

STATE OF MISSOURI

PERMIT BOOK



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number:

Project Number: 2007-05-059

Parent Company:

09 2007 - 011

Kawasaki Heavy Industries Ltd.

Parent Company Address: 1-1 Kawasaki-Cho, Akashi, Japan

Installation Name:

Kawasaki Motors Manufacturing Corporation

Installation Address:

28147 Business Highway 71, Maryville , MO 64468

Location Information:

Nodaway County, S31, T64, R35

Application for Authority to Construct was made for:

The installation of a crankcase machining line #9, an Assembly Engine Testing Line #12, seven (7) performance dynamometers, and five (5) endurance dynamometers. Gasoline combustion is the main source of emissions.. 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.

SEP 24 2007

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James A. Lawrence".

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.

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Permit No.	
Project No.	2007-05-059

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."

Kawasaki Motors Manufacturing Corporation
Nodaway County, S31, T64, R35

1. Emission Limitations
 - A. Kawasaki Motors Manufacturing Corporation shall emit less than 250 tons of Volatile Organic Compounds (VOCs) from the entire installation in any consecutive 12-month period.
 - B. Kawasaki Motors Manufacturing Corporation shall emit less than 250 tons of Carbon Monoxide (CO) from the entire installation in any consecutive 12-month period.
 - C. Kawasaki Motors Manufacturing Corporation 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 period.
 - D. Kawasaki Motors Manufacturing Corporation shall emit less than two (2) tons of Benzene (CAS # 71-42-2) a Hazardous Air Pollutants (HAPs) from the following emission points (ETF2 through ETF13) the 12 dynamometers located in the Endurance Testing Facility and AET12 in any consecutive 12-month period.
 - E. Kawasaki Motors Manufacturing Corporation shall emit less than 40 tons tons of Nitrogern Oxide (NO_x) from ETF2 through ETF13, AET12 and SH1 in any consecutive 12-month period.
 - F. Kawasaki Motors Manufacturing Corporation must determine the total amount of VOC, CO, and HAPs emitted from the installation. Attachment A, B, C, D, E, and F or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A, 1.B., 1C. 1.D and 1.E. used in the entire installation.
 - G. Kawasaki Motors Manufacturing Corporation shall maintain all records required by this permit for not less than five (5) years and shall make them

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SPECIAL CONDITIONS:

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

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 at the installation.

- H. Kawasaki Motors Manufacturing Corporation 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 2.G indicate that the source exceeds the limitation of Special Conditions Number 1.A, 1.B., 1.C., 1.D., and 1.E..
2. Screen Modeling Action Level
- A. When considering using an alternative material that contains a HAP, Kawasaki Motors Manufacturing Corporation must calculate the potential emissions for each individual HAP in the alternative material that has a Screen Modeling Action Level (SMAL) available at http://www.dnr.mo.gov/forms/NSR_SUPPL_INFO_PACKAGE.pdf. If the potential HAP emissions for the alternative HAP containing material is equal to or greater than the Screen Modeling Action Levels, then Kawasaki Motors Manufacturing Corporation must seek approval from the Air Pollution Control Program before the use of the alternative coating.
 - B. Kawasaki Motors Manufacturing Corporation must determine the potential emissions for each individual HAP in the alternative material consumed in the installation. Attachment G or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 2.A. used in the entire installation.
 - C. Kawasaki Motors Manufacturing Corporation 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 at the installation.
3. Fuel Restriction
- Kawasaki Motors Manufacturing Corporation shall combust only unleaded gasoline, aviation gasoline (100LL) ,Tier II EEE gasoline or the following ethanol fuel blends E85, E20 and E10. Before fuels other than those listed above are used for engine testing Kawasaki Motors Manufacturing Corporation shall seek approval from the Air Pollution Control Program.

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SPECIAL CONDITIONS:

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

4. Dynamometer Engine Testing

Kawasaki Motors Manufacturing Corporation shall not use leaded fuel in the dynamometer engine testing stations unless authorized and approved by the US EPA. Based on a review of applicable federal regulations entitled Test Procedures for Testing Highway and Nonroad engines and a July 13, 2005 Final Rule (federal) Unleaded gasoline {maximum organic lead 0.013 grams per liter} is required for dynamometer engine testing. See Table 1 of 40 CFR 1065.710 on page 40596 {also pages 28 to 44 pages of the July 13, 2005 Federal Register. Approval of any variance of these requirements must be obtained directly from the United States Environmental Protection Agency (USEPA)..

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

Project Number: 2007-05-059
Installation ID Number: 147-0023
Permit Number:

Kawasaki Motors Manufacturing Corporation
28147 Business Highway 71
Maryville, MO 64468

Complete: May 15, 2007
Reviewed: August 28, 2007

Parent Company:
Kawasaki Heavy Industries Ltd.
1-1 Kawasaki-Cho
Akashi, Japan

Nodaway County, S31, T64, R35

REVIEW SUMMARY

- The installation of a Crankcase Machining Line #9, an Assembly Engine Testing Line #12, seven (7) performance dynamometers, and five (5) endurance dynamometers. Gasoline combustion is the main source of emissions.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. The HAP of concern from this process are Benzene (CAS # 71-43-2) and Methanol (CAS # 67-56-1).
- None of the New Source Performance Standards (NSPS) apply 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. Subpart ZZZZ, NESHAP for *Stationary Reciprocating Internal Combustion Engines*, does not apply since the engines are less than 500 horsepower in size.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emission of carbon monoxide (CO) are above major source levels, while potential emissions of VOC and NO_x potential emissions are above their respective de minimis levels. This permit limits the VOC emissions from the entire installation to less than major levels. Potential emissions of NO_x is conditioned to below de minimis levels at 40 tons on the following emission points ETF2 through ETF13, SH1 and AET12. Benzene is conditioned to 2 tons per year from the following emission points ETF2 through ETF13 and AET12.

- This installation is located in Nodaway 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 performed to determine the ambient impact of CO. However, no model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions; therefore, VOC ambient air quality modeling was not performed.
- Emissions testing is not required for the source.
- A revision to the Part 70 Operating permit application is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Kawasaki Motors Manufacturing Corporation operates a gasoline engine manufacturing installation in Maryville, Missouri, (Nodaway County). Kawasaki Motors builds engines ranging from 4.5 horsepower (hp) up to 23.0 hp. These engines are primarily used in walk-behind lawn mowers, riding lawn mowers and all-terrain vehicles.

Kawasaki Motors is not considered a major source for CO because of the 250 ton limit in permit 092005-001 and 062007-004. New Source Review purposes it is considered a minor source. The installation submitted a Part 70 State Operating Permit application (Project Number: 2006-03-047) on March 09, 2006.

The following projects for Kawasaki Motors Manufacturing Corp. have been processed by the Air Pollution Control Program.

Table 1: Previous Permit Projects

Permit Number	Description
062007-004	2006-10-085: Use of aviation fuel
	2006-09-062: Use of aviation fuel-applicability determination
092005-001A	2006-04-058: Amendment remove conditions
No Permit Required	2006-03-045: Die casting and crankcase machining
	2006-03-047: Part 70 Operating Permit Amendment
	2005-10-020: Update Part 70 Operating Permit
092005-001	2005-05-106: Install four new processes
	2004-11-068: Intermediate Operating Permit Amendment
012005-002	2004-10-003: Add two small engine assembly lines
032004-006	2003-10-049: Installation of a machining operation
No Permit Required	2003-06-036: Engine testing exhaust fans
	2003-05-092: Intermediate Operating Permit Amendment
082003-011	2003-05-091: Installation of a engine assembly line
	2003-02-097: Applicability, permit required for new lines.
	2002-06-097: Intermediate Operating Permit application
	2002-05-002: Correction or amendment change retaining compound.
No Permit Required	2001-05-090: 680cc LPG engines.
No Permit Required	2001-03-092: Installation of natural gas engines.
062001-001	2001-02-113: Installation of a wet vacuum impregnation system to seal porosity in aluminum parts
112000-010	2000-09-054: Installation of two (2) gasoline engine assembly lines
0699-024	1999-03-119: Installation of an assembly line for building internal combustion engines and installation of an electrode position paint system
	1998-05-636: major source review, closed out
0598-012	1998-02-0221: Addition of a wet paint booth and a process heater
	147-0023-020: Intermediate Operating Permit Application
0897-034	147-0023-017: Installation of a gasoline engine assembly line
0797-005	3340-0023-017: Installation of four (4) machining lines and six (6) heating/ventilation units
0494-009	3340-0023-016: Installation of an aluminum die casting machine and a machine process
0493-011	3340-0023-015: Installation of two (2) aluminum die casts and melting furnaces
0193-001	3340-0023-011: Installation of a powder paint booth
1291-004	3340-0023-009: Addition of chromate aluminum parts
	3340-0023-008: Amendment to 0791-001
0791-001	3340-0023-007: Installation of gasoline engine assembly line and aluminum scrap furnaces
1190-004	3340-0023-006: Addition of connecting rod machine line and injection molding
0890-001	3340-0023-005: Installation of aluminum die cast engines

Kawasaki has had several permitting actions take place over a relatively short period of time. Kawasaki asserts that production is expanded to be consistent with demand and need for new engines, as decided by the parent company, Kawasaki Heavy Industries. Although several projects involve machining, the parts made serve different purposes, and so, should not be considered together.

PROJECT DESCRIPTION

Kawasaki proposes to install three new processes at (147-0023) the gasoline engine manufacturing installation at this time.

Endurance Testing Facility

This process will be an addition to the current Endurance Testing Facility from permit # 092005-001. Continuous performance and durability testing of 1-cylinder, 2-cylinder and 4-stroke internal combustion engines ranging from 5 hp to 37 hp. The Endurance Testing Facility will control and monitor up to 12 dynamometers. Seven (7) performance dynamometers and five (5) endurance dynamometers. The facility has a maximum fuel consumption rate of 3.4 gallons per hour (gph). Gasoline combustion (emission point ETF2 and ending with ETF13) is the main source of air emissions from this process. A 1,000-gallon gasoline tank (emission point T-ETF2) and two small space heaters (emission point SH1), totaling 3.0 million BTU per hour of energy output, are other emitting units from this process.

Crankshaft Machining Line #9

The ATV crankshaft machining line will machine Fx1000V, Fx850V and FH680V crankcases. Coolants, lubricants and cutting oils will be used in the process (emission point MMF). The applicant determined their maximum usage of oils.

Assembly Engine Testing Line #12

Installation of an engine assembly line (emission point AET12) for gasoline fueled, internal combustion engines -174cc to 999cc single and two cylinder engines, up to 35 hp. Process includes complete assembly of the engine and use of aerosol cleaner for engine parts throughout the assembly process. A lubricant is used on equipment parts as they are assembled. Also, a silicone sealant is used for some parts as they are assembled, motor oil is added to each engine, a fuel line is connected to the carburetor of each engine for a two minute running test, draining the oil from the engine and packing the engine are activities on this line. The Maximum Hourly Design Rate (MHDR) of the unleaded gasoline burned in the engine testing process is 1.0 gallons per hour. The engine exhaust will be ducted outside the plant (emission release point S11H). Approximately 200 engines will be assembled and tested per day or approximately 48,000 engines per year. The use of aerosol cleaner, lubricant and sealant will be included in emission points MFCE1 and MFCE2 which record fugitive HAP and VOC emissions plant wide.

The installation indicated the emissions from this project number 2007-05-059 are included under the existing installation wide limits for HAPs, CO and VOC. The installation established a specific emission limit of less than 2 tons of Benzene on 12

(ETF2 through ETF13, and AET12) of the 13 dynamometers located in the Endurance Testing Facility and established a NO_x emission specific limit on (ETF2 through ETF13, AET12, and SH1)

EMISSIONS/CONTROLS EVALUATION

Emissions from the proposed processes will come from the combustion of gasoline in the internal combustion engines and from combustion of natural gas in the space heaters. VOC emissions consist of working and breathing losses from the gasoline storage tank and from volatile components contained in the coolants, lubricants and cutting oils. Those volatile components create emissions from evaporation and during fluid mist generation.

The emission factors for fuel combustion during engine testing (SCC 2-04-004-01) were obtained from the Factor Information Retrieval (FIRE) version 6.25, *Source Classification Codes and Emission Factors Listings for Criteria Air Pollutants*. The Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4, *Natural Gas Combustion*, (7/1998) was used to calculate emissions from the space heaters. Breathing and working losses from the gasoline tank were determined using emission factors obtained from FIRE (SCC Codes: 4-03-010-03 and 4-03-010-09, respectively). Potential VOC emissions from machining (MMF) were determined based on historical usage and a conservative estimate of increased usage for the proposed processes (installation total potential machining oil usage of 50,000 gal annually). Calculations were done using a mass balance and the presumption that all of the VOCs contained in the machining oils will be emitted to the ambient air. Also, some of the Benzene emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document, Section 3.3 Gasoline and Diesel Industrial Engines, Table 3.3 - 1, October 1996.

Engine testing emissions were estimated for unleaded gasoline on the dynamometers. The permit does not authorize the use of leaded fuel in the dynamometer engine testing stations. Since the emissions in this permit were based on unleaded gasoline, a special condition is included that requires the evaluation of additional alternate fuels other than unleaded gasoline, aviation gasoline (100LL), Tier II EEE gasoline and the following ethanol fuel blends E85, E20 and E10 for engine testing. Kawasaki Motors Manufacturing Corporation shall seek the Air Pollution Control Program approval before using any other fuel. Aviation gasoline is considered a leaded fuel and is not authorized for dynamometer testing.

In Permit Number 062007-004 with project number 2006-10-085 is an evaluation of aviation gasoline 100LL which is classified as a leaded fuel and Tier II EEE unleaded gasoline. Tier II EEE unleaded gasoline does not result in a significant emission increase, or the significant emission of an air pollutant not previously emitted. It appears to be a low sulfur fuel. However, not all Tier II and Tier III fuels that are classified as unleaded gasoline meet this standard and are not approved for use by Kawasaki Motors Manufacturing Corporation without individual consideration.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Existing potential emissions for VOC and CO were determined from a review of all construction permits issued to the installation. Existing potential for the remaining pollutants was taken from Permit No. 062007-004. Existing actual emissions were taken from the applicant's 2006 Emissions Inventory Questionnaire (EIQ) submittal. The following table provides an emissions summary for this project.

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 <i>De Minimis</i> Levels	**Existing Potential Emissions	Existing Actual Emissions (2006EIQ)	Potential Emissions of the Application	Installation Conditioned Potential
PM ₁₀	15.0	27.5	9.97	2.57	N/A
SO _x	40.0	1.92	0.22	2.01	N/A
NO _x	40.0	34.01	22.37	41.30	<40
VOC	40.0	<250	125.52	170.11	<250
CO	100.0	<250	125.43	1494.42	<250
HAPs	10.0/25.0	58.00	1.02	5.56	<10.0/25.0
BENZENE	10	N/D	N/A	3.30	<2.0
LEAD	0.6	0.17	N/D	N/A	N/A

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

** Existing potential emissions totals are taken from Permit 062007-004 with Project Number: 2006-10-085.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

APPLICABLE REQUIREMENTS

Kawasaki Motors Manufacturing 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.

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 Sulfur Compounds*, 10 CSR 10-6.260

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of CO. Table 3 shows the Kawasaki Motors Impact is in compliance with the Ambient Air Quality Standards 1 hour and 8 hour concentration found at 10 CSR 10-6.010.

Table 3: Kawasaki Motors Impact compared to Ambient Air Quality Standards.

Concentration Time	Kawasaki Motors Manufacturing Corporation Impact (ug/m ³)	Ambient Air Quality Standards (ug/m ³)
1 hour	17,230	40,000
8 Hour	6892	10,000

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.

Timothy Paul Hines
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 07, 2007, received May 10, 2007, designating Kawasaki Heavy Industries Ltd. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Kansas City Regional Office Site Survey, dated May17, 2007.

Attachment A
VOC and CO Monthly Compliance Worksheet
Kawasaki Motors Manufacturing Corporation Nodaway County, S31, T64, R35
Project Number: 2007-05-059 Installation ID Number: 147-0023

Emission Point	Usage Units	Usage Amt.	VOC Emission Factor	CO Emission Factor	VOC (lb)	CO (lb)
Example Gasoline Emission Point	gallons	76.5000	0.3939 lb/gal	8.151 lb/gal	30.1334	623.5515
AET1	gallons					
AET2	gallons					
AET3	gallons					
AET4	gallons					
AET5	gallons					
AET6	gallons					
AET7	gallons					
AET8	gallons					
AET9	gallons					
AET10	gallons					
AET11	gallons					
DCF01	MMCF					
DCF01	tons					
DCF03	MMCF					
DCF05	MMCF					
DCF07	MMCF					
DCF09	MMCF					
DET4	gallons					
DET5	gallons					
PE10	MMCF					
PE10B	MMCF					
ETF1	gallons					
SH1	MMCF					
ETC	gallons					
ASTC	gallons					

Some Emission Points need to be segmented for calculation

(lb/2000) Attachment A Total Tons

Note: The VOC content of reclaimed VOC material transferred to a contract reclamation service can be subtracted from the VOC total. A 12-Month rolling CO emission total of CO of less than or equal to 250.0 tons indicates compliance.

Attachment B VOC Monthly Compliance Worksheet

Point	Product	Part #	VOC %	Density(lb/gal)	Usage-Gal	VOCs-lbs	Container Size
MMF	Example (cutting oil)	H1957	54.00%	7.6200	41.2500	169.7355	55 gal drum
MMF							
MMF							
MMF							
MMF							
MMF							
MMF							
MMF							
MMF							
MFCE1							
MFCE1							
MFCE1							
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Total VOC tons							
Attachment A + Attachment B Combined Total Tons :							

Attachment A VOC total is added to the total of Attachment B. All VOC emissions from the site must be counted. A 12-Month rolling VOC emission total of all VOC emissions at the installation of less than or equal to 250.0 tons indicates compliance

Attachment C
HAP Monthly Compliance Work Sheet
Kawasaki Motors Manufacturing Corporation
Nodaway County, S31, T64, R35
Project Number 2007-05-059
Installation ID Number 147-0023

For Month _____ Year _____

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
						D times E Times F =G	G times 0.005
HAP Chemical	CAS #	Product	Gallons used	% HAP	Sp Gr	Lbs of HAPs	Tons of HAPs
Example Benzene	71-43-2	Cleaning solution	15	<0.5%	0.7100	0.5325	0.0026
Monthly Total Tons:							
12 month Rolling Cumulative Tons:							

A rolling 12-Month HAP emission total of all HAPs emissions at the installation of less than or equal to 10 tons individually HAP or 25 tons combined HAP indicates compliance.

Attachment D
Special Condition 1D
BENZENE Monthly Compliance Work Sheet
Kawasaki Motors Manufacturing Corporation
Nodaway County, S31, T64, R35
Project Number 2007-05-059
Installation ID Number 147-0023

For Month _____ Year _____

Emission Point	Gallons of gasoline combusted in the emission point	Heating Value of Gasoline (MMBTU/gallon)	Benzene (pounds/MMBTU)	Benzene Pounds	Conversion (pounds to tons)	Tons of Benzene
example	100	0.130	0.1419	1.845	0.0005	0.0009224
ETF2		0.130	0.1419		0.0005	
ETF3		0.130	0.1419		0.0005	
ETF4		0.130	0.1419		0.0005	
ETF5		0.130	0.1419		0.0005	
ETF6		0.130	0.1419		0.0005	
ETF7		0.130	0.1419		0.0005	
ETF8		0.130	0.1419		0.0005	
ETF9		0.130	0.1419		0.0005	
ETF10		0.130	0.1419		0.0005	
ETF11		0.130	0.1419		0.0005	
ETF12		0.130	0.1419		0.0005	
ETF13		0.130	0.1419		0.0005	
AET12		0.130	0.1419		0.0005	
Monthly Total Tons:						
!2 month Rolling Cumulative Tons:						

A rolling 12-Month HAP emission total of less than two (2) tons of Benzene emissions from emission points ETF2 through ETF13 and AET12 at the installation indicates compliance.

Attachment E
Special Condition 1E
NOx Monthly Compliance Work Sheet
Kawasaki Motors Manufacturing Corporation
Nodaway County, S31, T64, R35
Project Number 2007-05-059
Installation ID Number 147-0023

For Month _____ Year _____

Emission Point	Gallons of gasoline combusted in the emission point Or standard cubic feet used of natural gas	Heating Value of Gasoline (MMBTU/gallon)	NOx (pounds/MMBTU) or (100lb/10 ⁶ scf)	NOx Pounds	Conversion (pounds to tons)	Tons of NOx
example	100	0.130	1.63		0.0005	0.0009224
ETF2		0.130	1.63		0.0005	
ETF3		0.130	1.63		0.0005	
ETF4		0.130	1.63		0.0005	
ETF5		0.130	1.63		0.0005	
ETF6		0.130	1.63		0.0005	
ETF7		0.130	1.63		0.0005	
ETF8		0.130	1.63		0.0005	
ETF9		0.130	1.63		0.0005	
ETF10		0.130	1.63		0.0005	
ETF11		0.130	1.63		0.0005	
ETF12		0.130	1.63		0.0005	
ETF13		0.130	1.63		0.0005	
AET12		0.130	1.63		0.0005	
SH1		N/A	{100lb/(1 x 10 ⁶ scf)}		0.0005	
Monthly Total Tons:						
!2 month Rolling Cumulative Tons:						

A rolling 12-Month HAP emission total of less than forty (40) tons of NOx emissions from emission points ETF2 through ETF13, AET12 and SH1 at the installation indicates compliance.

Attachment F: Monthly Individual HAPs Tracking Record
Kawasaki Motors Manufacturing Corporation
Nodaway County, S31, T64, R35
Project Number 2007-05-059
Installation ID Number 147-0023

HAP Name: _____ CAS No.: _____

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

Column 1 (a)	Column 2 (b)
List materials from Attachment B which emit this specific HAP (Name, Type)	HAP emissions from Attachment B [Column 5] (in Tons)
(c) Total HAP Emissions Calculated for this Month, in Tons:	
(d) 12-Month HAP Emissions Total (f) from Previous Month's Attachment F, in Tons:	
(e) Monthly HAP Emissions Total (c) from Previous Year's Attachment F, in Tons:	
(f) Current 12-month Total of HAP Emissions in Tons: [(c) + (d) - (e)]:	

- Instructions: Choose appropriate HAP calculation method for units reported
- Individually list each material which emits this specific HAP from this installation;
 - Record the amount of HAP emissions already calculated for Attachment F in [Column 5] in Tons;
 - Summation of [Column 2] in Tons;
 - Record the previous 12-Month individual HAP emission total (f) from last month's Attachment F, in Tons;
 - Record the monthly HAP emission total (c) from previous year's Attachment F, in Tons; and
 - Calculate the new 12-month individual HAP emissions total. **A 12-Month individual HAP emissions total of less than ten (10.0) tons for the installation indicates compliance.**

Attachment G
HAP Screen Modeling Action Level (SMAL) Compliance Record*
Kawasaki Motors Manufacturing Corporation
Project Number: 2007-05-059
Installation ID: 147-0023
Permit Number:

Copy this sheet as needed.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
HAP Identification	Screen Modeling Action Level (ton/yr) (Note 1)	Density of Sealant (lb/gal)	Individual HAP Content (Weight %)	Maximum Hourly Design Rate (gal/hr) (Note 2)	Annual HAP Emissions (tons/yr) (Note 3)
				0.786	
				0.786	
				0.786	
				0.786	
				0.786	
				0.786	

This tracking sheet only refers to HAPs with a SMAL less than 10 tons per year.

Note 1: Screen Modeling Action Levels for individual HAPs can be found in the "Supplemental Information Package" of the construction permit application (page 21).

Note 2: The Maximum Hourly Design Rate is assumed to not change with the use of a different sealant.

Note 3: Column 6 = $\text{Column 3} \times \text{Column 4} \times \text{Column 5} \times 8760$.

HAP emissions of no more than the SMAL 2000 given in Column 2 indicate compliance.

Ms. LeAnne Ebrecht
Environmental Technician
Kawasaki Motors Manufacturing Corporation
28147 Business Highway 71
Maryville, MO 64468

RE: New Source Review Permit - Project Number: 2007-05-059

Dear Ms. Ebrecht:

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 the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:thl

Enclosures

c: Kansas City Regional Office
PAMS File 2007-05-059
Permit Number: