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NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

JUL 29 2019

Mr. Randy Pace
EHS Coordinator
Excelsior Springs Seating Systems
301 S McCleary Rd
Excelsior Springs, MO 64024

RE: New Source Review Permit Amendment - Permit Number: 102012-013C
Project Number: 2019-01-015; Installation Number: 047-0191

Dear Mr. Pace:

Excelsior Springs Seating Systems (ESSS) is applying for an amendment to the existing permit #102012-013B in order to increase the production limit on armrest, headrest, and seat cushions. The previous limit allowed ESSS to produce 1,400,000 headrest and armrest cushions and 1,650,000 seat cushions annually. The original maximum hourly design rate (MHDR) was unknown; however, ESSS was aware that the facility was capable of higher production rates than those established in the previous construction permit. Previously, the ESSS site was permitted to have four storage tanks, but the planned MDI storage tank, referenced as EP-02 in Permit #102012-013B, does not exist and is no longer planned to ever exist, so it has been removed from the emissions calculations. This amendment seeks to increase the headrest, armrest, and seat cushion production by removing the 1,400,000 and 1,650,000 cushion limitations entirely. In lieu of these limitations, this amendment will instead instate a limit based on VOC emissions.

Table 1: Emission Point Summary

Emission Point	Description
EP-01	Mold Preparation
EP-02	Foam Production
EP-03	Mold Release
EP-04	Foam Crushing & Anti-Squeak Application
EP-05	1600 hp Diesel Emergency Generator
EP-06	Natural Gas 1.5 MMBtu/hr Space Heaters
ST-01	9,000 gal MDI Storage Tank
ST-03	9,000 gal Polyol Storage Tank
ST-04	9,000 gal Polyol Storage Tank
EP-HAUL1	Raw Material Delivery
EP-HAUL2	Exit Road/Service Road/Empty Truck Entrance
EP-HAUL3	Empty Truck Entrance



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Table 2: Potential Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	Existing Actual Emissions (2018 EIQ)	New Potential Emissions of Installation	Conditioned Potential Emissions of Installation
PM	25.0	0.02	3.02	N/A
PM ₁₀	15.0	0.02	2.94	N/A
PM _{2.5}	10.0	0.02	2.93	N/A
SO _x	40.0	2.0 x 10 ⁻³	6.47	N/A
NO _x	40.0	0.29	9.60	N/A
VOC	40.0	22.78	113.25	<40.00
CO	100.0	0.23	2.20	N/A
CO ₂ e	75,000/100,000	N/A	2631.47	N/A
HAPs	25.0	N/A	0.16	N/A
Lead Compounds	0.01	N/A	1.00E-05	N/A
MDI (101-68-8)	0.1	N/A	1.00E-05	N/A
Ethylene Oxide (75-21-8)	0.1	N/A	0.01	N/A
Propylene Oxide (75-56-9)	5.0	N/A	0.01	N/A
1,4-Dioxane (123-91-1)	6.0	N/A	0.01	N/A
Acetaldehyde (75-07-0)	9.0	N/A	0.01	N/A
Formaldehyde (50-00-0)	2.0	N/A	0.01	N/A
Arsenic Compounds	0.01	N/A	4.00E-06	N/A
Benzene (71-43-2)	2.0	N/A	1.00E-03	N/A
Beryllium Compounds	0.008	N/A	2.00E-07	N/A
Cadmium Compounds	0.01	N/A	2.00E-05	N/A
Chromium Compounds	5.0	N/A	3.00E-05	N/A
Cobalt Compounds	0.1	N/A	2.00E-06	N/A
Dichlorobenzene	3.0	N/A	2.00E-05	N/A
Hexane (110-54-3)	10.0	N/A	0.04	N/A
Manganese Compounds	0.8	N/A	1.00E-05	N/A
Mercury Compounds	0.01	N/A	1.00E-05	N/A
Naphthalene (91-20-3)	10.0	N/A	2.00E-04	N/A
Nickel Compounds	1.0	N/A	4.00E-05	N/A
Polycyclic Organic Matter	0.01	N/A	1.00E-04	N/A
Selenium Compounds	0.1	N/A	5.00E-07	N/A
Toluene (108-88-3)	10.0	N/A	5.00E-04	N/A
Acrolein	0.04	N/A	1.00E-05	N/A
Xylene (1330-20-7)	10.0	N/A	3.00E-04	N/A

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

Mr. Pace
Page Three

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 thirty 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, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

If you have any questions regarding this amendment, please do not hesitate to contact Dakota Fox at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kendall B. Hale
Permits Section Chief

KBH:dfj

Enclosures

c: Kansas City Regional Office
PAMS File: 2019-01-015

Page No.	4
Permit No.	102012-013C
Project No.	2019-01-015

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 (3)(E). "Conditions required by permitting authority."

Excelsior Springs Seating Systems
Clay County, S10, T5N, R30W

1. Superseding Condition
 - A. The conditions of this permit supersede Special Condition 2 found in the previously issued construction permit #102012-013B issued by the Air Pollution Control Program.

2. VOC Emission Limitation
 - A. Excelsior Springs Seating Systems (ESSS) shall emit less than 40 tons of VOC emissions from the entire installation as defined in Table 1 in any consecutive 12 month period.

 - B. ESSS shall record the emissions of VOC produced each month and shall also calculate the 12-month rolling total VOC emissions using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

3. Use of Alternative Coatings
 - A. When considering using an alternative material that is different than a material listed in the Application for Authority to Construct, ESSS must calculate the potential emissions of VOCs and each individual HAP in the alternative material using mass balance analysis from the new coatings SDS sheet.

 - B. The limit applied to the installation in Special Condition 2.A will include emission from the use of any new coatings. Their emissions shall be accounted for in Attachment A.

Page No.	5
Permit No.	102012-013C
Project No.	2019-01-015

SPECIAL CONDITIONS:

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

- C. ESSS must seek approval from the Air Pollution Control Program before use of the alternative material if the potential individual HAP emissions for the alternative material is equal to or greater than the Screening Model Action Levels (SMAL) listed for any compound in Table 2.
4. Record Keeping and Reporting Requirements
- A. ESSS 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 Safety Data Sheets (SDS) and purchasing/inventory records sufficient to substantiate VOC usage figures for all materials used in the equipment in this permit.
 - B. ESSS Shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by e-mail at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

Attachment A - VOC Compliance Worksheet

Excelsior Springs Seating Systems
 Clay County, S10, T5N, R30W
 Project Number: 2019-01-015
 Installation ID Number: 047-0191
 Permit Number: 192019-0130

This sheet covers the month of _____ in the year of _____.

Emission Point	Description	Monthly Usage (lbs)	VOC Emission Factor ¹ (lb/lb)	Monthly VOC Emissions ² (lb/month)	Monthly VOC Emissions ³ (tpm)	Monthly SSM VOC Emissions ⁴ (lb/month)	Monthly SSM VOC Emissions ⁵ (tpm)
EP-01	ChemTrend PU-11166						
EP-01	ChemTrend PU-11183						
EP-01	ChemTrend PU-14085						
EP-01	Mold Spray/Wax ⁶						
EP-02	Foam Production - Polyol		0.005				
EP-02	Foam Production - MDI		1.000				
EP-04	04 ACMOS 23-9020 NRT						
EP-04	Anti-Squeak Spray ⁶						
EP-06	Space Heaters ⁷	N/A	N/A	N/A	0.009	N/A	N/A
ST-01, ST-03, & ST-04	MDI and Polyol Storage Tanks ⁷	N/A	N/A	N/A	9.1 x 10 ⁻⁹	N/A	N/A
Emission Point	Description	Monthly Usage ⁸ (hr)	VOC Emission Factor ⁹ (lb/hr)	Monthly VOC Emissions ² (lb/month)	Monthly VOC Emissions ³ (tpm)	Monthly SSM VOC Emissions ⁴ (lb/month)	Monthly SSM VOC Emissions ⁵ (tpm)
EP-05	Emergency Generator		1.513				
Installation Monthly VOC Emissions Total for All Sources¹⁰ (tons)							
Installation 12-Month Rolling VOC Emissions Total For All Sources¹¹ (tons):							

[Footnotes Listed on Next Page]

N/A = Not Applicable

¹VOC Emission Factors for EP-01 ChemTrend PU-11166, EP-01 ChemTrend PU-11183, EP-01 ChemTrend PU-14085, and EP-04 ACMOS 23-9020 NRT, as well as any additional mold sprays/waxes or anti-squeak sprays, should be obtained by referring to the weight percent VOC contents (lbs of VOC per lbs of material) from their respective SDS. VOC Emission Factors for EP-02 Polyol and MDI were determined according to their VOC content as shown on their respective SDS and the American Chemistry Council's MDI tool.

²VOC Emissions in pounds per month are calculated by multiplying the Monthly Usage by the given Emission Factor.

³VOC Emissions in tons per month are calculated by dividing the previous column by 2000.

⁴SSM VOC Emissions represent the VOC emissions released during start-up, shutdown, and maintenance procedures as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with 10 CSR 10-6.050.

⁵SSM VOC Emissions in tons per month are calculated by dividing the previous column by 2000.

⁶The Mold Spray/Wax and Anti-Squeak Spray rows exist to cover any new materials used in the process. These materials must adhere to Special Condition 3-Use of Alternative Coatings.

⁷Storage Tanks and the Space Heaters were listed as Potential to Emit (PTE). Storage Tank PTEs were calculated using a 709,000 gallons/yr annual throughput per tank and the MDI Calculator Spreadsheet located at <https://polyurethane.americanchemistry.com/Health-Safety-and-Product-Stewardship/Emissions/MDI-Emissions-Estimator.xls>. The Space Heaters' PTE was calculated using WebFIRE for SCC 10100602.

⁸Time usage of the Emergency Generator is to be obtained from the non-resettable meter on the engine and defined as this month's reading minus last month's reading.

⁹VOC Emission Factor for the Emergency Generator was derived from AP-42 Section 3.4 Large Stationary Diesel And All Stationary Dual-fuel Engines Table 3.4-1 (10/96).

¹⁰ Installation Monthly VOC Emissions Total = the sum of all of the current month's VOC Emissions and SSM VOC Emissions.

¹¹ Installation 12-Month Rolling VOC Emissions Total Emissions = This month's Installation Monthly VOC Emissions Total for All Sources + the sum of the previous 11 months' Installation Monthly VOC Emissions Total for All Sources. **The permittee is in compliance with Special Condition 2.A if Installation 12-Month Rolling VOC Emissions Total For All Sources is less than 40 tons.**