

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: 122015 - 018 Project Number: 2015-05-016

Installation Number: 157-0019

Parent Company: TG Missouri Corporation

Parent Company Address: 2200 Plattin Road, Perryville, MO 63775

Installation Name: TG Missouri Corporation

Installation Address: 2200 Plattin Road, Perryville, MO 63775

Location Information: Perry County, LG844, T35N, R10E

Application for Authority to Construct was made for:  
Kaizen Paint Booth System (EP-240). This review was conducted in accordance with  
Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

Dec 29, 2015  
EFFECTIVE DATE

Kyra L Moore  
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."*

TG Missouri  
Perry County, LG844, T35N, R10E

1. **Superseding Condition**  
Special Condition 2 of this permit supersedes Special Condition 2.A. found in the previously issued construction permit 082014-016 issued by the Air Pollution Control Program.
2. **Emission Limitation**
  - A. TG Missouri shall emit less than 10.0 tons individually and 25.0 tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from the entire installation as defined in Table 1.
  - B. Attachment A and Attachment B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.

**Table 1: Installation HAP Emission Points**

Emission Point	Description
EP-240	Kaizen Booth Paint System
EP-238	PMF4 Decorative chrome plating
EP-237	PMF4 Nickel plating
EP-235	PMF4 Hydrochloric acid catalyst
EP-234	PMF4 Chrome etching
EP-232	PMF3 Decorative chrome plating
EP-231	PMF3 Nickel plating
EP-229	PMF3 Hydrochloric acid catalyst
EP-228	PMF3 Chrome Etching
EP-227	Blackout Booth Paint System
EP-226	CST Process film activator
EP-224	PMF2 Decorative chrome plating
EP-223	PMF2 Nickel plating
EP-221	PMF2 Hydrochloric acid catalyst
EP-220	PMF2 Chrome etching
EP-216-212	PB20 Paint System
EP-210	PMF1 Decorative Chrome Plating

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**SPECIAL CONDITIONS:**

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

Emission Point	Description
EP-209	PMF1 Nickel Plating
EP-207	PMF1 Hydrochloric acid catalyst
EP-206	PMF1 Chrome Etching
EP-197-205	Robotic Paint Booth (P-12)
EP-194-196	Robotic Paint Booth (P-11)
EP-188-193	Robotic Paint Booth (P-10)
EP-171-183	Robotic Paint Booth (P-9)
EP-170	Boiler
EP-169	Printing
EP-168	Transfer Of Dry Raw Material
EP-167	Fluidized Bed
EP-165-166	Saturn Outerbelt Line
EP-164	Shot Blasting
EP-163	Magnesium Die Casting Furnace
EP-155-162	Air Bag Robotic Paint Booth (P-14)
EP-149-154	Air Bag Robotic Paint Booth (P-6)
EP-144-148	Air Bag Robotic Paint Booth (P-5)
EP-137-143	Air Bag/Column Cover Paint Booth (P-4)
EP-132-136	Mudguard Paint Booth (P-3)
EP-126-131	Back Panel (Rear Garnish) Paint Booth (P-2)
EP-116-125	Water Heaters
EP-090-115	Space Heaters
EP-085	Shot Blasting
EP-084	Aluminum Pouring/Casting
EP-083	Aluminum Die Cast Melting Furnaces (3)
EP-080-082	Building 1 Paint Booth (P-18)
EP-079	PVC Degreaser #2
EP-062-063	Paint Booth (P-8)
EP-001-059	Polyurethane

3. Control Device Requirement-Filter
  - A. TG Missouri shall control emissions from the Kaizen Booth Paint Gun using a booth and filter media (EP-240) as specified in the permit application. Only one spray gun may be used at once.
  - B. The filter media shall be operated and maintained in accordance with the manufacturer's specifications. The filter media 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.
  - C. Replacement filters shall be kept on hand at all times. The filters shall be

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#### SPECIAL CONDITIONS:

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

- made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- D. TG Missouri shall monitor and record the operating pressure drop across the filter media at least once every 24 hours of operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- E. TG Missouri shall maintain an operating and maintenance log for the filter media 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. Use of Alternative Coating in the Kaizen Booth Paint System
- A. When considering using an alternative coating in the Kaizen Booth Paint System that is different than a material listed in the Application for Authority to Construct, TG Missouri shall calculate the potential emissions of all individual HAP and the combined volatile organic compounds (VOCs) in the alternative material.
- B. TG Missouri shall seek approval from the Air Pollution Control Program before use of the alternative material if the potential individual HAP emissions for the alternative material are equal to or greater than the screening model action level (SMAL) for any chemical listed in Appendix A or if the potential emissions of VOCs exceed 13.55 tons per year.
- C. Attachment C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Condition 4.A.
5. Operational Requirement  
TG Missouri shall keep the surface coatings, solvents, and cleaning solutions in sealed containers whenever the materials are not in use. TG Missouri shall provide and maintain suitable, easily read, permanent markings on all of the above containers used with this equipment.

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#### SPECIAL CONDITIONS:

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

6. Record Keeping and Reporting Requirements
  - A. TG Missouri 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 Material Safety Data Sheets (MSDS) for all materials used.
  - B. TG Missouri shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten 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.

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

Project Number: 2015-05-016  
Installation ID Number: 157-0019  
Permit Number:

TG Missouri  
2200 Plattin Road  
Perryville, MO 63775

Complete: June 1, 2015

Parent Company:  
TG Missouri  
2200 Plattin Road  
Perryville, MO 63775

Perry County, LG844, T35N, R10E

REVIEW SUMMARY

- TG Missouri has applied for authority to construct an Kaizen Paint Booth System (EP-240).
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs from the Kaizen Paint Booth are mixed isomer xylenes (Chemical Abstracts Service (CAS) 1330-20-7), ethyl benzene (CAS 100-41-4), and toluene (CAS 108-88-3).
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation.
- None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
  - 40 CFR Part 63, Subpart PPPP *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*, does not apply because the installation is not a major source of HAPs.
  - 40 CFR Part 63, Subpart HHHHHH *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*, does not apply as the installation is not engaged in refinishing operations that encompass motor vehicle and mobile equipment.
  - 40 CFR Part 63, Subpart XXXXXX *National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories*, does not apply as the installation has documented rationale that it does not meet any of the nine source categories.

- Filtration media is being used to control the particulate matter (PM), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) from the Kaizen Paint Booth.
- 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 and SMALs. Potential emissions of volatile organic compounds (VOC) exceed the insignificant emission exemption level in 10 CSR 10-6.061(3)(A)3.A.
- This installation is located in Perry County, an attainment area for all 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 and SMALs.
- Emissions testing is not required for the equipment.
- An application to amend the Part 70 Operating Permit is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

## INSTALLATION DESCRIPTION

TG Missouri (herein TG) manufactures plastic, rubber, and metal automobile parts and accessories including steering wheels, airbags and interior panels. TG Missouri is a major source (Part 70) under operating permits and major source under construction permits for volatile organic compounds (VOCs). The following permits have been issued to TG Missouri from the Air Pollution Control Program.

Table 2: Permit History

Permit Number	Description
0986-012A	Manufacturing of steel steering wheel & plastic governor gear
1187-009	Installation of parts molding operation
0290-003	Installation of six (6) polyurethane presses to mold air bag covers
0290-004	Installation of 14 polyurethane presses, a spray booth, and an adhesive coating machine
0590-006	Addition of painting equipment for side protection molding
0691-002	Installation of nine (9) polyurethane presses for molding air bag covers
0791-010	Installation of six (6) polyurethane steering wheel presses
0791-013	Installation of injection molding, aluminum die cast, and air bag assembly
0592-001	Installation of six (6) polyurethane steering wheel presses
0792-029	Installation of three (3) polyurethane steering wheel presses

0393-010	Installation of six (6) polyurethane presses and one (1) aluminum die cast furnace
0794-018	Installation of aluminum die casting, air bag assembly, polyurethane processing, and spray painting
0595-007	Addition of Injection molding equipment
1295-019	Installation of an air bag robotic paint booth
0396-005	Installation of magnesium die casting
0896-005	Installation of Saturn outer-belt process line
157-0019-0001	Part 70 operating permit
1297-018	Installation of two (2) magnesium die casting lines
0298-014	Construction of six (6) new polyurethane paint booths
0998-006	Installation of four (4) polyurethane paint booths
042002-018	Installation of a robotic paint booth
082002-019	Paint booths
OP2008-022	Part 70 operating permit renewal
022009-011	Two automated spray booths and one chrome plating line (PMF1)
122010-014	CST Process and PMF2
012012-010	Installation of blackout paint booth
042012-008	Installation of compact plating system PMF3
042012-008A	True-up to actual
082014-016	New compact plating system PF4

## PROJECT DESCRIPTION

TG proposes to install a paint system designated as Kaizen Booth Paint System (EP-240). The Kaizen Booth Paint System will be used to coat metal parts with solvent based coatings. Parts will be rolled or hauled into the paint booth through the front doors. The parts will then be coated manually with a spray gun. Painted parts will then be manually unloaded from the paint booth for air drying. The maximum hourly design rate of spraying is 50 grams per minute (0.66 gal/hr). Painted is applied using a high volume low pressure LPH-101 spray gun. The maximum material density of the proposed paints is 8.39 pounds per gallon. All volatile emissions are considered to be emitted from the booth itself.

TG is requesting permission to use two paints for the Kaizen Booth Paint System EP-240.

Table 3: Paints Requested for Kaizen Booth Paint System EP-240

Product Name	Product Number
Fast Production Enamel, Safety Yellow	F75YC3
Fast Production Enamel, White	F75WC1

## EMISSIONS/CONTROLS EVALUATION

The emissions from the paint booth were calculated using the maximum paint usage and material safety data sheets (MSDS) supplied by TG. All available VOCs were considered to be emitted. All HAPs in this review are volatile HAPs and are also considered to be emitted. The balance of total coating and volatiles was used to determine the percent solids. Coating was assigned 60 percent solids transfer efficiency. Overspray solids are controlled by filter media. Conservatively, all solids

were considered to be PM<sub>2.5</sub>. Solids are captured by the booth at TG confirmed 100 percent efficiency and controlled by the filter media at 60 percent.

TG has received several permits for paint booths. Most of these permits did not evaluate PM emissions, nor require overspray control devices. PM emissions from paint booths are likely, and control devices are not inherent to the process.

Existing potential emissions were taken from NSR Permit 082014-016. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year). The following table provides an emissions summary for this project.

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 Application	New Installation Conditioned Potential
PM	25.0	1.23	N/D	1.77	N/A
PM <sub>10</sub>	15.0	4.37	13.68	1.77	N/A
PM <sub>2.5</sub>	10.0	1.23	N/D	1.77	N/A
SO <sub>x</sub>	40.0	0.14	0.02	N/A	N/A
NO <sub>x</sub>	40.0	19.43	0.48	N/A	N/A
VOC	40.0	531.78	162.71	13.55	N/A
CO	100.0	7.63	0.14	N/A	N/A
Combined HAPs	25.0	< 25.0	1.81	2.03	< 25.0
Xylene	10.0	< 10.0	N/D	0.483	< 10.0
Ethylbenzene	10.0	< 10.0	N/D	0.097	< 10.0
Toluene	10.0	< 10.0	N/D	1.448	< 10.0

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

### 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 and SMALs. Potential emissions of VOC exceed the insignificant emission exemption level in 10 CSR 10-6.061(3)(A)3.A.

### APPLICABLE REQUIREMENTS

TG Missouri 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
- *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

## 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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Chad Stephenson  
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 April 9, 2015, received May 5, 2015, designating TG Missouri as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.







**Appendix A: 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	83-26-2	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-]	542-75-8	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CARBON TETRACHLORIDE	56-23-5	1		Y	N	DICHLOROVOS	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	84-67-5	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-]	92-87-1	1	V	Y	N	CHLOROBENZENE	108-90-7	10		Y	N	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
ANILINE	62-53-2	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 METHYLETHER	107-30-2	0.1		Y	N	DIMETHYLAMINOAZOBENZENE, [4-]	80-11-7	1		Y	N
ANTIMONY COMPOUNDS		5	H	N	Y	CHLOROPRENE	128-99-8	1		Y	N	DIMETHYLANILINE, [N-N-]	121-89-7	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	28300-74-8	1	H	N	Y	CHROMIUM COMPOUNDS		5	L	N	Y	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
ANTIMONY TRIOXIDE	1309-04-4	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	1345-04-8	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-]	122-86-7	0.09	V	Y	Y
ASBESTOS	1332-21-4	0	A	N	Y	CRESOL, [META-]	108-39-4	1	B	Y	N	DIPHENYL METHANE DIISOCYANATE, [4,4-]	101-88-8	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	50-32-6	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)	111-78-2				
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DIAZOMETHANE	334-88-3	1		Y	N	ETHYLENE GLYCOL MONOHXYLETHYER	112-25-4	5	P	Y	N
BERYLLIUM SALTS		2E-05	J	N	Y	DIBENZ(A,H)ANTHRACENE	63-70-3	0.01	V	Y	N	ETHYLENE IMNE [AZRIDINE]	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	132-84-9	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	74-83-8	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-]	106-48-7	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-]	78-34-3	1		Y	N	HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DICHLOROETHANE, [1,2-]	107-05-2	0.8		Y	N	HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-5	0.01	F	Y	N
CALCIUM CYANAMIDE	156-82-7	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)	105-80-2					DICHLOROMETHANE	75-09-2	10		N	N	HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N
CAPTAN	133-05-2	10		Y	Y	DICHLOROPHENOXYACETIC ACID, [2,4-]	84-75-7	10	C	Y	Y	HEXACHLOROCYCLOHEXANE, [TECHNICAL]	508-73-1	0.01	F	Y	N

## Appendix A: 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						
MALEIC ANHYDRIDE	108-31-6	1		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N						
MANGANESE COMPOUNDS		0.8	R	N	Y	POLYCYCLIC ORGANIC MATTER		0.01	V	Y	N						
MERCURY COMPOUNDS		0.01	S	N	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y						
METHANOL	67-56-1	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N						
METHOXYCHLOR	72-43-5	10	V	Y	Y	PROPIONALDEHYDE	123-38-6	5		Y	N						
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y						
METHYL CHLORIDE	74-87-3	10		Y	N	PROPYLENE OXIDE	75-56-9	5		Y	N						
METHYL ETHYL KETONE (Delisted)	78-93-3					PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N						
METHYL HYDRAZINE	60-34-4	0.06		Y	N	QUINOLINE	91-22-5	0.006		Y	N						
METHYL IODIDE	74-88-4	1		Y	N	QUINONE	106-51-4	5		Y	N						
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y						
METHYL ISOCYANATE	624-83-9	0.1		Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y						
METHYL METHACRYLATE	80-62-6	10		Y	N	STYRENE	100-42-5	1		Y	N						
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	STYRENE OXIDE	96-09-3	1		Y	N						
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						
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						
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N						
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N						
MINERAL FIBERS		0	T	N	Y	TOLUENE	108-88-3	10		Y	N						
NAPHTHALENE	91-20-3	10	V	Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N						
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N						
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	TOXAPHENE	8001-35-2	0.01		Y	N						
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N						
NICKEL COMPOUNDS		1	U	N	Y	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N						
NICKEL REFINERY DUST		0.08	U	N	Y	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N						
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y	TRICHLOROETHYLENE	79-01-6	10		Y	N						
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	TRIETHYLAMINE	121-44-8	10		Y	N						
NITROPROPANE, [2-]	79-46-9	1		Y	N	TRIFLURALIN	1582-09-8	9		Y	Y						

Legend	
Group ID	Aggregate Group Name
A	Asbestos
B	Cresols/Cresylic Acid (isomers and mixtures)
C	2,4 - D, Salts and Esters
D	Dibenzofurans, Dibenzodioxins
E	4, 6 Dinitro-o-cresol, and Salts
F	Lindane (all isomers)
G	Xylenes (all isomers and mixtures)
H	Antimony Compounds
I	Arsenic Compounds
J	Beryllium Compounds
K	Cadmium Compounds
L	Chromium Compounds
M	Cobalt Compounds
N	Coke Oven Emissions
O	Cyanide Compounds
P	Glycol Ethers
Q	Lead Compounds (except elemental Lead)
R	Manganese Compounds
S	Mercury Compounds
T	Fine Mineral Fibers
U	Nickel Compounds
V	Polycyclic Organic Matter
W	Selenium Compounds
X	Polychlorinated Biphenyls (Aroclors)
Y	Radionuclides

Notes  
 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

Mr. Michael Welker  
Environmental Supervisor  
TG Missouri  
2200 Plattin Road  
Perryville, MO 63775

RE: New Source Review Permit - Project Number: 2015-05-016

Dear Mr. Welker:

Enclosed with this letter is your permit to construct. Please study it carefully. 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 amended 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 have any questions regarding this permit, please do not hesitate to contact Chad Stephenson, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:cs

Enclosures

c: Southeast Regional Office  
PAMS File: 2015-05-016

Permit Number: