

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Titan Wheel Corporation of Illinois
Attn: Carman Jones
2701 Spruce Street
Quincy, Illinois 62301

Application No.: 04050034

I.D. No.: 001806AAB

Applicant's Designation:

Date Received: November 28, 2007

Subject: Wheel Manufacturing Plant

Date Issued: September 4, 2008

Expiration Date: September 4, 2013

Location: 2701 Spruce Street, Quincy, Adams County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of three electro-coat dip tanks controlled by two filters, ten liquid paint booths controlled by nine filters, one powder coating booth controlled by a filter, two gas fired boilers (with fuel oil #2 as back-up), 59.0 mmBtu/hour each, seven paint cure ovens and a paint burn-off oven controlled by an afterburner pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of volatile organic material (VOM), 10 tons/year of single hazardous air pollutant (HAP), and 25 tons/year of all HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
- b. Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hour of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

- c. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 3a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.
- 5a. Pursuant to 35 Ill Adm. Code 215.181(a), the requirements of 35 Ill. Adm. Code 215.182 through 215.184 (Solvent Cleaning) shall not apply. to sources whose emissions of volatile organic material do not exceed 6.8 kg (15 lbs) in any one day, or 1.4 kg (3 lbs) in any one hour.
- b. Pursuant to 35 Ill Adm. Code 215.204(k)(2), no owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 Ill. Adm. Code Part 215, delivered to the coating applicator:

Heavy Off-highway Vehicle Products	<u>kg/l</u>	<u>lb/gal</u>
i. Extreme Performance Prive Coat	0.42	3.5
ii. Extreme Performance Top Coat - Air Dried	0.52	4.3
iii. Final Repair Coat - Air Dried	0.58	4.8
- c. Pursuant to 35 Ill. Adm. Code 215.206(d), "touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 215.206, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.
- d. Pursuant to 35 Ill. Adm. Code 215.209, no coating line subject to the limitations of 35 Ill. Adm. Code 215.204 is required to meet 35 Ill. Adm. Code 215.301 or 215.302 after the date by which the coating line is required to meet 35 Ill. Adm. Code 215.204.
- e. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material

into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.

- 6a. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The paint cure ovens and burn-off oven shall only be operated with natural gas as the fuel. The use of any other fuel in the paint cure ovens and burn-off oven requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- c. The boilers shall only be operated with either natural gas or distillate fuel oil as the fuels. The use of any other fuel in the boilers requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- d. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent; or
 - ii. The wt. percent given by the formula: Maximum wt. percent sulfur = $(0.000015) \times (\text{Gross heating value of oil, Btu/lb})$.
- e. Organic liquid by-products or waste materials shall not be used in any fuel combustion emission units without written approval from the Illinois EPA.
- f. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- g. Material insulated with polyvinyl chloride or asbestos, or scrap containing fuming metals tin, zinc, or lead shall not be charged to burn-off oven.
- h. The afterburner controlling burn-off oven shall be in operation at all times when the associated emission unit is in operation.
- i. The afterburner shall be equipped with a temperature indicator.
- j. The afterburner shall be heated to an operating temperature of 1400°F before charging and this temperature shall be maintained during operation.

- 7a. Volatile organic materials (VOM) usage and VOM emissions from the paints and clean-up solvents usage in the three dip electro-coat tanks and ten liquid paint booths shall not exceed 8.0 tons/month and 70.0 tons/year.
- b. The VOM and HAP emissions shall be determined from the following equation:

$$E = \Sigma (P_i \times C_i) + \Sigma (S_j \times C_j) - W \times C_w,$$

Where:

- E - VOM(HAP) emissions (ton);
 P_i - paint usage (ton);
 C_i - VOM(HAP) content of the paint (fraction);
 S_j - clean-up solvent usage (ton);
 C_j - VOM(HAP) content of the solvent (fraction);
 W - certified amount of waste solvent shipped-off (ton);
 C_w - certified VOM(HAP) content of the waste solvent (fraction).

These limits are based on the maximum operating rate.

- 8a. Operation and emissions of the two boilers (combined) and seven paint cure ovens shall not exceed the following limits:
- i. Natural Gas Usage: 75 mmscf/month, 450 mmscf/year
- ii. Fuel Oil #2 Usage: 42,000 gallons/month, 42,000 gallons/year
- iii. Emissions from the combustion of natural gas and fuel oil #2:

<u>Pollutant</u>	<u>Emission Factor</u>		<u>Emissions</u>	
	<u>(lb/10³ Gal)</u>	<u>(lb/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO _x)	20	100	3.75	22.5
Carbon Monoxide (CO)	5	84	3.15	18.90
Particulate Matter (PM)	2	7.6	0.29	1.71
Volatile Organic Materials (VOM)	0.2	5.5	0.21	1.24
Sulfur Dioxide (SO ₂)	42.6	0.6	0.89	0.89

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.3-1, 1.4-1, and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- b. This permit is issued based on negligible emissions of particulate matter from the burn-off oven. For this purpose, emissions shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 tons/year.
- c. This permit is issued based on negligible emissions of particulate matter from the powder coating and liquid paint booths. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

9. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP).
10. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 12a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, .
 - c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
 - d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
 - e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
13. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for

this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

14. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 15a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. The names and amounts of liquid paints used in electro-coat tanks and liquid paint booths and category of coating which they are used for (gallons/month and gallons/year);
 - ii. The names and amounts of clean-up solvents used;
 - iii. VOM and HAP content of each liquid paint and solvent (lb/gallons);
 - iv. Natural gas and fuel oil usage (mmscf/month and mmscf/year, gallons/month and gallons/year);
 - v. The sulfur content of the residual fuel oil used in the boilers provided by the supplier fuel oil (weight %); and
 - vi. Monthly and annual CO, NO_x, PM, VOM, SO₂ and total combined HAP emissions and individual HAP emissions with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
16. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

17. If there is an exceedance or deviation from of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

18. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

It should be noted that this permit has been revised to include the operation of seven existing paint cure ovens.

If you have any questions on this, please call George Kennedy at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:GMK:jws

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the wheel manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of VOM and 10 tons per year of a single HAP and 25 tons per year of combined HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

<u>Equipment/Process</u>	E M I S S I O N S (Tons/Year)						Single <u>HAP</u>	Combined <u>HAPs</u>
	<u>PM</u>	<u>NO_x</u>	<u>CO</u>	<u>SO₂</u>	<u>VOM</u>			
Dip Electro-Coat Tanks and Liquid Paint Booths (Paints and Clean-up)					70.0			
Powder Coating	0.44							
Boilers and Paint Cure Ovens Natural Gas and #2 Oil	1.71	22.50	18.90	0.89	1.24			
Burn-Off Oven Controlled by Afterburner	0.44							
Total	2.59	22.50	18.90	0.89	71.24	9.0	22.5	

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