foam from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0596-024	Change in the mold release chemical from a water based to a solvent-based material
1297-027	Replacement of electric process heaters with natural gas heaters
032000-014	New MDI polyurethane foam manufacturing line

### PROJECT DESCRIPTION

This permit modifies the VOC installation-wide limitation from the previous construction permit, Permit No. 0596-024 to allow for greater production. The VOC installation-wide limit is being changed from less than 100 tons per year of VOC to less than 250 tons per year of VOC. Table 2 lists the emission points for the installation.

There are three hazardous air pollutants that are used in a significant degree at Woodbridge Corporation operations. Toluene Diisocyanate (TDI) and Diphenylmethane diisocyanate (MDI) are used as reactants with polyol as the primary reactants in the polyurethane process. Diethanolamine (DEOA) is used in the catalyst/premix area. All three have a potential to emit less than their respective SMAL.

Table 2: Installation Emission Points

Emission Unit	Description
EP-01A	TDI and MDI Raw Material Storage
EP-01B	Tank Farm Polyol
EP-02	Catalyst Pre-Mix Vent
EP-03	Fugitive Air Toxic Releases
EP-04	Pouring Process Vent (TDI Line)
EP-06	Demold & Gas Ovens (TDI Line)
EP-07	Release Agent (TDI Line)
EP-09	Roller Vacuum Exhaust (TDI Line)
EP-10	Glue Repair (TDI Line)
EP-11	Fugitive VOC Releases (Pre-Mix & Surge)
EP-12	Space Heating
EP-13	Raw Material Receiving – TDI & MDI
EP-15	Process Heaters
EP-16	Solvent Release Agent (MDI Line)
EP-17	Pouring Operation and Demold Vent (MDI Line)
EP-18	Inkjet Stamping of Foam

## EMISSIONS/CONTROLS EVALUATION

The pollutants of concern with this application are volatile organic compounds (VOC). The majority of VOC emissions are generated by the use of release agents for the TDI Line (EP-07) and the MDI Line (EP-16). The Potential VOC emissions of the release agents were determined using a mass balance approach. The usage amounts from 2014 were used and doubled for calculation of the potential emissions. In 2014, 100 tons of PU11332 was used for the TDI line and 50 tons of PU11332 was used for the MDI line. Since the usage numbers are based on operating 7,436 of the 8,760 hours in a year, doubling the amounts was considered a conservative safety factor for evaluating potential emissions.

Potential emissions for TDI and MDI working loss were estimated using the American Chemistry Council's MDI and TDI Emissions Estimator (<http://polyurethane.americanchemistry.com/Health-Safety-and-Product-Stewardship/Emissions>). The emission rate of TDI was calculated and it was assumed that MDI emits at the same rate. Emissions are based on an annual usage rate of 677,126 gallons of both TDI and MDI. Emissions from TDI and MDI raw material storage breathing loss were considered negligible. The emission factors used in the analysis of Tank Farm Polyol Working Loss (EP-01B) were obtained using TANKS Emissions Estimation Software, Version.4.09D.

The emission rates for VOC from EP-02, EP-04, EP-06, EP-09, EP-11 and EP-17 were calculated using emission factors from stack tests conducted at Woodbridge Corporation sister facility in St. Peters, Missouri. The sister facility was evaluated with only a TDI line so it was assumed that the MDI pouring operation and demold vent emitted at the same rate as the TDI pouring operation and demold vent. This was

considered a conservative assumption since the vapor pressure of TDI is higher than MDI. Table 3 lists the emissions rates used in the calculations of potential emissions of this project. The emission rates were derived from the stack tests conducted by The Environmental Resource, Group, Inc. in November of 1993.

Table 3: Provided Emission Rates

Emission Unit	VOC Emission Rate (lb/hr)
EP-02 Catalyst Pre-Mix Vent	0.000596
EP-04 Pouring Process Vent (TDI Line)	0.003467*
EP-06 Demold & Gas Ovens (TDI Line)	0.006029*
EP-09 Roller Vacuum Exhaust (TDI Line)	0.0196
EP-11 Fugitive VOC Releases from Catalyst Pre-mix & Surge	0.000596
EP-17 Pouring Operation and Demold Vent (MDI Line)	0.009496*

\*No VOC emission rate is given in the stack test. Emission rates for TDI and DEOA were given, both of which are VOCs. The emission rates for TDI and DEOA were summed to give a VOC emission rate

The emission factors for fugitive DEOA releases (EP-03) were obtained from the Environmental Protection Agency (EPA) document Emission Factors For Equipment Leaks of VOC and HAP, Table 3-3 (01/86).

The emission factors for fugitive TDI and MDI releases (EP-03) were obtained from *Fate and Potential Environmental Effects of Methylenediphenyl Diisocyanate and Toluene Diisocyanate Released into the Atmosphere* authored by Bernard Tury, Denis Pemberton, and Robert E. Bailey published in the Journal of the Air & Waste Management Association, Vol.53, Issue 1, 2003. A range for MDI emissions from 0.2 grams per ton of MDI used to 6.0 grams per ton of MDI used is listed. For this facility the worst case was assumed of 6 grams per ton of MDI used. An average of TDI emission of 25 grams per ton of TDI was used in calculation of TDI fugitive releases.

The VOC emission factor for fugitive air toxic releases (EP-03) was calculated by summing the MDI, TDI and DEOA emission factors all of which are VOC.

The emission factors for the combustion of natural gas (EP-12 and EP-15) were obtained from the Environmental Protection Agency (EPA) document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 1.4, Natural Gas Combustion (07/98).

Emissions from loading losses incurred during TDI and MDI Raw Material Receiving (EP-13) were calculated using Equation (1) found in AP-42 Section 5.2.1.1 Loading Losses (July 2008). A saturation factor of 1.0 was used (Table 5.2-1). A vapor pressure of 0.000498 psia, a molecular weight of 174.2 g/mol and a liquid temperature of 520°R was assumed for TDI. Since MDI has a lower vapor pressure than TDI the emission rate of MDI was conservatively assumed to be the same as that of TDI.

The Potential VOC emissions from the Inkjet Stamping of Foam (EP-18) were determined using a mass balance approach. The product usage amounts from 2014 were used and doubled for calculation of the potential emissions.

The following table provides an emissions summary for this project. Existing potential emissions were taken from construction permit #032000-014. Existing actual emissions were taken from the installation's 2014 EIQ. Potential emissions of the application represent the potential of the installation assuming continuous operation (8760 hours per year). New installation conditioned potential emissions represent the installation-wide potential to emit for applicable pollutants. Conditioned potential emissions of the application represent the PTE conditioned by the voluntary VOC limit of 250.0 tons per year.

Table 4: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2014 EIQ)	Potential Emissions of the Installation	New Installation Conditioned Potential
PM	25.0	N/D	N/D	0.02	N/A
PM <sub>10</sub>	15.0	1.28	N/D	0.26	N/A
PM <sub>2.5</sub>	10.0	N/D	N/D	0.26	N/A
SO <sub>x</sub>	40.0	N/D	N/D	0.02	N/A
NO <sub>x</sub>	40.0	N/D	N/D	3.41	N/A
VOC	40.0	< 100.0	93.01	344.45	< 250.0
CO	100.0	N/D	N/D	2.87	N/A
HAPs	10.0/25.0	< 10.0/25.0	N/D	< 10.0/25.0	< 10.0/25.0
Toluene 2,4- diisocyanate	0.1	N/D	N/D	0.08	N/A
Diethanolamine	5.0	N/D	N/D	0.53	N/A
4,4'-methylene diphenyl diisocyanate	0.1	N/D	N/D	0.0002	N/A

N/A = Not Applicable; N/D = Not Determined

#### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC are above de minimis levels.

#### APPLICABLE REQUIREMENTS

Woodbridge Corporation - Kansas City Foam shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

## GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
  - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

## SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *Control of Sulfur Dioxide Emissions*, 10 CSR 10-6.261
- *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*, 10 CSR 10-6.405

## STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated November 17, 2015, received December 1, 2015, designating Woodbridge Holdings Inc. as the owner and operator of the installation.

## Attachment A –VOC Compliance Worksheet

Woodbridge Corporation - Kansas City Foam  
 Platte County,  
 Project Number: 2015-12-003  
 Installation ID Number:  
 Permit Number: \_\_\_\_\_

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
 (month, year) (month, year)

Table A: Covers EP-01, EP-02, EP-03, EP-04, EP-06, EP-09, EP-11, EP-12, EP-13, EP-15 and EP-17

	Individual Totals:	(Units)	Emission Factor	Month Total (lbs):
EP-01A Raw Material Storage (TDI and MDI)		1000 gallons	0.00055 lb VOC/1000 gallons	
EP-01B Tank Farm Polyol – Working Loss		1000 gallons	0.000468 lb VOC/1000 gallons	
EP-02 Catalyst Pre Mix Vent		hours	0.000596 lb VOC/hr	
EP-03 Fugitive Air Toxic Releases		Tons of foam produced	0.082 lb VOC/ton of foam produced	
EP-04 Pouring Process Vent		hours	0.003467 lb VOC/hr	
EP-06 Demold & Gas Ovens		hours	0.006029 lb VOC/hr	
EP-09 Roller Vacuum Exhaust		hours	0.0196 lb VOC/hr	
EP-11 Fugitive VOC Releases from Catalyst Pre-mix and Surge		hours	0.000596 lb VOC/hr	
EP 12 Space Heating		mmcf	5.50 lb VOC/mmcf	
EP-13 Raw Material Receiving TDI & MDI		1000 Gallons of TDI&MDI delivered	0.002079 lb VOC/1000 gallon of TDI/MDI delivered	
EP-15 Process Heaters		mmcf	5.50 lb VOC/mmcf	
EP17 MDI Pouring Operation and De-Mold Vent		Hours	0.009496 lb VOC/hour	
<sup>1</sup> Total VOCs this month (tons):		tons	N/A	N/A

<sup>1</sup> Add together the VOC emission totals for the above emission points, and then divide the total VOC emissions (lbs) by 2000 lb/ton to get the resulting VOC emissions for the given month

Table B Release Agent TDI Line (EP-7), Release Agent MDI Line (EP-16), and Inkjet Stamping of Foam (EP-18)

Emission Point	Raw Material Usage (gal)	<sup>1</sup> Material Density (lbs/gal)	<sup>2</sup> VOC Content (%)	<sup>3</sup> Monthly VOC Emissions <sup>1</sup> (lbs)
<sup>4</sup> Total VOC Emissions for this Month:				tons

<sup>1</sup> Input the Material Density (lbs/gal) from the material SDS for the release agent. This document must be kept in the records for justification upon request by Missouri Department of Natural Resources

<sup>2</sup> Input the VOC Content (weight %) from the material SDS for the release agent. This signed document must be kept in the records for justification upon request by Missouri Department of Natural Resources

<sup>3</sup> Multiply the raw material usage by the material density and VOC Content (weight %) of the respective release agent. This product will be the resulting amount of VOCs (lbs) from a release agent. This process shall be repeated for each release agent used each month

<sup>4</sup> Add together the VOC emission totals for EP-7, EP-16, and EP-18 and then divide the total VOC emissions (lbs) by 2000 lb/ton to get the resulting i VOC emissions) for the given month.

Table C: Installation VOC Emission Totals

<sup>1</sup> Total VOCs this month (tons):		tons
<sup>2</sup> 12-Month VOC Emissions (tons):		tons

<sup>1</sup>Sum the VOC Emission Total values from Table A and Table B to get the installation monthly VOC emissions

<sup>2</sup>Sum all of the VOC emissions values (tons) from each monthly emissions total, found in the "Total VOCs this month" row on each month's tracking sheet. This value shall not exceed **250.0 tons** in any consecutive 12-month period



**ATTACHMENT C**  
**Aggregate HAP Emissions Tracking Record**

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
 (month, year) (month, year)

Date (month/year)	Column A Emission Point	Column B Raw Material Usage (gal)	Column C Material Density (lbs/gal)	Column D Total HAP Content (%/100)	Column E Monthly Aggregate HAP Emissions <sup>1</sup> (tons)	Column F Sum of Most Recent 12-months HAP <sup>2</sup> (tons)
	Total Aggregate HAP Emissions for this Month:					
	Total Aggregate HAP Emissions for this Month:					
	Total Aggregate HAP Emissions for this Month:					
	Total Aggregate HAP Emissions for this Month:					

<sup>1</sup>Column E = (Column B) x (Column C) x (Column D) / 2000.

<sup>2</sup>Sum of the last 12 consecutive monthly aggregate HAP emissions totals including the current month

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheet
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> .....	Code of Federal Regulations	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO</b> .....	carbon monoxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSR</b> .....	New Source Review
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PM</b> .....	particulate matter
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>ppm</b> .....	parts per million
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EP</b> .....	Emission Point	<b>PTE</b> .....	potential to emit
<b>EPA</b> .....	Environmental Protection Agency	<b>RACT</b> .....	Reasonable Available Control Technology
<b>EU</b> .....	Emission Unit	<b>RAL</b> .....	Risk Assessment Level
<b>fps</b> .....	feet per second	<b>SCC</b> .....	Source Classification Code
<b>ft</b> .....	feet	<b>scfm</b> .....	standard cubic feet per minute
<b>GACT</b> .....	Generally Available Control Technology	<b>SDS</b> .....	Safety Data Sheet
<b>GHG</b> .....	Greenhouse Gas	<b>SIC</b> .....	Standard Industrial Classification
<b>gpm</b> .....	gallons per minute	<b>SIP</b> .....	State Implementation Plan
<b>gr</b> .....	grains	<b>SMAL</b> .....	Screening Model Action Levels
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>HAP</b> .....	Hazardous Air Pollutant	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>hr</b> .....	hour	<b>tph</b> .....	tons per hour
<b>hp</b> .....	horsepower	<b>tpy</b> .....	tons per year
<b>lb</b> .....	pound	<b>VMT</b> .....	vehicle miles traveled
<b>lbs/hr</b> .....	pounds per hour	<b>VOC</b> .....	Volatile Organic Compound
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

Mr. Casey Wills  
Process Manager  
Woodbridge Corporation - Kansas City Foam  
555 NW Platte Valley Drive  
Riverside, MO 64150

RE: New Source Review Permit - Project Number: 2015-12-003

Dear Mr. Wills:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the Administrative Hearing Commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the Administrative Hearing Commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission. You may contact the Administrative Hearing Commission by writing to them at United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102 or by phone at (573) 751-2422 or by fax at (573) 751-5018. The Administrative Hearing Commission also has a website located at [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

If you have any questions regarding this permit, please do not hesitate to contact Chad Stephenson at the Department of Natural Resources' Air Pollution Control Program,

Mr. Casey Wills  
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P.O. Box 176, Jefferson City, MO 65102 or by phone at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

**AIR POLLUTION CONTROL PROGRAM**

Susan Heckenkamp  
New Source Review Unit Chief

SH:csd

Enclosures

c: Kansas City Regional Office  
PAMS File: 2015-12-003

Permit Number: