

STATE OF MISSOURI

PERMIT BOOK



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: 11 2014 - 005 Project Number: 2014-07-063  
Installation Number: 165-0041

Parent Company: Yanfeng USA Automotive Trim Systems, Inc.

Parent Company Address: 4110 NW Helena, Riverside, MO 64150

Installation Name: Yanfeng USA Automotive Trim Systems, Inc.

Installation Address: 4110 NW Helena, Riverside, MO 64150

Location Information: Platte County, S08, T50N, R33W

Application for Authority to Construct was made for:  
The construction of a new automotive trim manufacturing facility. This review was conducted in accordance with Section (5), 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.

NOV 10 2014

EFFECTIVE DATE

*Kendall B. Halo for Kyra Morse*

DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## 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.

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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 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."*

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

1. Capture Device Requirement – Permanent Total Enclosures
  - A. Yanfeng USA Automotive Trim Systems, Inc. shall capture emissions of the operations listed in Table 1 with a permanent total enclosure such that all emissions associated with the coating operations are captured and exhausted.

Table 1: Units with Permanent Total Enclosures

Emission Unit	Emission Unit Description
EU-05	Paint Booths 1-3
EU-08	Cure Oven

- B. Installation shall design and construct each paint booth according to the Occupational Safety and Health Administration (OSHA) requirements, 29 CFR 1910.94(c)(6) *Velocity and air flow requirements*.
    - C. Installation shall demonstrate that each paint booth was constructed according to Special Condition 1.B. by keeping a record of the following design parameters:
      - 1) The minimum recommended face velocity.
      - 2) Engineering drawings which demonstrate that the spray booth was designed to meet the minimum face velocity.
    - D. Installation shall verify the proper operation of each paint booth by recording the actual face velocity or the actual volumetric airflow for each paint booth at least one time per calendar year (no less than nine calendar months and no more than 15 calendar months following the previous measurement).
  2. Capture Device Requirement – Partial Enclosures
    - A. Yanfeng USA Automotive Trim Systems, Inc. shall capture emissions of the operations listed in Table 2 with a 3-sided enclosure such that

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**SPECIAL CONDITIONS:**

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

emissions associated with the repairing operations are captured and exhausted.

Table 2: Units with Partial Enclosures

Emission Unit	Emission Unit Description
EU-06	Repair Booth

- B. Installation shall design and construct each paint booth according to the Occupational Safety and Health Administration (OSHA) requirements, 29 CFR 1910.94(c)(6) *Velocity and air flow requirements*.
  - C. Installation shall demonstrate that each paint booth was constructed according to Special Condition 2.B. by keeping a record of the following design parameters:
    - 1) The minimum recommended face velocity.
    - 2) Engineering drawings which demonstrate that the spray booth was designed to meet the minimum face velocity.
  - D. Installation shall verify the proper operation of each paint booth by recording the actual face velocity or the actual volumetric airflow for each paint booth at least one time per calendar year (no less than nine calendar months and no more than 15 calendar months following the previous measurement).
3. Control Device Requirement – Water Wash Spray Booth
- A. Yanfeng USA Automotive Trim Systems, Inc. shall control emissions from the enclosed spray booths (EU-05) using a water wash as specified in the permit application.
  - B. The water wash shall be operated and maintained in accordance with the manufacturer's specifications.
  - C. The water wash shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. The pressure drop shall be measured and recorded at least once every 24 hours. 24-hour periods when spray applied surface coating is non-operational shall be recorded. The pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

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#### SPECIAL CONDITIONS:

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

- D. The water wash pH shall be measured and recorded at least once every 24 hours. Periods when surface coating is non-operational shall be recorded. The pH shall be maintained within the design conditions specified in the manufacturer's performance warranty.
  - E. Yanfeng USA Automotive Trim Systems, Inc. shall maintain a copy of the filter manufacturer's performance warranty on site.
  - F. Yanfeng USA Automotive Trim Systems, Inc. shall maintain an operating and maintenance log for the filter which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
4. Control Device Requirement – Dry Filter
- A. Yanfeng USA Automotive Trim Systems, Inc. shall control emissions from the repair booth spray applied surface coating operation (EU-06) using a filter.
  - B. The filter shall be operated and maintained in accordance with the manufacturer's specifications.
  - C. The filter shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. The pressure drop shall be measured and recorded at least once every 24 hours. 24-hour periods when spray applied surface coating is non-operational shall be recorded. The pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - D. Yanfeng USA Automotive Trim Systems, Inc. shall maintain a copy of the filter manufacturer's performance warranty on site.
  - E. Yanfeng USA Automotive Trim Systems, Inc. shall maintain an operating and maintenance log for the filter which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and

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**SPECIAL CONDITIONS:**

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

- 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Control Device Requirement - Regenerative Thermal Oxidizer (RTO, CD-02)

- A. Yanfeng USA Automotive Trim Systems, Inc. shall control emissions from the emission units listed in Table 3 using the RTO (CD-02) as specified in the permit application, except during periods of RTO malfunction.

Table 3: Emission Units Controlled by the RTO

Emission Unit	Emission Unit Description
EU-05	Paint Booths 1-3
EU-08	Cure Oven

- B. Yanfeng USA Automotive Trim Systems, Inc. can emit directly to the ambient air uncontrolled emissions from the emission units in Table 3 only during periods of RTO malfunction. Periods of RTO malfunction shall be recorded in accordance with Special Condition 5.F.
- C. The minimum operating temperature of the combustion chamber (°F) shall be established during initial performance testing required in Special Condition 9.
- D. Yanfeng USA Automotive Trim Systems, Inc. shall maintain the combustion chamber above the minimum operating temperature specified in Special Condition 5.C. whenever the RTO is being used to control emissions from the units in Table 3.
- E. Yanfeng USA Automotive Trim Systems, Inc. shall continuously monitor and record the combustion chamber temperature to demonstrate compliance with Special Condition 5.D.
- F. Yanfeng USA Automotive Trim Systems, Inc. shall maintain an operating and maintenance log for the RTO which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

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**SPECIAL CONDITIONS:**

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

6. **Operational Requirement - Solvent/Ink Cloths**
  - A. Yanfeng USA Automotive Trim Systems, Inc. shall keep the ink solvents and cleaning solutions in sealed containers whenever the materials are not in use. Yanfeng USA Automotive Trim Systems, Inc. shall provide and maintain suitable, easily read, permanent markings on all inks, solvent and cleaning solution containers used with this equipment.
  
7. **Use of Alternative Material**
  - A. Before using an alternative surface coating in Paint Booths 1-3 or the Repair Booth (EU-05 and EU-06) that differs from a material listed in the Application for Authority to Construct, Yanfeng USA Automotive Trim Systems, Inc. shall calculate the potential emissions of all HAPs and VOC from using the alternative material.
  
  - B. Yanfeng USA Automotive Trim Systems, Inc. shall seek approval from the Air Pollution Control Program New Source Review Unit before use of the alternative material if the potential individual HAP emissions for the alternative material are greater than the SMAL for any HAP listed in Appendix B or if the potential combined HAP emissions for the alternative material are greater than or equal to 25.0 tons per year.
  
  - C. Attachment A, Attachment B, and Attachment C or equivalent forms, such as electronic forms, preapproved by the Air Pollution Control Program shall be used to show compliance with Special Conditions 7.A and 7.B.
  
8. **Record Keeping and Reporting Requirements**
  - A. Yanfeng USA Automotive Trim Systems, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.
  
  - B. Yanfeng USA Automotive Trim Systems, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

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**SPECIAL CONDITIONS:**

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

9. Performance Testing – RTO (CD-02)
  - A. Yanfeng USA Automotive Trim Systems, Inc. shall perform an initial performance test on the RTO to verify that the control efficiency is greater than 95 percent by weight or has an emission rate that is no greater than 3.8 lbs/hr, and to determine the minimum combustion chamber temperature.
  - B. The stack testing shall be performed within sixty (60) days after achieving the maximum production rate of the coating line but not later than 180 days after the initial start of operation. Testing shall be performed in accordance with the Proposed Test Plan required in Special Condition 9.D.
  - C. During the performance test, Yanfeng USA Automotive Trim Systems, Inc. shall verify the proper operation of each permanent total enclosure in accordance with United States Environmental Protection Agency (USEPA) Method 204. The verification procedure shall be included in the Proposed Test Plan required in Special Condition 9.D. and be approved by the Air Pollution Control Program's Compliance/Enforcement Section prior to the required emissions testing.
  - D. A completed Proposed Test Plan (form enclosed) must be submitted to the Air Pollution Control Program at least 30 days prior to the proposed test date of any such performance tests so that a pretest meeting may be arranged, if necessary, and to assure that the test date is acceptable for an observer to be present. The Proposed Test Plan must include specification of test methods to be used and be approved by the Air Pollution Control Program's Compliance/Enforcement Section prior to conducting the required emissions testing.
  - E. Two copies of a written report of the performance test must be submitted to the director within 90 days of completion of the performance testing. The report must include the following:
    - 1) Legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Methods for at least one sample run for each air pollutant tested; and
    - 2) The destruction efficiency for VOC; and
    - 3) The minimum temperature of the combustion chamber.

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**SPECIAL CONDITIONS:**

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

- F. The test report is to fully account for all operational and emissions parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2014-07-063  
Installation ID Number: 165-0041  
Permit Number:

Yanfeng USA Automotive Trim Systems, Inc.  
4110 NW Helena  
Riverside, MO 64150

Complete: August 18, 2014

Parent Company:  
Yanfeng USA Automotive Trim Systems, Inc.  
4110 NW Helena  
Riverside, MO 64150

Platte County, S08, T50N, R33W

REVIEW SUMMARY

- Yanfeng USA Automotive Trim Systems, Inc. has applied for authority to construct a new automotive trim (door trim panels, floor consoles, and instrument panels) manufacturing facility at 4110 NW Helena in Riverside, Missouri.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are products of natural gas combustion and surface coating operations.
- None of the New Source Performance Standards (NSPS) apply to the installation.
  - NSPS 40 CFR 60 Subpart MM, "Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations" does not apply to the equipment because this operation only coats plastic body components.
  - NSPS 40 CFR Part 60 Subpart Dc: *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* does not apply to this facility because the boilers do not exceed 10 MMBtu/hr heat input.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAP) apply to the installation
  - NESHAP 40 CFR Part 63 Subpart PPPP: *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products* does not apply to the paint booths and repair booth because this installation is not a major source of HAPs.
- A regenerative thermal oxidizer is being used to control VOC and HAP emissions from the paint booth equipment in this permit.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below 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 since potential emissions of the application are below de minimis levels.
- Emissions testing is required for the RTO.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

## PROJECT DESCRIPTION

Yanfeng USA Automotive Trim Systems, Inc. has applied for authority to construct a new automotive trim (door trim panels, floor consoles, and instrument panels) manufacturing facility at 4110 NW Helena in Riverside, Missouri. The facility will supply parts to automotive assembly plants in Kansas City, Kansas and Wentzville, Missouri. Proposed processes include injection molding, sonic welding, laser cutting, grinding, and painting of plastic parts. The facility will use two different copolymers in the extrusion process with a melt temperature ranging between 400-440 degrees Fahrenheit.

Since this is a new installation, no permits have been issued to Yanfeng USA Automotive Trim Systems, Inc. from the Air Pollution Control Program.

This installation will receive two different copolymers to be used in the processes. These are received in pellet form and stored in silos until used in the injection molding process. The injection molding process consists of three units, each rated at 240 pounds of pellets per hour. Laser cutting units, each rated at 240 lbs/hr, will be used to refine the shape of extruded plastic parts. Plastic fixtures will be added to door panels during the sonic welding process. The weld horn of the sonic welder will be applied 64 times per door, which equates to 95.5 lb/hr. Sonic welding consists of joining thermoplastics through the use of heat generated from high frequency mechanical motion, thus melting the plastic and forming a molecular bond between the parts. There will be two plastic grinders, each rated at 240 lb/hr, to grind down excess extruded plastic back to pellets to be reused. A list of all emission units are shown in Table 4 below.

Table 4: Emission Units of the Installation

Emission Units	Description	MHDR <sup>1</sup>
EU-01	Injection Molder #1	240 lbs/hr
EU-02	Injection Molder #2	240 lbs/hr
EU-03	Injection Molder #3	240 lbs/hr
EU-04	Laser Cutting #1	240 lbs/hr
EU-05	Laser Cutting #2	240 lbs/hr
EU-06	Sonic Welding #1	95.5 lbs/hr
EU-07	Sonic Welding #2	95.5 lbs/hr
EU-08	Sonic Welding #3	95.5 lbs/hr
EU-09	Sonic Welding #4	95.5 lbs/hr
EU-10	Grinding #1	240 lbs/hr
EU-11	Grinding #2	240 lbs/hr
EU-12	Paint Booth #1	8.41 gal/hr
EU-13	Paint Booth #2	8.41 gal/hr
EU-14	Paint Booth #3	8.41 gal/hr
EU-15	Repair Booth	0.68 gal/hr
EU-16	Flame Treater	0.13 MMBtu/hr
EU-17	Cure Oven	1.1 MMBtu/hr
EU-18	Air Make-Up Boiler #1	0.55 MMBtu/hr
EU-19	Air Make-Up Boiler #2	0.55 MMBtu/hr
EU-20	Regenerative Thermal Oxidizer	1.2 MMBtu/hr
EU-21	Haul Road	1000 lbs/hr

<sup>1</sup> The MHDR for Paint Booths #1-3 and the Repair Booth were taken from the highest paint application rate.

Plastic parts will be painted in a three booth paint line. At the start of the coating process parts are manually loaded onto a paint rack on a moving conveyor. After automatic part identification, parts enter the robotic flame treatment booth. Flame treatment improves paint adhesion. The flame treater is natural gas fired and rated at 0.13 MMBtu/hr. Next, parts are deionized by passing through deionizing air blowers before entering the first robotic paint booth. Coated parts are allowed to flash for 1.5 minutes before entering the second robotic paint booth. Coated parts are allowed to flash for 1.5 minutes before entering the third robotic paint booth. Coated parts are allowed to flash for 10 minutes before curing in a natural gas fired cure oven at 180 to 200°F. The heat input of the oven is 1.1 MMBtu/hr. Particulate emissions from the paint booths are individually controlled by a water wash system. VOC emissions from the paint booths, flash tunnels, and oven are controlled by a regenerative thermal oxidizer (RTO). The RTO uses an auxiliary natural gas burner rated at 1.2 MMBtu/hr and is designed for a 95 percent thermal efficiency and a 95 percent reduction in VOC emissions. Air to the paint booths, flash tunnels, and oven is supplied by an air makeup unit (AMU). Heat to the AMU is supplied by two 0.550 MMBtu/hr natural gas-fired boilers. An additional booth will be used for repairs. The repair booth will discharge directly to the atmosphere and VOC emissions will not be controlled by the RTO but particulate emissions will be controlled with a filter.

## EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, *Natural Gas Combustion*, Section 1.4, July 1998. Emission units using natural gas are the flame treater, cure oven, two boilers for the air make-up unit, and the RTO.

Emissions from injection molding were calculated using the report *“Development of Emission Factors for Polypropylene Processing”*, January 1999. It was assumed that the average die melt temperature will be 400°F and the resin type will be most similar to Controlled Rheology Homopolymer.

Emissions from laser cutting were calculated using the measured results from *“Test Report about the measurements in the crude gas of the exhaust air at a material processing unit with laser –LSA 55 for the posterior customer of Jenoptic Automation Technology GmbH in Germany”*, March 2003.

Emissions from sonic molding were calculated using the report *“Development of Emission Factors for Polyethylene Processing”*, June 1996. Emission factors were taken from the results of high density polyethylene (HDPE) blow molding.

No specific emission factors for plastic grinding exist. In order to remain consistent with permits the MDNR have issued for similar processes, the emissions from plastic grinding were calculated using the emission factor for general polyethylene (Low Density), SCC 3-01-018-12, as a conservative estimate for particulate emissions.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.1 “Paved Roads,” January 2011.

Potential emissions from the paint booths and repair booth were calculated using mass balance, citing the paint MSDS. The three paint booths use high volume, low pressure (HVLP) automatic spray guns and the repair booth uses a cup style spray gun. Spray guns were assigned 65 percent solids transfer efficiency per the U.S. Air Force IERA document titled “Air Emissions Inventory Guidance Document for Stationary Sources at Air Force Installations”, December 2003. Remaining solids were assumed PM<sub>2.5</sub>. All applied VOC and volatile HAPs were considered emitted. The spray booths are fully enclosed and were given 98 percent capture efficiency. The repair booth is 3-sided and was given 90 percent capture efficiency. Potential emissions of each pollutant were selected from the greater of the two coatings respective emissions, at the same application rate, regardless of the coating. For example, project PM emissions could be from one coating, while project VOC emissions could be from another coating. This approach represents the most conservative scenario. The paints do not contain particulate matter HAPs. The purge solvent, catalyst, and reducer emissions were calculated using mass balance at each respective application rate, specified by Yanfeng USA Automotive Trim Systems, Inc. Particulate emissions from the three paint booths will be controlled by a water wash system with 95 percent control efficiency. VOC emissions from the three paint booths will be controlled by the RTO with 95 percent control efficiency. The repair booth will control particulate emissions with a filter rated at

95 percent control efficiency. No VOC controls will be used for the repair booth emissions.

The following table provides an emissions summary for this project. Existing potential or actual emissions are not available as Yanfeng USA Automotive Trim Systems, Inc. will be a new facility. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 5: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (N/A EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/A	N/A	6.709	N/A
PM <sub>10</sub>	15.0	N/A	N/A	6.754	N/A
PM <sub>2.5</sub>	10.0	N/A	N/A	6.746	N/A
SO <sub>x</sub>	40.0	N/A	N/A	0.009	N/A
NO <sub>x</sub>	40.0	N/A	N/A	1.516	N/A
VOC	40.0	N/A	N/A	36.743	N/A
CO	100.0	N/A	N/A	1.273	N/A
GHG (CO <sub>2</sub> e)	75,000 / 100,000	N/A	N/A	1829.798	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	1819.056	N/A
HAPs	10.0/25.0	N/A	N/A	1.139	N/A

N/A = Not Applicable

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

### APPLICABLE REQUIREMENTS

Yanfeng USA Automotive Trim Systems, Inc. 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.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *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
- *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 (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

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Bryce Mihalevich  
New Source Review Unit

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Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 18, 2014, received July 24, 2014, designating Yanfeng USA Automotive Trim Systems, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

## Attachment A – Alternative Coating Compliance Worksheet Paint Booths 1-3

Yanfeng USA Automotive Trim Systems, Inc.  
Platte County, S08, T50N, R33W  
Project: 2014-07-063  
Installation ID: 159-0027  
Permit:

Coating or material name \_\_\_\_\_ Date \_\_\_\_\_ Copy this sheet as needed.

A	B	C	D	E	F	G	H	I	J
Process and Emission Unit	Individual HAP Name and CAS No.	HAP is also Particulate Matter (yes / no)	Individual HAP Content (max weight %)	Maximum Hourly Application Rate (lbs coating per hour)	Overall Transfer and Control Efficiency (%)	Individual HAP PTE (tpy)	Individual HAP SMAL (tpy)	Coating VOC (weight %)	Coating VOC PTE (tpy)
<i>(Example) EP-05</i>	<i>Benzene 71-43-2</i>	<i>no</i>	<i>2.0%</i>	73.76	95.00%	0.323	2.0	36.61%	5.914
<i>(Example) EP-05</i>	<i>Cobalt 2-Ethylhexanoate 136-52-7</i>	<i>yes</i>	<i>0.5%</i>		98.25%	0.006	0.1		

- A. Record the process description and emission unit.
- B. Record all the individual HAPs from this single coating/material SDS.
- C. Compare the HAP to Appendix B for verification as particulate matter.
- D. Record the maximum weight percent of each HAP from the SDS.
- E. Calculate the coating's maximum hourly application rate (lb/hr) by multiplying the coating density (lb/gal) by the MHDR of the coating (gal/hr). The MHDR of the repair booth paints are as follows; Soft Swade Catalyst V66VM106 - **2.40 gal/hr**; Purge Solvent R7K5200 - **0.31 gal/hr**; Butyl Acetate R6K18 - **1.20 gal/hr**; Soft Swade G55-1, GM 167A Ebony/Jet Black 600R G55B5068 - **8.41 gal/hr**. Seek approval from the Air Pollution Control Program New Source Review Unit if the new MHDR will exceed the application rate.
- F. The overall PM transfer and control efficiency includes the spray gun (HVLV) transfer efficiency (65%), booth capture efficiency (100%), and water curtain control efficiency (95%):  $[1 - (1 - 65\%) \times (1 - 95\%)] \times 100 = 98.25\%$ . The overall VOC control efficiency includes the booth capture efficiency (100%), and regenerative thermal oxidizer control efficiency (95%):  $(1 - (1 - 95\%)) \times 100 = 95\%$ .
- G. Calculate the particulate matter and VOC HAP potential to emit:  $G = D \times E \times (1 - F) \times 8,760 / 2,000$ .
- H. Record the individual HAP SMAL from Appendix B. If the individual HAP potential to emit is greater than or equal to the respective SMAL seek approval from the Air Pollution Control Program New Source Review Unit before using this coating.
- I. Record or calculate the coating's VOC weight % from the SDS.
- J. Calculate the VOC potential to emit:  $J = E \times (1 - F) \times I \times 8,760 / 2,000$ . Use Attachment C to compare the alternative coating emissions to the permitted emissions for the coating it will be replacing.

## Attachment B – Alternative Coating Compliance Worksheet Repair Booth

Yanfeng USA Automotive Trim Systems, Inc.  
 Platte County, S08, T50N, R33W  
 Project: 2014-07-063  
 Installation ID: 159-0027  
 Permit:

Coating or material name \_\_\_\_\_ Date \_\_\_\_\_ Copy this sheet as needed.

A	B	C	D	E	F	G	H	I	J
Process and Emission Unit	Individual HAP Name and CAS No.	HAP is also Particulate Matter (yes / no)	Individual HAP Content (max weight %)	Maximum Hourly Application Rate (lbs coating per hour)	Overall Transfer and Control Efficiency (%)	Individual HAP PTE (tpy)	Individual HAP SMAL (tpy)	Coating VOC (weight %)	Coating VOC PTE (tpy)
<i>(Example) EP-05</i>	<i>Benzene 71-43-2</i>	<i>no</i>	<i>2.0%</i>	<i>5.98</i>	<i>N/A</i>	<i>0.323</i>	<i>2.0</i>	<i>36.61%</i>	<i>9.589</i>
<i>(Example) EP-05</i>	<i>Cobalt 2-Ethylhexanoate 136-52-7</i>	<i>yes</i>	<i>0.5%</i>		<i>94.925%</i>	<i>0.006</i>	<i>0.1</i>		

- A. Record the process description and emission unit.
- B. Record all the individual HAPs from this single coating/material SDS.
- C. Compare the HAP to Appendix B for verification as particulate matter.
- D. Record the maximum weight percent of each HAP from the SDS.
- E. Calculate the coating's maximum hourly application rate (lb/hr) by multiplying the coating density (lb/gal) by the MHDR of the coating (gal/hr). The MHDR of the repair booth paints are as follows; Soft Swade Catalyst V66VM106 - **0.20 gal/hr**; Purge Solvent R7K5200 - **0.03 gal/hr**; Butyl Acetate R6K18 - **0.10 gal/hr**; Soft Swade G55-1, GM 167A Ebony/Jet Black 600R G55B5068 - **0.68 gal/hr**. Seek approval from the Air Pollution Control Program New Source Review Unit if the new MHDR will exceed the application rate.
- F. Seek approval from the Air Pollution Control Program New Source Review Unit if the new MHDR will exceed the application rate indicated in Attachment C.
- G. The overall PM transfer and control efficiency includes the spray gun (HVLV) transfer efficiency (65%), booth capture efficiency (90%), and dry filter control efficiency (95%):  $\{1 - [(1 - 65\%) \times (1 - 90\%) + (1 - 65\%) \times (1 - 95\%) \times (90\%)]\} \times 100 = 94.925\%$ . There are no controls for VOC in the repair booth.
- H. Calculate the particulate matter and VOC HAP potential to emit:  $G = D \times E \times (1 - F) \times 8,760 / 2,000$ .
- I. Record the individual HAP SMAL from Appendix B. If the individual HAP potential to emit is greater than or equal to the respective SMAL seek approval from the Air Pollution Control Program New Source Review Unit before using this coating.
- J. Record or calculate the coating's VOC weight % from the SDS.
- K. Calculate the VOC potential to emit:  $J = E \times (1 - F) \times I \times 8,760 / 2,000$ . Use Attachment C to compare the alternative coating emissions to the permitted emissions for the coating it will be replacing.

**Attachment C – Alternative Coating Compliance Worksheet  
Permitted Coatings Emission Summary**

Yanfeng USA Automotive Trim Systems, Inc.  
Platte County, S08, T50N, R33W  
Project: 2014-07-063  
Installation ID: 159-0027  
Permit:

Coating or material name \_\_\_\_\_ Date \_\_\_\_\_ Copy this sheet as needed.

A	B	C	D	E	F	G	H
Product Name	Product Number	Paint Booths 1-3 MHDR (gal/hr)	Paint Booths 1-3 Controlled VOC Emissions (tpy)	Repair Booth MHDR (gal/hr)	Repair Booth VOC Emissions (tpy)	Permitted Total VOC Emissions (tpy)	Alternative Coating VOC PTE (tpy)
Soft Swade Catalyst	V66VM106	2.40	2.845	0.20	3.347	6.192	
Purge Solvent	R7K5200	0.31	0.123	0.03	0.144	0.267	
Butyl Acetate	R6K18	1.20	2.653	0.10	3.121	5.774	
Soft Swade G55-1, GM 167A Ebony/Jet Black 600R	G55B5068	8.41	11.050	0.68	12.99	24.04	

1. Add the Coating VOC PTE (J) from Attachment A and B together.  $H = J \text{ (Attachment A)} + J \text{ (Attachment B)}$
2. Compare the Alternative Coating VOC PTE (H) with the Permitted Total VOC Emissions (G) of the coating that is being replaced.
3. If the alternative coating (H) is greater than or equal to the permitted total VOC Emissions (G), contact the Air Pollution Control Program New Source Review Unit before using this coating.

## Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CARBARYL	63-25-2	10	V	Y	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CARBON DISULFIDE	75-15-0	1		Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CARBON TETRACHLORIDE	56-23-5	1		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
ACETOPHENONE	98-86-2	1		Y	N	CARBONYL SULFIDE	463-58-1	5		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CATECHOL	120-80-9	5		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
ACROLEIN	107-02-8	0.04		Y	N	CHLORAMBEN	133-90-4	1		Y	Y	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
ACRYLAMIDE	79-06-1	0.02		Y	N	CHLORDANE	57-74-9	0.01		Y	Y	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
ACRYLIC ACID	79-10-7	0.6		Y	N	CHLORINE	7782-50-5	0.1		N	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
ACRYLONITRILE	107-13-1	0.3		Y	N	CHLOROACETIC ACID	79-11-8	0.1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
AMINOBIIPHENYL, [4-]	92-67-1	1	V	Y	N	CHLOROBENZENE	108-90-7	10		Y	N	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
ANILINE	62-53-3	1		Y	N	CHLOROBENZYLATE	510-15-6	0.4	V	Y	Y	DIMETHYL PHTHALATE	131-11-3	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CHLOROFORM	67-66-3	0.9		Y	N	DIMETHYL SULFATE	77-78-1	0.1		Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N	DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
ANTIMONY COMPOUNDS		5	H	N	Y	CHLOROPRENE	126-99-8	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	CHROMIUM COMPOUNDS		5	L	N	Y	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	CHRYSENE	218-01-9	0.01	V	Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	COBALT COMPOUNDS		0.1	M	N	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
ASBESTOS	1332-21-4	0	A	N	Y	CRESOL, [META-]	108-39-4	1	B	Y	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N	EPICHLOROHYDRIN	106-89-8	2		Y	N
BENZENE	71-43-2	2		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
BENZIDINE	92-87-5	0.0003	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	CUMENE	98-82-8	10		Y	N	ETHYL ACRYLATE	140-88-5	1		Y	N
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N	ETHYL BENZENE	100-41-4	10		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y	ETHYL CHLORIDE	75-00-3	10		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N	ETHYLENE GLYCOL	107-21-1	10		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N	ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2				
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DIAZOMETHANE	334-88-3	1		Y	N	ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N
BERYLLIUM SALTS		2E-05	J	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N	ETHYLENE IMINE (AZIRIDINE)	151-56-4	0.003		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DIOXINS/FURANS		6E-07	D, V	Y	N	ETHYLENE OXIDE	75-21-8	0.1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DIBENZOFURAN	132-64-9	5	V	Y	N	ETHYLENE THIOUREA	96-45-7	0.6		Y	Y
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N	FORMALDEHYDE	50-00-0	2		Y	N
BROMOFORM	75-25-2	10		Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N	GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y	GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N	HEPTACHLOR	76-44-8	0.02		Y	N
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y	HEXACHLOROBENZENE	118-74-1	0.01		Y	N
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N	HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DICHLOROETHYLENE, [1,2-]	107-06-2	0.8		Y	N	HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N	HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N
CAPROLACTAM (Delisted)	105-60-2					DICHLOROMETHANE	75-09-2	10		N	N	HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N
CAPTAN	133-06-2	10		Y	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y	HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N

## Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
HEXAMETHYLENE, -1,6-DIISOCYANATE	822-06-0	0.02		Y	N	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N	VINYL ACETATE	108-05-4	1		Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
HEXANE, [N-]	110-54-3	10		Y	N	PARATHION	56-38-2	0.1		Y	Y	VINYL CHLORIDE	75-01-4	0.2		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N	XYLENE, [ORTHO-]	95-47-6	10	G	Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N	XYLENE, [PARA-]	106-42-3	10	G	Y	N
HYDROQUINONE	123-31-9	1		Y	N	PHENOL	108-95-2	0.1		Y	N	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N						
ISOPHORONE	78-59-1	10		Y	N	PHOSGENE	75-44-5	0.1		Y	N						
LEAD COMPOUNDS		0.01	Q	N	Y	PHOSPHINE	7803-51-2	5		N	N						
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N	Legend					
MALEIC ANHYDRIDE	108-31-6	1		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N	Group ID	Aggregate Group Name				
MANGANESE COMPOUNDS		0.8	R	N	Y	POLYCYCLIC ORGANIC MATTER		0.01	V	Y	N	A	Asbestos				
MERCURY COMPOUNDS		0.01	S	N	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y	B	Cresols/Cresylic Acid (isomers and mixtures)				
METHANOL	67-56-1	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N	C	2,4 - D, Salts and Esters				
METHOXYCHLOR	72-43-5	10	V	Y	Y	PROPIONALDEHYDE	123-38-6	5		Y	N	D	Dibenzofurans, Dibenzodioxins				
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y	E	4, 6 Dinitro-o-cresol, and Salts				
METHYL CHLORIDE	74-87-3	10		Y	N	PROPYLENE OXIDE	75-56-9	5		Y	N	F	Lindane (all isomers)				
METHYL ETHYL KETONE (Delisted)	78-93-3					PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N	G	Xylenes (all isomers and mixtures)				
METHYL HYDRAZINE	60-34-4	0.06		Y	N	QUINOLINE	91-22-5	0.006		Y	N	H	Antimony Compounds				
METHYL IODIDE	74-88-4	1		Y	N	QUINONE	106-51-4	5		Y	N	I	Arsenic Compounds				
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y	J	Beryllium Compounds				
METHYL ISOCYANATE	624-83-9	0.1		Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y	K	Cadmium Compounds				
METHYL METHACRYLATE	80-62-6	10		Y	N	STYRENE	100-42-5	1		Y	N	L	Chromium Compounds				
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	STYRENE OXIDE	96-09-3	1		Y	N	M	Cobalt Compounds				
METHYLCYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TETRACHLORODIBENZO-P-DIOXIN [2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y	N	Coke Oven Emissions				
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N	O	Cyanide Compounds				
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N	P	Glycol Ethers				
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N	Q	Lead Compounds (except elemental Lead)				
MINERAL FIBERS		0	T	N	Y	TOLUENE	108-88-3	10		Y	N	R	Manganese Compounds				
NAPHTHALENE	91-20-3	10	V	Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N	S	Mercury Compounds				
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N	T	Fine Mineral Fibers				
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	TOXAPHENE	8001-35-2	0.01		Y	N	U	Nickel Compounds				
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N	V	Polycyclic Organic Matter				
NICKEL COMPOUNDS		1	U	N	Y	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N	W	Selenium Compounds				
NICKEL REFINERY DUST		0.08	U	N	Y	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N	X	Polychlorinated Biphenyls (Aroclors)				
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y	TRICHLOROETHYLENE	79-01-6	10		Y	N	Y	Radionuclides				
NITROBENZENE	98-95-3	1		Y	N	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N						
NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N						
NITROPHENOL, [4-]	100-02-7	5		Y	N	TRITHYLAMINE	121-44-8	10		Y	N	Note 1	The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million				
NITROPROPANE, [2-]	79-46-9	1		Y	N	TRIFLURALIN	1582-09-8	9		Y	Y						

## 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>2</sub>e</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. Ricky Cook-Alt  
Paint Process Engineer  
Yanfeng USA Automotive Trim Systems, Inc.  
4110 NW Helena  
Riverside, MO 64150

RE: New Source Review Permit - Project Number: 2014-07-063

Dear Mr. Cook-Alt:

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 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 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 certified mail, it will be deemed filed on the date it is mailed; if it is sent by any other method it will be deemed filed on the date it is received by the administrative hearing commission. Hearing Commission, Truman State Office Building, Room 640, 301 W. High Street, P.O. Box 1557, Jefferson City, Missouri 65102, website: [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 Bryce Mihalevich at the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:bml

Enclosures

c: Kansas City Regional Office  
PAMS File: 2014-07-063

Permit Number: