

## 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: **052007-002** Project Number: 2007-03-015

Parent Company: Dana Corporation

Parent Company Address: 4500 Dorr Street, Toledo, OH 43615

Installation Name: Torque Traction Integration Technologies, Inc.

Installation Address: 2400 Lemone Industrial Boulevard, Columbia, MO 65201

Location Information: Boone County, S20, T48, R12

Application for Authority to Construct was made for:  
The installation of a Model 80 Line paint spray booth (EP-31) and operation of two (2) puddle welders. This review was conducted in accordance with Section (6), 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.

MAY 4 2007

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James K. Karmel", written over a horizontal line.  
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 this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 15 days after the actual start up of this (these) air contaminant source(s).

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 source(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.

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:

Project Number: 2007-03-015

Parent Company: Dana Corporation

Parent Company Address: 4500 Dorr Street, Toledo, OH 43615

Installation Name: Torque Traction Integration Technologies, Inc.

Installation Address: 2400 Lemone Industrial Boulevard, Columbia, MO 65201

Location Information: Boone County, S20, T48, R12

Application for Authority to Construct was made for:

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EFFECTIVE DATE

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DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

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Permit No.	
Project No.	2007-03-015

#### SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions: *The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Torque Traction Integration Technologies, Inc.  
Boone County, S20, T48, R12

#### 1. **Superseding Condition**

The conditions of this permit supersede Special Conditions 1 and 2 of Permit Number 0497-006, and Special Condition 1 of Permit Number 0992-013.

#### 2. **VOCs Emission Limitations**

- A. Torque Traction Integration Technologies, Inc. shall emit into the atmosphere less than 250 tons of Volatile Organic Compounds (VOCs) from the entire installation in any 12 - month rolling average period.
- B. Torque Traction Integration Technologies, Inc. shall maintain the monthly and the sum of the most recent consecutive 12 - month records of the VOC emissions from the entire installation. Torque Traction Integration Technologies, Inc. shall use Attachment "A", *Monthly VOC Compliance Tracking Records or an Air Pollution Control Program* approved equivalent form to demonstrate compliance with Special Condition Number 2.A. These records shall be maintained on-site for five (5) years and shall be made available to Missouri Department of Natural Resources' personnel upon request.
- C. Torque Traction Integration Technologies, Inc. shall report to the air pollution Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which *Monthly VOC Tracking Records* (Special Condition Number 2.B.) indicate that Torque Traction Integration Technologies, Inc. exceeded the limitation of Special Condition Number 2.A.

#### 3. **HAPs Emission Limitations**

- A. Torque Traction Integration Technologies, Inc. shall emit less than ten (10) tons individually or twenty-five (25) tons combined of Hazardous Air Pollutants (HAPs) from the entire installation in any consecutive 12-month rolling average period.

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Project No.	2007-03-015

**SPECIAL CONDITIONS:**

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

- B. Attachment B, Attachment C, and Attachment D or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 3.A. The records must include each individual HAP identified on a Material Safety Data Sheets (MSDS) for the HAP containing products in use in the entire installation. The total of the individual HAPs must add up to the total combined HAPs. Torque Traction Integration Technologies, Inc. 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 MSDS for all materials used.
- C. Torque Traction Integration Technologies, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 3.B. indicate that the source exceeds the limitation of Special Conditions Number 3.A.
- D. When considering using a new HAP containing paint or painting or coating supply item Torque Traction Integration Technologies, Inc. must calculate the potential emissions for each individual Hazardous Air Pollutant (HAP) in the alternative HAP material (paint). If the potential HAP emissions for the alternative paint is equal to or greater than the 10 tons per year for each individual HAP or 25 tons per year for total HAPs, or if the calculated potential amount of emissions is equal to or greater than the Screen Modeling Action Levels (SMAL) found in Attachment E for any chemical used then Torque Traction Integration Technologies, INC. must seek approval from the Air Pollution Control Program before use of the alternative paint. Attachment E may require periodic updating to current values. Current HAPs SMAL values can be obtained from the Air Pollution Control Programs State Toxicologist.

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Permit No.	
Project No.	2007-03-015

**SPECIAL CONDITIONS:**

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

**4. Control Device Conditions**

- A. Torque Traction Integration Technologies, Inc. shall control emissions from the welding with cartridge filters and Model 80 Paint Spray Booth with paint arresting pads as specified in the permit application. The cartridge filters and pads shall be operated and maintained in accordance with the manufacturer's specifications. The cartridge filters and pads 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 DNR employees may easily observe them. Replacement filters for the cartridge filters and pads shall be kept on hand at all times. The filters and pads shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- B. Torque Traction Integration Technologies, Inc. shall monitor and record the operating pressure drop across the cartridge drum filters and pad area at least once every 24 hours when the equipment is operating. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- C. Torque Traction Integration Technologies, Inc. shall maintain an operating and maintenance log for the cartridge filters and pad area which shall include the following:
  - a. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - b. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (6) REVIEW

Project Number: 2007-03-015  
Installation ID Number: 019-0066  
Permit Number:

Torque Traction Integration Technologies, Inc.  
2400 Lemone Industrial Boulevard  
Columbia, MO 65201

Complete: March 08, 2007  
Reviewed: April 27, 2007

Parent Company:  
Dana Corporation  
4500 Dorr Street  
Toledo, OH 43615

Boone County, S20, T48, R12

REVIEW SUMMARY

- Torque Traction Integration Technologies, Inc. has applied for authority to construct a paint line and 2 puddle welders.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are manganese compounds.
- None of the New Source Performance Standards (NSPS) applies to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Cartridge filters and paint arresting pad filters are being used to control the particulate emissions from the equipment in this permit.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. However, potential emissions of VOC and Particulate matter for this project are below de minimis levels. The plant requested an installation wide limitation for VOC and HAPs making this a Section 6 permit.
- This installation is located in Boone County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed for this review. No Screen 3 model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.
- Emissions testing is not required for the source.
- An Intermediate Operating Permit amendment is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Dana Corporation's Torque-Traction Integration Technologies, Inc. (TTIT) assembles automobile axles under SIC code 3714 at its plant in Boone County. The plant assembles axles for passenger vehicles and pickup trucks. After assembly, the plant applies black paint to some axles to inhibit corrosion during normal driving conditions. The plant has three basis operation that are sources of emissions: PM, VOC and HAP emissions from coating operations, PM and HAP emissions from welding operations, and combustion emissions from natural gas combustion.

Coating emissions are estimated on a mass balance basis for VOC's. The coating presently in use (Wilko 316.01) does not contain HAPs. The HAP emissions are from the welding operation. All VOCs present are assumed to be emitted during the drying or curing process. PM emissions are based on the transfer efficiency of the coating process in conjunction with the solids of the particular coating. All emission factors for natural gas combustion and welding are taken from AP-42 tables.

There are currently two coating lines operating at the facility. These include four application areas (booths) which use a water based coating. Also at this plant is an adhesive application, parts cleaning and a number of combustion units. The plant currently has four paint booths. The installation's Potential to Emit (PTE) calculations are below major source thresholds. The plant has accepted a regulatory limit to ensure emissions are below major source thresholds and to allow them flexibility in the event their coating formulations should change. The site has an Intermediate Operating Permit with a VOC limit less than 100 tons and a HAP limit less than 25 tons combined and less than 10 tons individually. The following permits have been issued to Torque Traction Integration Technologies, Inc. from the Air Pollution Control Program.

Table 1: Permitting actions for Torque Traction Integration Technologies, Inc.

Permit Number	Description
0699-028	Isopropanol Solvent Usage
OP	Intermediate Operating Permit expires 3/7/2012
0497-006	New axle paint line
0996-004	New Coating Line and sealant applicator
0396-003	New Coating Line
0992-013	Original Permit Issued

## PROJECT DESCRIPTION

One spray line is being added to the plant. It is being moved from a DANA plant in Buena Vista, Virginia. The line will use VOC based coating Wilko 316.01. The potential to emit for the spray booth was calculated by using actual emissions from the Virginia plant. The paint line has a power free conveyor system that moves the axle into and out of the paint booth. The operator presses a release button to initiate the cycle. At this point, the conveyor moves a new axle into the paint booth while at the same time moving the painted axle out of the booth ready to be loaded onto racks. The line speed for the conveyor is 30 feet per minute. The distance from the on deck stop to the stop in the paint booth is 13 feet 10 inches. According to plant data the axle takes 26 seconds to move into the paint booth (based on a conveyor speed of 0.5 feet per second times 13 feet with no waiting time for the conveyor to begin moving the axle). The minimum time to paint an axle is 29 seconds. Total cycle time is 55 seconds, which converts to a maximum hourly design rate of 65.6 axles per hour an annual rate of 573.8 thousand axles per line.

The annual usage for the VOC coating used at the Buena Vista plant was 18,592 gallons. The amount of coating was used to paint a total of 445,566 axles, for a usage rate of 41.7 gallons per thousand axles. The maximum hourly coating usage would therefore be calculated as follows:

Maximum Hourly production = 65.5 axles /hr Coating usage = 41.7 gal/1000 axle \*  
0.066 1000 axles/ hour = 2.7 gallons /hour

The application was used to establish new VOC limits for the installation by elimination production based emission limits in outstanding construction permits and resolve operating permit issues. Permit 0992-013 Special Condition 1 restricted axle paint to any particular booth, but is now limited by the installation wide HAP and VOC limits. Permit 0992-013 restricted amount of paint per booth and annual amount of paint consumed, but this is now limited by the installation wide HAP and VOC limits. Special Condition 1 restricted annual production of automobile axles will not be specifically limited. This condition is found in permit number 0497-006 Special Condition 1 and is in permit 0396-003 project description. The annual production of automobile axles is now limited by the installation wide HAP and VOC limits. The operating permit limit of less than 100 tons VOC restricts the amount of VOC emitted. However, this permit authorizes up to 250 tons of VOC. To achieve this rate the operating permit would need to be amended. This was authorized to give the plant the greatest amount of flexibility in paint and coating selection.

## EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Electric Arc Welding Table 12.19 (01/95) and from historical actual emissions from the Virginia plant, mass balance, and MSDS information. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table

provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions**	Existing Actual Emissions (2006)	**Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	0.16	0.0	1.82	N/A
SOx	40.0	N/A	0.0	N/A	N/A
NOx	40.0	N/A	0.5	N/A	N/A
VOC	40.0	146	4.6	104	<250
CO	100.0	0.34	0.4	N/A	N/A
HAPs	10.0/25.0	15.48	0.0	0.02	<10.0/25.0

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

\*\*The conditioned PTE amount came from permit number 0699-028 project number 1999-03-074.

Transfer efficiency of 65 percent was used for the manually operated air-assisted spray gun. Emissions from the spray booth will be filtered by a fiberglass filter and will be emitted through a roof stack. A control efficiency of 94 % was used and is based on vendor literature for the equivalent filter used at the Virginia plant.

#### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub>, VOC and HAPs are below de minimis levels for the project, but because of the plant wide limits this permit is a Section 6.

#### APPLICABLE REQUIREMENTS

Torque Traction Integration Technologies, 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  
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.
- *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 10-3.090

#### SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

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Timothy Paul Hines  
Environmental Engineer

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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 March 01, 2007 and received March 08, 2007 designating Dana Corporation as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey, dated March 19, 2007.









## Attachment E Screen Modeling Action Levels For Individual HAPs

Chemical	CAS#	Screen Modeling Action Levels (tons/year)	Synonyms
I. Acetaldehyde	75-07-0	9	Acetic Aldehyde, Aldehyde, Ethanal, Ethyl Aldehyde
Acetamide	60-35-5	1	Acetic Acid Amide, Ethanamide
Acetonitrile	75-05-8	4	Methyl Cyanide, Ethanenitrile, Cyanomethane
Acetophenone	98-86-2	1	Acetylbenzene, Methyl Phenyl Ketone, Hyppone
Acetylamino fluorine, [2-]	53-96-3	0.005	N-2-Fluorenyl Acetaminde, N-Fluroen-2-yl Acetamide, 2-Acetamideofluorene
Acrolein	107-02-8	0.04	Acrylaldehyde, Acrylic Aldehyde, Allyl Aldehyde, Propenal
Acrylamide	79-06-1	0.02	Propenamido, Acrylic Amide, Acrylamide Monomer, Ethylenecarboxamide
Acrylic Acid	79-10-7	0.6	Propenoic Acid, Ethylene Carboxylic Acid, Vinylformic Acid
Acrylonitrile	107-13-1	0.3	Vinyl Cyanide, Cyanoethylene, Propenenitrile
Allyl Chloride	107-05-1	1	1-Chloro-2-Propene, 3-Chloropropylene, Chloroallylene, Alpha-Propylene
Aminobiphenyl, [4-]	92-67-1	1	Biphenylene, P -Phenylaniline, Xenylamine, 4-Aminodiphenyl, 4-Biphenylamine
Aniline	62-53-3	1	Aminobenzene, Phenylamine, Aniline Oil, Aminophen, Arylamine
Anisidine, [Ortho-]	90-04-0	1	O-Methoxyaniline
Antimony Compounds (except those specifically listed)		5	Antimony (Pentachloride, Tribromide, Trichloride, Trifluoride)
Antimony Pentafluoride	7783-70-2	0.1	
Antimony Potassium Tartrate	28300-74-5	1	
Antimony Trioxide	1309-64-4	1	
Antimony Trisulfide	1345-04-6	0.1	
Arsenic and Inorganic Arsenic Compounds		0.005	Arsenic (Diethyl, Disulfide, Pentoxide, Trichloride, Trioxide, Trisulfide), Arsinine, Arsenous Oxide
Benz(a)Anthracene	56-55-3	0.01	
Benz(c)acridine	225-51-4	0.01	

## Attachment E Screen Modeling Action Levels For Individual HAPs

Benzene	71-43-2	2	Benzol, Phenyl Hydride, Coal Naphtha, Phene, Benxole, Cyclohexatriene
Benzidine	92-87-5	0.0003	4,4'-Biphenyldiamine, P-Diaminodiphenyl, 4,4'-Diaminobiphenyl, Benzidine Base
A. Benzo(a)pyrene	50-32-8	0.01	
B. Benzo(b)fluoranthene	205-992	0.01	
C. Benzotrichloride	98-07-7	0.006	Benzoic Trichloride, PhenylChloroform, Trichloromethylbenzene
Benzyl Chloride	100-44-7	0.1	Alpha-Chlorotoluene, Tolyl Chloride
Beryllium Compounds (except Beryllium Salts)		0.008	Beryllium (Acetate, Carbonate, Chloride, Fluoride, Hydroxide, Nitrate, Oxide)
Beryllium Salts		0.00002	
Bis(Chloroethyl)Ether	111-44-4	0.06	Dichloroethyl ether, Dichloroether, Dichloroethyl Oxide, BCEE
Bis(Chloromethyl)Ether	542-88-1	0.0003	BCME, Sym-Dichloromethyl ether, Dichloromethyl Ether, Oxybis-(Chloromethane)
Butadiene, [1,3-]	106-99-0	0.07	Biethylene, Bivinyll, Butadiene Monomer, Divinyl Erythrene, Vinylethylene
Butylene Oxide, [1,2-]	106-88-7	1	1,2-Epoxybutane, 1-Butene Oxide, 1,2-Butene Oxide, Butylene Oxide, Ethylethylene
Cadmium Compounds		0.01	Cadmium (Dust, Fume, Acetate, Chlorate, Chloride, Fluoride, Oxide, Sulfate, Sulfide)
Carbon Disulfide	75-15-0	1	Carbon Bisulfide, Dithiocarbonic Anhydride
Carbon Tetrachloride	56-23-5	1	Tetrachloromethane, Perchloromethane
Carbonyl Sulfide	463-58-1	5	Carbon Oxide Sulfide, Carbonoxysulfide
Catechol	120-80-9	5	Pyrocatechol, O-Dihydroxybenzene
Chloramben	133-90-4	1	3-Amino-2,5-Dichlorobenzoic Acid, Amben, Amiben*, Vegiben* (*Trademark)
Chlordane	57-74-9	0.01	ENT9932, Octachlor
Chlorine	7782-50-5	0.1	Bertholite
Chloroacetic Acid	79-11-8	0.1	Monochloroacetic Acid, Chloroethanoic Acid
Chloroacetophenone, [2-]	532-27-4	0.06	Phenacyl Chloride, Chloromethyl Phenyl Ketone, Tear Gas, Mace
Chlorobenzilate	510-15-6	0.4	Ethyl-4,4'-Dichlorobenzilate, Ethyl-4,4'-Dichlorophenyl Glycollate
Chloroform	67-66-3	0.9	Trichloromethane
Chloromethyl Methyl Ether	107-30-2	0.1	CMME, Methyl Chloromethyl Ether, Chloromethoxymethane, Monochloromethyl

Attachment E Screen Modeling Action Levels For Individual HAPs

			Ether
Chloroprene	126-99-8	1	2-Chloro-1,3-Butadiene, Chlorobutadiene, Neoprene Rubber Compound
Chromic Chloride	10025-73-7	0.1	
Chromium Compounds (except Hexavalent)		5	Chromium, Chromium(II) Compounds, Chromium (III) Compounds
Chromium Compounds, Hexavalent		0.002	Chromium (VI)
Chrysene	218-01-9	0.01	
Cobalt Carbonyl	12010-68-1	0.1	
Cobalt Metal (and compounds, except those specifically listed)		0.1	Cobalt (Bromide, Chloride, Diacetate, Formate, Nitrate, Oxide, Sulfamate)
Coke Oven Emissions	8007-45-2	0.03	Coal Tar, Coal Tar Pitch, Coal Tar Distillate
Cresol, [Meta-]	108-39-4	1	3-Cresol, M-Cresylic Acid, 1-Hydroxy-3-Methylbenzene, M-Hydroxytoluene
Cresol, [Ortho-]	95-48-7	1	2-Cresol, O-Cresylic Acid, 1-Hydroxy-2-Methylbenzene, 2-Methylphenol
Cresol, [Para-]	106-44-5	1	4-Cresol, P-Cresylic Acid, 1-Hydroxy-4-Methylbenzene, 4-Hydroxytoluene
Cresols/ Cresylic Acid (isomers and mixture)	1319-77-3	1	
Cyanide Compounds (except those specifically listed)	20-09-7	5	Cyanide (Barium, Chlorine, Free, Hydrogen, Potassium, Silver, Sodium, Zinc)
DDE (p,p'-Dichlorodiphenyl Dichloroethylene)	72-55-9	0.01	
Di(2-Ethylhexyl)Phthalate, (DEHP)	117-81-7	5	Bis(2-ethylhexyl)Phthalate, Di(2-Ethylhexyl)Phthalate, DOP, Di-Sec-Octyl Phthalate
Diaminotoluene, [2,4-]	95-80-7	0.02	2,4-Toluene Diamine, 3-Amino-Para-Toluidine, 5-Amino-Ortho-Toluidine
Diazomethane	334-88-3	1	Azimethylene, Diazirine
Dibenz(a,h)anthracene	53-70-3		
Dibenzofuran	132-64-9	5	Diphenylene Oxide
Dibenzopyrene, [1,2:7,8]	189-55-9		
Dibromo-3-Chloropropane, [1,2-]	96-12-8	0.01	DBCP
Dibromomethane, [1,2-]	106-93-4	0.1	Ethylene Dibromide, Ethylene Bromide, Sym-Dibromoethane

Attachment E Screen Modeling Action Levels For Individual HAPs

Dichlorobenzene, [1,4-]	106-46-7	3	1,4-Dichloro-P-DCB, 1-4-DCB, PDB, PDCB
Dichlorobenzidene, [3,3-]	91-94-1	0.2	4,4'-Diamino-3,3'-Dichlorobiphenyl, 3,3'-Dichlorobiphenyl-4,4'-Diamine, DCB
Dichloroethane, [1,1-]	75-34-3	1	Ethylidene Dichloride, 1,1-Ethylidene Dichloride, Asymmetrical Dichlorethane
Dichloroethane, [1,2-]	107-06-2	0.8	Ethylene Dichloride, Glycol Dichloride, Ethylene Chloride
Dichloroethylene, [1,1-]	75-35-4	0.4	Vinylidene Chloride, DCE, VDC
Dichloropropane, [1,2-]	78-87-5	1	Propylene Dichloride
Dichloropropene [1,3-]	542-75-6	1	1,3-Dichloropropylene, Alpha-Chlorallyl Chloride
Dichlorvos	62-73-7	0.2	DDVP, 2,2-Dichlorovinyl dimethylphosphate
Diethanolamine	11-42-2	5	Bis(2-Hydroxyethyl)Amine, 2,2'-Dihydroxydiethylamine, Di(2-Hydroxyethyl)Amine
Diethyl Sulfate	64-67-5	1	Diethyl Ester Sulfuric Acid, Ethyl Sulfate
Dimethoxybenzidine, [3,3-]	119-90-4	0.1	Fast Blue B Base, Dianisidine, O-Dianisidine
Dimethylbenz(a)anthracene, [7,12]	57-97-6	0.01	
Dimethyl Benzidine, [3,3-]	119-93-7	0.008	O-Tolidine, Bianisidine, 4,4'-Diamino-3,3'-Dimethylbiphenyl, Diaminoditoyl
Dimethyl Carbamoyl Chloride	79-44-7	0.02	DMCC, Chloroformic Acid Dimethyl Amide, Dimethyl Carbamyl Chloride
Dimethyl Formamide	68-12-2	1	DMF, Formyldimethylamine
Dimethyl Hydrazine, [1,1-]	57-14-7	0.008	Unsymmetrical Dimethylhydrazine, UDMH, Dimazine
Dimethyl Sulfate	77-78-1	0.1	Sulfuric Acid Dimethyl Ester, Methyl Sulfate
Dimethylaminoazobenzene, [4-]	60-11-7	1	N,N-Dimethyl-P-Phenylazo-Aniline, Benzeneazo Dimethylaniline
Dimethylaniline, [N,N-]	121-69-7	1	N,N-Diethyl Aniline, N,N-Dimethylphenylamine, DMA
Dinitro-O-Cresol, [4,6-] and salts	534-52-1	0.1	DNOC, 3,5-Dinitro-O-Cresol, 2-Methyl-4,6-Dinitrophenol
Dinitrophenol, [2,4-]	51-28-5	1	DNP
Dinitrotoluene, [2,4-]	121-14-2	0.02	Dinitrotoluol, DNT, 1-Methyl-2,4-Dinitrobenzene
Dioxane, [1,4-]	123-91-1	6	1,4-Diethyleneoxide, Diethylene Ether, P-Dioxane
Diphenylhydrazine, [1,2-]	122-66-7	0.09	Hydrazobenzene, N,N'-Diphenylhydrazine, N,N'-Bianiline, 1,1'-Hydrodibenzene
Diphenylmethane Diisocyanate, [4,4-]	101-68-8	0.1	Methylene Bis(Phenylisocyanate), Methylene Diphenyl Diisocyanate, MDI
Epichlorohydrin	106-89-8	2	1-Chloro-2,3-Epoxypropane, EPI, Chloropropylene Oxide, Chloromethyloxirane
Ethyl Acrylate	140-88-5	1	Ethyl Propenoate, Acrylic Acid Ethyl Ester

### Attachment E Screen Modeling Action Levels For Individual HAPs

Ethylene Imine (Aziridine)	151-56-4	0.003	Azacyclopropane, Dimethyleneimine, Ethylenimine, Vinylamine, Azirane
Ethylene Oxide	75-21-8	0.1	1,2-Epoxyethane, Oxirane, Dimethylene Oxide, Anprolene
Ethylene Thiourea	96-45-7	0.6	2-Imidazolidinethione, ETU
Fluomine	62207-76-5	0.1	
Formaldehyde	50-00-0	2	Oxymethylene, Formic Aldehyde, Methanal, Methylene Oxide, Oxomethane
Glycol Ethers (except those specifically listed)		5	
Heptachlor	76-44-8	0.02	1,4,5,6,7,8,8A-Heptachloro-3A,4,7,7A-Tetrahydro-4,7-Methanoindiene
Hexachlorobenzene	118-74-1	0.01	Perchlorobenzene, HCB, Pentachlorophenyl Benzene, Phenyl Perchloryl
Hexachlorobutadiene	87-68-3	0.9	Perchlorobutadiene, 1,3-Hexachlorobutadiene, HCB
Hexachlorocyclopentadiene	77-47-4	0.1	HCCPD, HEX
Hexachloroethane	67-72-1	5	Perchloroethane, Carbon Hexachloride, HCE, 1,1,1,2,2,2-Hexachloroethane
Hexamethylene Diisocyanate, 1,6-	822-06-0	0.02	1,6-Diisocyanatohexane, 1,6-Hexanediol Diisocyanate
Hexamethylphosphoramide	680-31-9	0.01	Hexamethylphosphoric Triamide, HEMPA, Hexametapol, Hexamethylphosphoramide
Hydrazine	302-01-2	0.004	Methylhydrazine, Diamide, Diamine, Hydrazine Base
Hydrogen Fluoride	7664-39-3	0.1	Hydrofluoric Acid Gas, Fluorhydric Acid Gas, Anhydrous Hydrofluoric Acid
Hydrogen Selenide	7783-07-5	0.1	
Hydroquinone	123-31-9	1	Quinol, Hydroquinol, P-Diphenol, 1,4-Benzenediol, Hydrochinone, Arctuvine
Indeno(1,2,3-cd)Pyrene	193-39-5	0.01	
Lead and Compounds (except those specifically listed)	20-11-1	0.01	Lead (Acetate, Arsenate, Chloride, Fluoride, Iodide, Nitrate, Sulfate, Sulfide)
Lindane [Gamma-Hexachlorocyclohexane]	58-89-9	0.01	Benzene Hexachloride – Gamma Isomer
Maleic Anhydride	108-31-6	1	2,5-Furanediene, Cis-Butenedioic Anhydride, Toxic Anhydride
Manganese and Compounds (except those specifically listed)	20-12-2	0.8	Manganese (Acetate, Chloride, Dioxide, (II)-Oxide, (III)-Oxide, (II)-Sulfate)
Mercury Compounds (except those specifically listed)	20-13-3	0.01	Mercury Compounds (Methyl-, Ethyl-, Phenyl-)
Mercury Compounds	20-13-3	0.01	Mercury (Chloride, Cyanide, (I,II)-[Bromide, Iodide, Nitrate, Sulfate], Oxide)

Attachment E Screen Modeling Action Levels For Individual HAPs

(Inorganic)			
Methyl Hydrazine	60-34-4	0.06	Monomethylhydrazine, Hydrozomethane, 1-Methylhydrazine
Methyl Iodide	74-88-4	1	Idomethane
Methyl Isocyanate	624-83-9	0.1	Isocyanatomethane, Isocyanic Acid, Methyl Ester
Methylcyclopentadienyl Manganese	12108-13-3	0.1	
Methylene Bis(2-Chloroaniline), [4,4-]	101-14-4	0.2	Curene, MOCA, 4,4'-Diamino-3,3'-Dichlorodiphenylmethane
Methylenedianiline, [4,4-]	101-77-9	1	4,4'-Diaminodipheylmethane, DDM, MDA, Bis(4-Aminophenyl)Methane, DAPM
Nickel Carbonyl	13463-39-3	0.1	
Nickel Compounds (except those specifically listed)		1	Nickel (Acetate, Ammonium Sulfate, Chloride, Hydroxide, Nitrate, Oxide, Sulfate)
Nickel Refinery Dust	12035-72-2	0.08	
Nickel Subsulfide		0.04	
Nitrobenzene	98-95-3	1	Nitrobenzoi, Oil of Mirbane, Oil of Bitter Almonds
Nitrobiphenyl, [4-]	92-93-3	1	4-Nitrodiphenyl, P-Nitrobiphenyl, P-Nitrophenyl, PNB
Nitrophenol, [4-]	100-02-7	5	4-Hydroxynitrobenzene, Para-Nitrophenol
Nitropropane, [2-]	79-46-9	1	Dimethylnitromethane, Sec-Nitropropane, Isonitropropane, Nitroisopropane
Nitroso-N-Methylurea, [N-]	684-93-5	0.0002	N-Methyl-N-Nitrosourea, N-Nitroso-N-Methylcarbamide
Nitrosodimethylamine, [N-]	62-75-9	0.001	Dimethylnitrosamine, DMN, DMNA
Nitrosomorpholine, [N-]	59-89-2	1	4-Nitrosomorpholine
Parathion	56-38-2	0.1	DNTP, Monothiophosphate, Diethyl-P-Nitrophenyl
PCB (Polychlorinated Biphenyls)	1336-36-3	0.009	Aroclors
Pentachloronitrobenzene	82-68-8	0.3	Quintobenzene, PCNB, Quiniozene
Pentachlorophenol	87-86-5	0.7	PCP, Penchlorol, Pentachlorophenate, 2,3,4,5,6-Pentachlorophenol
Phenol	108-95-2	0.1	Carbolic Acid, Phenic Acid, Phenylic Acid, Phenyl Hydrate, Hydroxybenzene
Phenyl Mercuric Acetate	62-38-4	0.01	
Phosgene	75-44-5	0.1	Carbonyl Chloride, Carbon Oxychloride, Carbonic Acid Dichloride
Phosphine	7803-51-2	5	Hydrogen Phosphide, Phosphoretted Hydrogen, Phosphorus Trihydride
Phosphorous (Yellow or White)	7723-14-0	0.1	

### Attachment E Screen Modeling Action Levels For Individual HAPs

Phthalic Anhydride	85-44-9	5	Phthalic Acid Anhydride, Benzene-O-Dicarboxylic Acid Anhydride, Phthalandione
Polycyclic Organic Matter (except those specifically listed)	TP15	0.01	POM, PAH, Polyaromatic Hydrocarbons,
Potassium Cyanide	151508	0.1	
Propane Sultone, [1,3-]	1120-71-4	0.03	1,2-Oxathiolane-2,2-Dioxide, 3-Hydroxy-1-Propanesulphonic Acid Sultone
Propiolactone, [Beta-]	57-57-8	0.1	2-Oxetanone, Propiolactone, BPL, 3-Hydroxy-B-Lactone-Propanoic Acid
Propionaldehyde	123-38-6	5	Propanal, Propyl Aldehyde, Propionic Aldehyde
Propylene Oxide	75-56-9	5	1,2-Epoxypropane, Methylethylene Oxide, Methyl Oxirane, Propene Oxide
Propyleneimine, [1,2-]	75-55-8	0.003	2-Methyl Aziridine, 2-Methylazacyclopropane, Methylethyleneimine
Quinoline	91-22-5	0.006	1-Azanaphthalene, 1-Benzazine, Benzo(B)Pyridine, Chinoline, Leucoline
Quinone	016-51-4	5	Benzoquinone, Chinone, P-Benzoquinone, 1,4-Benzoquinone
Selenium and Compounds (except those specifically listed)	7782-49-2	0.1	Selenium (Metal, Dioxide, Disulfide, Hexafluoride, Monosulfide)
Sodium Cyanide	143339	0.1	
Sodium Selenate	13410010	0.1	
Sodium Selenite	10102018 8	0.1	
Styrene	100-42-5	1	Cinnamene, Cinnamol, Phenethylene, Phenylethylene, Vinylbenzene
Styrene Oxide	96-09-3	1	Epoxyethylbenzene, Phenylethylene Oxide, Phenyl Oxirane, Epoxystyrene
Tetrachlorodibenzo-P-Dioxin	1746-01-6	6.00E-07	
Tetrachloroethane, [1,1,2,2-]	79-34-5	0.3	Sym-Tetachloroethane, Acetylene Tetrachloride, Ethane Tetrachloride
Tetraethyl Lead	78-00-2	0.01	
Tetramethyl Lead	75-74-1	0.01	
Titanium Tetrachloride	7550-45-0	0.1	Titranium Chloride
Toluene Diisocyanate, [2,4-]	584-84-9	0.1	TDI, Tolyene Diisocyanate, Diisocyanatoluene
Toluidine, [Ortho-]	95-53-4	4	Ortho-Aminotoluene, Ortho-Methylaniline, 1-Methyl-1,2-Aminobenzene
Toxaphene	8001-35-2	0.01	Chlorinated Camphene, Camphechlor, Polychlorcamphene
Trichloroethane, [1,1,2-]	79-00-5	1	Vinyl Trichloride, Beta-Trichloroethane

Attachment E Screen Modeling Action Levels For Individual HAPs

Trichlorophenol, [2,4,5-]	95-95-4	1	2,4,5-TCP
Trichlorophenol, [2,4,6-]	88-06-2	6	2,4,6-TCP
Trifluralin	1582-09-8	9	2,6-Dinitro-N-N-Dipropyl-4-(Trifluoromethyl)Benzeneamine
Trimethylpentane, [2,2,4-]	540-84-1	5	Isobutyltrimethylethane, Isoctane
Urethane [Ethyl Carbamate]	51-79-6	0.8	Ethyl Urethane, O-Ethylurethane, Leucothane, NSC 746, Urethan
Vinyl Acetate	108-05-4	1	Acetic Acid Vinyl Ester, Vinyl Acetate Monomer, Ethenyl Ethanoate
Vinyl Bromide	593-60-2	0.6	Bromoethylene, Bromoethene
Vinyl Chloride	75-01-4	0.2	Chloroethylene, Chloroethene, Monochloroethylene

Mr. Kevin Farmer  
Regional Environmental Manager  
Torque Traction Integration Technologies, Inc.  
2400 Lemone Industrial Boulevard  
Columbia, MO 65201

RE: New Source Review Permit - Project Number: 2007-03-015

Dear Mr. Farmer:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, 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 Tim Hines at (573) 751-4817, or you may write to me at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:thl

Enclosures

c: Northeast Regional Office  
PAMS File 2007-03-015  
Permit Number: