STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number: 082014-016

Project Number: 2014-05-032
Installation Number:157-0019

Parent Company: TG Missouri Corp.

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

Installation Name: TG Missouri Corp.

Installation Address: 2200 Plattin Road, Perryville, MO 63775

Location Information: Perry County, Land Grant 844, T35N, R10E

Application for Authority to Construct was made for:
a new compact plating system designated as PMF4 process. This is a system for applying decorative reflective surface finishes to plastic automobile trim parts. It is very similar to the PMF3 process installed under NSR Permit 042012-008. 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.

JUL 26 2014

EFFECTIVE DATE

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.

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 Corp.
Perry County, Land Grant 844, T35N, R10E

1. Superseding Condition
   The conditions of this permit supersede all special conditions found in the previously issued construction permit 042012-008A 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.

Table 1: Installation HAP Emission Units

Emission Point	Description
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-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
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)

SPECIAL CONDITIONS:

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

Emission Point	Description
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

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.

3. Control Device Requirement – Composite Mesh Pad System

A. TG Missouri shall control emissions from the emission units in Table 2 using the respective composite mesh pad system.

Table 2: Emission Units Controlled by Composite Mesh Pad System

Emission Unit	Description	Emission Point
EP-206	PMF1 Chrome etching	CD-206
EP-210	PMF1 Decorative chrome plating	
EP-220	PMF2 Chrome etching	CD-220
EP-224	PMF2 Decorative chrome plating	
EP-228	PMF3 Chrome etching	CD-7
EP-232	PMF3 Decorative chrome plating	
EP-234	PMF4 Chrome etching	CD-234
EP-238	PMF4 Decorative chrome plating	CD-238

SPECIAL CONDITIONS:

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

B. Each composite mesh-pad system and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. Each composite mesh-pad system shall be equipped with a gauge or meter that indicates air pressure drop across the control device. These gauges and meters shall be located in such a way they may be easily observed by Department of Natural Resources' personnel.

C. TG Missouri shall monitor and record the operating pressure drop across each composite mesh-pad system at least once every twenty-four (24) hours. The operating pressure drop shall be maintained within the specifications of MACT Subpart N §63.343.

D. TG Missouri shall determine the outlet chromium concentration according to MACT Subpart N §63.343.

E. TG Missouri shall maintain an operating and maintenance log for the composite mesh-pad systems, which shall include the following:
   1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
   3) A record of regular inspection schedule, the date and results of all inspections, including any actions or maintenance activities that result from the inspection. Either paper copy or electronic formats are acceptable.

4. Control Device Requirement – Mesh Pad Mist Eliminator

A. TG Missouri shall control emissions from the emission units in Table 3 using the respective mesh pad mist eliminator.

Table 3: Emission Units Controlled by Mesh Pad Mist Eliminator

Emission Unit	Description	Emission Point
EP-207	PMF1 Hydrochloric acid catalyst	CD-207
EP-208	PMF1 Copper plating	
EP-209	PMF1 Nickel plating	
EP-221	PMF2 Hydrochloric acid catalyst	CD-221
EP-222	PMF2 Copper plating	
EP-223	PMF2 Nickel plating	

SPECIAL CONDITIONS:

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

B. Each mesh pad mist eliminator and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. Each mesh pad mist eliminator shall be equipped with a gauge or meter that indicates the air pressure drop across the control device. These gauges and meters shall be located in such a way they may be easily observed by Department of Natural Resources' personnel.

C. TG Missouri shall monitor and record the operating pressure drop across each mesh pad mist eliminator at least once every twenty-four (24) hours. The operating pressure drop shall be maintained within the specifications of the manufacturer's performance warranty, which shall be kept on site.

D. TG Missouri shall maintain an operating and maintenance log for each mesh pad mist eliminator, 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.

5. Control Device Requirement – Packed Bed Scrubber

A. TG Missouri shall control emissions from the emission units in Table 4 using the respective packed bed scrubber.

Table 4: Emission Units Controlled by Packed Bed Scrubber

Emission Unit	Description	Emission Point
EP-211	PMF1 Nitric acid exfoliate	CD-211
EP-225	PMF2 Nitric acid exfoliate	CD-225

B. Each packed bed scrubber and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. Each packed bed scrubber shall be equipped with a gauge or meter that indicates the solution pH and air pressure drop across the control device. These gauges and meters shall be located in such a way they may be easily observed by Department of Natural Resources' personnel. pH may also be sampled manually.

SPECIAL CONDITIONS:

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

C. TG Missouri shall monitor and record the solution pH of each packed bed scrubber at least once every twenty-four (24) hours. The pH shall be maintained within the specifications of the manufacturer's performance warranty, which shall be kept on site.

D. TG Missouri shall monitor and record the operating pressure drop across each packed bed scrubber at least once every twenty-four (24) hours. The operating pressure drop shall be maintained within the specifications of the manufacturer's performance warranty, which shall be kept on site.

E. TG Missouri shall maintain an operating and maintenance log for each packed bed scrubber, 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.

6. Control Device Requirement – Packed Bed Scrubber with Mist Eliminator

A. TG Missouri shall control emissions from the emission units in Table 5 using the respective packed bed scrubber with mist eliminator.

Table 5: Emission Units Controlled by Packed Bed Scrubber with Mist Eliminator

Emission Unit	Description	Emission Point
EP-229	PMF3 Hydrochloric acid catalyst	CD-8
EP-230	PMF3 Copper plating	
EP-231	PMF3 Nickel plating	CD-9
EP-233	PMF3 Nitric acid exfoliate	CD-10
EP-235	PMF4 Hydrochloric acid catalyst	CD-235
EP-236	PMF4 Copper plating	CD-236
EP-237	PMF4 Nickel plating	CD-237a and CD 237b
EP-239	PMF4 Nitric acid exfoliate	CD239

B. Each packed bed scrubber with mist eliminator and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. Each packed bed scrubber with mist eliminator shall be equipped with a gauge or meter that indicates the solution pH and air pressure drop across the control device. These gauges and meters shall be located in such a way they may be easily observed by Department of Natural Resources' personnel.

SPECIAL CONDITIONS:

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

C. TG Missouri shall monitor and record the solution pH of each packed bed scrubber with mist eliminator at least once every twenty-four (24) hours. The pH shall be maintained within the specifications of the manufacturer's performance warranty, which shall be kept on site.

D. TG Missouri shall monitor and record the operating pressure drop across each packed bed scrubber with mist eliminator at least once every twenty-four (24) hours. The operating pressure drop shall be maintained within the specifications of the manufacturer's performance warranty, which shall be kept on site.

E. TG Missouri shall maintain an operating and maintenance log for each packed bed scrubber with mist eliminator, 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.

7. Capture Device Requirement – PMF3 and PMF4 Capture and Removal Efficiencies

A. TG Missouri shall maintain 100 percent capture efficiency and at least 90% removal efficiency for each emission unit in Table 6.

Table 6: Emission Units Which Must Have 100% Capture Efficiency and at Least 90% Removal Efficiency

Emission Unit	Description	Control Device
EP-228	PMF3 Chrome etching	CD-7
EP-229	PMF3 Hydrochloric acid catalyst	CD-8
EP-230	PMF3 Copper plating	CD-8
EP-231	PMF3 Nickel plating	CD-9
EP-232	PMF3 Decorative chrome plating	CD-7
EP-233	PMF3 Nitric acid exfoliate	CD-10
EP-234	PMF4 Chrome etching	CD-234
EP-235	PMF4 Hydrochloric acid catalyst	CD-235
EP-236	PMF4 Copper plating	CD-236
EP-237	PMF4 Nickel plating	CD-237a and CD-237b
EP-238	PMF4 Decorative chrome plating	CD-238
EP-239	PMF4 Nitric acid exfoliate	CD-239

SPECIAL CONDITIONS:

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

B. TG Missouri shall demonstrate capture efficiency according to the procedures of EPA Test Method 204, *Criteria for and Verification of a Permanent or Temporary Total Enclosure*, set forth in 40 CFR Part 51, Appendix M.

C. TG Missouri shall maintain an operating and maintenance log associated with each capture device which shall include the following:
   1) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

D. TG Missouri shall maintain a copy of manufacturer's performance warranties for the control devices, which shall be kept on site, to demonstrate removal efficiency.

8. Operational Requirement
TG Missouri shall keep the solvents, coatings, and acids in sealed containers whenever the materials are not in use. TG Missouri shall provide and maintain suitable, easily read, permanent markings on all solvent, coating, and acid containers used with this equipment.

9. Record Keeping and Reporting Requirements
   A. TG Missouri shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data 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: 2014-05-032
Installation ID Number: 157-0019
Permit Number:

TG Missouri Corporation
2200 Plattin Road
Perryville, MO 63775

Complete: May 19, 2014

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

Perry County, Land Grant 844, T35N, R10E

REVIEW SUMMARY

- TG Missouri Corporation has applied for authority to install a new compact plating system designated as PMF4 process. This is a system for applying decorative reflective surface finishes to plastic automobile trim parts. It is very similar to the PMF3 process installed under NSR Permit 042012-008.

- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are hexavalent chromium, hydrochloric acid (hydrogen chloride), and nickel compounds.

- None of the New Source Performance Standards (NSPS) apply to the installation.

- None of the NESHAPs apply to this installation.

- MACT regulation 40 CFR 63 Subpart N, *National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks*, applies to the decorative chrome plating step (EP-238). MACT regulation 40 CFR 63 Subpart WWWWWW (6W), *National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*, applies to the nickel plating step (EP-237). No other MACT regulations apply. 40 CFR 63 Subpart PPPP, *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products*, does not apply because this installation is not major for HAP.

- 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, does not apply, per 10 CSR 10-6.400(1)(B)15, because all emission units to be installed are required by this permit to have control devices which control at least 90% of particulate matter emissions.

- The following control devices are being used to control the PM, chromium, nickel and hydrochloric acid emissions from the equipment in this permit:
    - A 68,000 cubic feet per minute (cfm) three-stage composite mesh pad system (CD-234) on the chrome etching step (EP-234);
    - A 32,000 cfm horizontal cross-flow wet packed bed scrubber with mist eliminator (CD-235) on the hydrochloric acid catalyst step (EP-235);
    - A 72,000 cfm horizontal cross-flow wet packed bed scrubber with mist eliminator (CD-236) on the copper plating step (EP-236);
    - A 44,000 cfm horizontal cross-flow wet packed bed scrubber with mist eliminator (CD-237a) and a 67,000 cfm horizontal cross-flow wet packed bed scrubber with mist eliminator (CD-237b) on the nickel plating step (EP-237);
    - A 60,000 cfm three-stage composite mesh pad system (CD-238) on the decorative chrome plating step (EP-238); and
    - A 58,000 cfm horizontal cross-flow wet packed bed scrubber with mist eliminator (CD-239) on the nitric strip (exfoliate) step (EP-239).

- 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 conditioned below de minimis levels.

- 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.

- Emissions testing may be required for the new equipment. Please refer to MACT Subpart N and Subpart 6W for possible testing associated with the MACT requirements.

- 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 Corporation, formerly known as TG (USA) Corporation, is a division of Toyoda Gosei which manufactures plastic, rubber and metal automobile parts and accessories in Perryville. The installation is a major source for operating permits, but all construction permits issued to it have been de minimis or minor. An application to renew its Part 70 operating permit was received October 1, 2012.

The following New Source Review and Operating permits have been issued to TG Missouri Corporation from the Air Pollution Control Program.

Table 7: 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	Water transfer imaging, clearcoat spray booth and a chromium elec troplating process (PMF 2)
012012-010	Installation of blackout paint booth
042012-008	Installation of compact plating system PMF3
042012-008A	True-up to actual

TG Missouri received two Notices of Violation (NOV) in 2010 related to the first chrome plating line permitted under 022009-011.

PROJECT DESCRIPTION

TG Missouri Corporation has applied for authority to install a new compact plating system designated as PMF4 process. This is a system for applying decorative reflective surface finishes to plastic automobile trim parts, and is very similar to the PMF3 process installed under NSR Permit 042012-008. The process moves plastic parts sequentially through etch, catalyst, copper plate, nickel plate, decorative chrome plate, and nitric strip (exfoliate) steps, with a water wash step at the beginning and after each of the other steps.

EMISSIONS/CONTROLS EVALUATION

The following table lists the emission points in the new plating process, along with their MHDRs and control devices.

Table 8: PFM 4 Plating Process Emission Points

Designation	Description	Maximum Hourly Design Rate	Control Device	Control Device Description
EP-234	Chrome Etching	2,932,500 dscf 3,000 amp-hrs	CD-234	Composite Mesh Pad Scrubber
EP-235	Hydrochloric Acid Catalyst	94.3 ft^2	CD-235	Packed Bed Scrubber w/ Mist Eliminator
EP-236	Copper Plating Tanks	5,310,000 dscf	CD-236	Packed Bed Scrubber w/ Mist Eliminator
EP-237	Nickel Plating Tanks	27,747 amp-hrs	CD-237a & CD-237b	Packed Bed Scrubbers w/ Mist Eliminator
EP-238	Decorative Chrome Plating Tanks	3,399,000 dscf 3,663 amp-hrs	CD-238	Composite Mesh-Pad Scrubber
EP-239	Nitric Acid Exfoliate	138 ft^2	CD-239	Packed Bed Scrubber w/ Mist Eliminator

N/A = Not Applicable, dscf = dry standard cubic feet, ft^2 = square feet, amp-hrs = ampere-hours

Most of 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, Section 12.20 *Metallurgical Industry/Electroplating* (July1996). The factor for hexavalent chromium was taken from 40 CFR 63 Subpart N *National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks*; the controlled factor of 2.6 E^{-6} from §63.342(d)(2) was used. PM_{10} and $PM_{2.5}$ were assumed equal to PM.

The following table provides an emissions summary for this project. Existing potential emissions were taken from NSR Permit 042012-008A. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 9: Emissions Summary (tons per year)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/D	N/A	1.23	N/D
PM_{10}	15.0	20.0	3.14	1.23	4.37
$PM_{2.5}$	10.0	N/D	3.06	1.23	N/D
SOx	40.0	0.14	0.04	N/A	0.14
NOx	40.0	19.43	4.81	N/A	19.43
VOC	40.0	531.78	89.57	N/A	531.78
CO	100.0	7.63	0.79	N/A	7.63
GHG (CO_2e)	100,000	N/A	N/A	N/A	N/A
GHG (mass)	250.0	N/A	N/A	N/A	N/A
Largest individual HAP (HCl)	10.0	<10.0	N/D	1.93	<10.0
Total HAPs	25.0	<25.0	2.05	2.49	<25.0

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 conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

TG Missouri Corporation 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

SPECIFIC REQUIREMENTS

- *MACT Regulations*, 10 CSR 10-6.075
    - *National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks,* 40 CFR Part 63, Subpart N
    - *National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*, 40 CFR Part 63, Subpart WWWWWW

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.

_____ _____

Cheryl Steffan Date
New Source Review Unit

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 7, 2014, received May 13, 2014, designating TG Missouri Corporation as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment A – Combined HAPs Compliance Worksheet

TG Missouri
Perry County, LG844, T35N, R10E
Project Number: 2014-05-032
Installation ID Number: 157-0019
Permit Number:

This sheet covers the period from _____ to _____. (Copy this sheet as needed.)
(month, year) (month, year)

Column 1	Column 2 (a)	Column 3	Column 4	Column 5
Material Used, (Name, HAP CAS #)	Amount of Material Used (Include Units)	Density (lbs/gal)	HAP Content (Weight %)	HAP Emissions (Tons)
(b) Chromium Compound Emissions from CD-206, CD-220, CD-7, CD-234 and CD238				
Nickel Compound Emissions from Attachment B in Tons				
(c) Natural Gas Combustion Combined HAP Emissions in Tons				
(d) Total HAP Emissions Calculated for this Month in Tons				
(e) 12-Month HAP Emissions Total from Previous Month's Worksheet in Tons				
(f) Monthly HAP Emissions Total (d) from Previous Year's Worksheet in Tons				
(g) Current 12-month Total of HAP Emissions in Tons: (g) = [(d) + (e) - (f)]				

(a) 1) If usage is in tons - [Column 2] x [Column 4] = [Column 5];
2) If usage is in pounds - [Column 2] x [Column 4] x [0.0005] = [Column 5];
3) If usage is in gallons - [Column 2] x [Column 3] x [Column 4] x [0.0005] = [Column 5];

(b) Calculate the monthly chromium emissions (tons) using the permitted emission factor from 40 CFR 63 Subpart N, or AP-42 Section 12.20 *Electroplating,*respectively. Also record this month's nickel compound emissions from Attachment B.

(c) Calculate the monthly combined HAP emissions from natural gas combustion. The emission factor is 1.888 pounds of combined HAPs per million cubic feet of natural gas. Convert to tons.

(d) Summation of [Column 5, (b), and (c)] in Tons;

(e) 12-Month HAP emissions (g) from last month's Attachment A in Tons;

(f) Monthly HAP emissions total (d) from the previous year's Attachment A in Tons;

(g) Calculate the new 12-month combined HAPs emissions total. A 12-Month HAP emissions total of less than 25.0 tons indicates compliance.

Attachment B – Individual HAP Compliance Worksheet

TG Missouri
Perry County, LG844, T35N, R10E
Project Number: 2014-05-032
Installation ID Number: 157-0019
Permit Number:

HAP Name: _____ CAS No.: _____

SMAL for this HAP from Appendix B in tons per year _____

This sheet covers the month of _____ in the year _____. (Copy this sheet as needed.)

Column 1 (a)	Column 2 (b)
List materials that contain this HAP (Name, Type)	HAP emissions from Attachment A [Column 5] (in Tons)

(c) Total Individual HAP Emissions for this Month, Tons	
(d) 12-Month Individual HAP Emissions Total (f) from Previous Month's Worksheet B, Tons	
(e) Monthly Individual HAP Emissions Total (c) from Previous 12 Month's Worksheet B, Tons	
(f) Current 12-month Total of HAP Emissions in Tons: [(c) + (d) - (e)]	

(a) Individually list each material which emits this specific HAP identified from Appendix A.
(b) Record the Individual HAP emissions already calculated in Attachment A in [Column 5] in Tons;
(c) Summation of [Column 2] in Tons;
(d) Record the previous 12-Month individual HAP emission total (f) from last month's Attachment B, in Tons;
(e) Record the monthly HAP emission total (c) from previous 12-Month Attachment B, in Tons:
(f) Calculate the new 12-month individual HAP emissions total. A 12-Month individual HAP emissions total of less than SMAL indicates compliance.

APPENDIX A

Abbreviations and Acronyms

%.....percent
ºF .....degrees Fahrenheit
acfm.....actual cubic feet per minute
BACT.....Best Available Control Technology
BMPs.....Best Management Practices
Btu.....British thermal unit
CAM.....Compliance Assurance Monitoring
CAS .....Chemical Abstracts Service
CEMS.....Continuous Emission Monitor System
CFR.....Code of Federal Regulations
CO.....carbon monoxide
CO_2.....carbon dioxide
CO_2e.....carbon dioxide equivalent
COMS .....Continuous Opacity Monitoring System
CSR .....Code of State Regulations
dscf.....dry standard cubic feet
EIQ.....Emission Inventory Questionnaire
EP .....Emission Point
EPA.....Environmental Protection Agency
EU.....Emission Unit
fps.....feet per second
ft .....feet
GACT.....Generally Available Control Technology
GHG.....Greenhouse Gas
gpm .....gallons per minute
gr .....grains
GWP .....Global Warming Potential
HAP .....Hazardous Air Pollutant
hr .....hour
hp.....horsepower
lb.....pound
lbs/hr .....pounds per hour
MACT.....Maximum Achievable Control Technology
µg/m^3 .....micrograms per cubic meter
m/s ..... meters per second
Mgal ..... 1,000 gallons
MW ..... megawatt
MHDR..... maximum hourly design rate
MMBtu.... Million British thermal units
MMCF..... million cubic feet
MSDS ..... Material Safety Data Sheet
NAAQS... National Ambient Air Quality Standards
NESHAPs ..... National Emissions Standards for Hazardous Air Pollutants
NO_x..... nitrogen oxides
NSPS..... New Source Performance Standards
NSR..... New Source Review
PM ..... particulate matter
$PM_{2.5}$..... particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10} ..... particulate matter less than 10 microns in aerodynamic diameter
ppm..... parts per million
PSD ..... Prevention of Significant Deterioration
PTE..... potential to emit
RACT..... Reasonable Available Control Technology
RAL ..... Risk Assessment Level
SCC..... Source Classification Code
scfm ..... standard cubic feet per minute
SIC..... Standard Industrial Classification
SIP..... State Implementation Plan
SMAL ..... Screening Model Action Levels
SO_x..... sulfur oxides
SO_2..... sulfur dioxide
tph..... tons per hour
tpy..... tons per year
VMT..... vehicle miles traveled
VOC..... Volatile Organic Compound

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
AMINOBIPHENYL, [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	CHLOROBENZILATE	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 EMMISIONS	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	DICHLOROETHANE, [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
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N
HEXANE, [N-]	110-54-3	10		Y	N
HYDRAZINE	302-01-2	0.004		N	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N
HYDROQUINONE	123-31-9	1		Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N
ISOPHORONE	78-59-1	10		Y	N
LEAD COMPOUNDS		0.01	Q	N	Y
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N
MALEIC ANHYDRIDE	108-31-6	1		Y	N
MANGANESE COMPOUNDS		0.8	R	N	Y
MERCURY COMPOUNDS		0.01	S	N	N
METHANOL	67-56-1	10		Y	N
METHOXYCHLOR	72-43-5	10	V	Y	Y
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N
METHYL CHLORIDE	74-87-3	10		Y	N
METHYL ETHYL KETONE (Delisted)	78-93-3				
METHYL HYDRAZINE	60-34-4	0.06		Y	N
METHYL IODIDE	74-88-4	1		Y	N
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N
METHYL ISOCYANATE	624-83-9	0.1		Y	N
METHYL METHACRYLATE	80-62-6	10		Y	N
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N
METHYLCYCLCOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N
MINERAL FIBERS		0	T	N	Y
NAPHTHALENE	91-20-3	10	V	Y	N
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y
NICKEL COMPOUNDS		1	U	N	Y
NICKEL REFINERY DUST		0.08	U	N	Y
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y
NITROBENZENE	98-95-3	1		Y	N
NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N
NITROPHENOL, [4-]	100-02-7	5		Y	N
NITROPROPANE, [2-]	79-46-9	1		Y	N
NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N
NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N
NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N
OCTACHLORONAPTHALENE	2234-13-1	0.01	V	Y	N
PARATHION	56-38-2	0.1		Y	Y
PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y
PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N
PENTACHLOROPHENOL	87-86-5	0.7		Y	N
PHENOL	108-95-2	0.1		Y	N
PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N
PHOSGENE	75-44-5	0.1		Y	N
PHOSPHINE	7803-51-2	5		N	N
PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N
PHTHALIC ANHYDRIDE	85-44-9	5		Y	N
POLYCYLIC ORGANIC MATTER		0.01	V	Y	N
PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y
PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N
PROPIONALDEHYDE	123-38-6	5		Y	N
PROPOXUR [BAYGON]	114-26-1	10		Y	Y
PROPYLENE OXIDE	75-56-9	5		Y	N
PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N
QUINOLINE	91-22-5	0.006		Y	N
QUINONE	106-51-4	5		Y	N
RADIONUCLIDES		Note 1	Y	N	Y
SELENIUM COMPOUNDS		0.1	W	N	Y
STYRENE	100-42-5	1		Y	N
STYRENE OXIDE	96-09-3	1		Y	N
TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y
TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N
TETRACHLOROETHYLENE	127-18-4	10		N	N
TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N
TOLUENE	108-88-3	10		Y	N
TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N
TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N
TOXAPHENE	8001-35-2	0.01		Y	N
TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N
TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N
TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N
TRICHLOROETHYLENE	79-01-6	10		Y	N
TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N
TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N
TRIETHYLAMINE	121-44-8	10		Y	N
TRIFLURALIN	1582-09-8	9		Y	Y
TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
VINYL ACETATE	108-05-4	1		Y	N
VINYL BROMIDE	593-60-2	0.6		Y	N
VINYL CHLORIDE	75-01-4	0.2		Y	N
XYLENE, [META-]	108-38-3	10	G	Y	N
XYLENE, [ORTHO-]	95-47-6	10	G	Y	N
XYLENE, [PARA-]	106-42-3	10	G	Y	N
XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N

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

Ms. Vickie Heberlie
Environmental Specialist
TG Missouri Corp.
2200 Plattin Road
Perryville, MO 63775

RE: New Source Review Permit - Project Number: 2014-05-032

Dear Ms. Heberlie:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your 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 Cheryl Steffan, at the Department of Natural Resources' 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

Susan Heckenkamp
New Source Review Unit Chief

SH:csl

Enclosures

c: Southeast Regional Office
PAMS File: 2014-05-032

Permit Number: