



Missouri Department of dnr.mo.gov

**NATURAL RESOURCES**

Michael L. Parson, Governor

Carol S. Comer, Director

**FEB 13 2020**

Mr. Eric Moses  
Safety Specialist  
Yanfeng USA Automotive Trim Systems, Inc.  
4110 NW Helena  
Riverside, MO 64150

RE: New Source Review Permit Amendment – Permit Number: 112014-005A  
Project Number: 2019-05-013; Installation Number: 165-0041

Dear Mr. Moses:

Yanfeng USA Automotive Trim Systems, Inc. (Yanfeng) operates an automotive trim manufacturing facility in Platte County, Missouri. The installation is a de minimis source for all criteria pollutants and is not required to obtain an operating permit. On May 7, 2019, the Air Pollution Control Program received your request to amend existing Construction Permit No. 112014-005 in order to update two special conditions that were determined to be inappropriate for the processes they represent.

One process at the facility is a surface coating operation for the painting of plastic parts. Painting is conducted in a contained tunnel system, where parts are loaded onto a moving conveyor and pass through an enclosed tunnel. As parts pass through the tunnel, they are coated in one or more of the three separate paint booths (EU-05; Paint Booths 1-3) and end in the cure oven (EU-08). Each of the paint booths are completely enclosed and utilize robotic sprayers. Particulate emissions from overspray are controlled in each booth by a waterfall control system that is behind the part being sprayed. Air is drawn from the booth through a narrow gap at the bottom of the waterfall into an enclosed chamber behind the painting area. Exhaust from the operation is directed to the regenerative thermal oxidizer, with some of the exhaust air being recirculated back into the paint booth along with fresh air. The air flow in each booth is maintained by an air makeup unit, which allows the booth to be operated under negative pressure. A computerized process control system is programmed with a logic system that shuts down the entire process line, which stops all painting, if any of the operating components (air flow, water flow, sludge pump, etc.) fail.

After a reassessment of the surface coating operation, Yanfeng identified several monitoring requirements in Special Conditions 1 and 3 of Construction Permit No. 112014-005 that are not appropriate for their respective processes. These conditions and their proposed changes are outlined below:

- Special Conditions 1.B, 1.C, and 1.D require that the paint booths meet OSHA requirement 29 CFR 1910.94(c)(6) and require annual recording of face velocity of each paint booth. As previously noted, all paint booths classified under EU-05 are totally enclosed operations within a conveyor tunnel that utilize waterfall control systems. In a letter dated October 22, 2001, OSHA responded to a series of questions proposed by Middle River Aircraft Systems concerning spray booths similar to those operating at Yanfeng. The letter states:

*“OSHA currently does not have specific standards addressing velocity requirements for a waterwash spray booth or an enclosed booth with no openings.”*

Therefore, the OSHA criteria specified in Special Conditions 1.B, 1.C, and 1.D do not apply to the paint booths. These conditions will be removed and replaced with language that better represents the monitoring and recording methods Yanfeng is capable of performing.

- Special Conditions 3.C and 3.D require the waterfall control systems to be equipped with gauges that monitor and record pressure drop, as well as require the pH of the water wash to be recorded. The specified parameters are not applicable to this type of control system because its operation does not depend on pressure drop and the pH of the water wash will not change. These conditions will be removed.
- Special Conditions 3.E and 3.F pertain to the requirements of maintaining a filter; however, the waterfall control system does not include a filter. These conditions will be removed.

Special Conditions 1 and 3 of Construction Permit No. 112014-005 were superseded and reestablished in Special Condition 2 of this amendment in order to simplify the updated language and better organize the overlapping monitoring and recordkeeping requirements. None of the proposed changes will affect the operation or emissions of the paint booths, the waterfall control systems, or any other existing equipment.

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,

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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.ao.mo.gov/ahc](http://www.ao.mo.gov/ahc).

If you have any questions regarding this amendment, please contact Ryan Schott, 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

A handwritten signature in blue ink that reads "Kendall B. Hale". The signature is written in a cursive style.

Kendall B. Hale  
Permits Section Chief

KBH:rsa

Enclosures

c: Kansas City Regional Office  
PAMS File: 2019-05-013

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#### 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 to 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."*

Yanfeng USA Automotive Trim Systems, Inc.  
Platte County (S08, T50N, R33W)

1. **Superseding Condition**  
The conditions of this permit supersede Special Conditions 1 and 3 of Construction Permit No. 112014-005, previously issued by the Air Pollution Control Program.
2. **Capture & Control Requirement – Total Enclosure & Waterfall Control System**
  - A. Yanfeng USA Automotive Trim Systems, Inc. shall capture emissions from EU-05 (Paint Booths 1-3) and EU-08 (Cure Oven) using permanent total enclosure, such that all emissions associated with these surface coating operations are captured and exhausted.
  - B. Yanfeng USA Automotive Trim Systems, Inc. shall maintain negative pressure on the paint booths using the air makeup unit at all times while surface coating is occurring.
  - C. Yanfeng USA Automotive Trim Systems, Inc. shall control emissions from EU-05 using a waterfall control system, as specified in the permit application.
  - D. The waterfall control system shall be operated and maintained in accordance with the manufacturer's specifications, which shall be kept on site.
  - E. Yanfeng USA Automotive Trim Systems, Inc. shall utilize a process control system for the paint booths which uses a logic system that automatically stops painting operations if there is a malfunction with the air makeup unit (which indicates a loss of negative pressure) or a malfunction with the water flow to the waterfall control system (which indicates a reduction in control efficiency).

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**SPECIAL CONDITIONS:**

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

- F. Yanfeng USA Automotive Trim Systems, Inc. shall develop a range of acceptable operating parameters for the paint booth process control system that shall include, at a minimum, the following values:
  - 1) Air makeup unit flow rate
  - 2) Waterfall flow rate
  - 3) Sludge pump flow rate
  
- G. Yanfeng USA Automotive Trim Systems, Inc. shall maintain all operating parameters within the acceptable ranges established in Special Condition 2.F, while surface coating is occurring. If any of the parameters deviate outside the acceptable range, Yanfeng USA Automotive Trim Systems, Inc. shall perform corrective actions to bring the parameter back into the acceptable range.
  
- H. Yanfeng USA Automotive Trim Systems, Inc. shall submit a report containing the process control system's range of acceptable operating parameters to the Air Pollution Control Program within 90 days after the issuance of this amendment. If the acceptable range of any parameter is changed at any time after the report has been submitted, Yanfeng USA Automotive Trim Systems, Inc. shall submit an updated report to the Air Pollution Control Program within 30 days of the change.
  
- I. Yanfeng USA Automotive Trim Systems, Inc. shall maintain records for the process control system, which shall include, at a minimum, the following information:
  - 1) Incidents of malfunction, deviance outside acceptable operating parameters, and/or automatic shutdowns of painting operations with impact on emissions, date and duration of event, probable cause, and corrective actions
  - 2) Maintenance activities with inspection schedule, repair actions, replacements, etc.