



## 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: 012008-013 Project Number: 2007-11-031

Parent Company: Henniges Automotive

Parent Company Address: 36600 Corporate Drive, Farmington Hills, MI 48331

Installation Name: Henniges Automotive

Installation Address: 101 Danny Scott Drive, New Haven, MO 63068

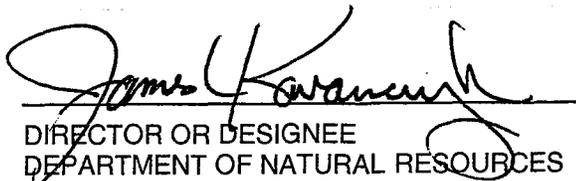
Location Information: Franklin County, S2, T44N, R3W

Application for Authority to Construct was made for: The construction of one (1) spray coating booth, one (1) primer spray booth, two (2) infrared ovens, three (3) offline flockers, a PVC extrusion line, and two (2) brush adhesive booths. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

JAN 29 2008

EFFECTIVE DATE

  
 DIRECTOR OR DESIGNEE  
 DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

**You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review.** In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the department's Air Pollution Control Program of the anticipated date of start up of 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.	2007-11-031

**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."*

Henniges Automotive  
Franklin County, S2, T44N, R3W

1. **Superseding Condition**  
The conditions of this permit supersede special condition #2 found in the previously issued construction permit (Permit Number 052004-007A) from the Air Pollution Control Program.
2. **Emission Limitation**
  - A. Henniges Automotive shall emit less than 100 tons of Volatile Organic Compounds (VOCs) from entire installation in any consecutive 12-month period.
  - B. Henniges Automotive shall emit less than 10.0 tons of individual Hazardous Air Pollutants (HAPs) and 25.0 tons of combined HAPs from the entire installation in any consecutive 12-month period.
  - C. Attachment A, Attachment B, and Attachment C, or equivalent forms approved by the Air Pollution Control Program, shall be used to demonstrate compliance with Special Conditions 2.A. and 2.B. Henniges Automotive 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.
  - D. Henniges Automotive 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.C. indicate that the source exceeds the limitation of Special Conditions Number 2.A. or 2.B.

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

Project Number: 2007-11-031  
Installation ID Number: 071-0173  
Permit Number:

Henniges Automotive  
101 Danny Scott Drive, New Haven, MO 63068

Complete: November 8, 2007

Parent Company:  
Henniges Automotive  
36600 Corporate Drive  
Farmington Hills, MI 48331

Franklin County, S2, T44N, R3W

REVIEW SUMMARY

- Henniges Automotive has applied for authority to construct one (1) spray coating booth, one (1) primer spray booth, two (2) infrared ovens, three (3) offline flockers, a PVC extrusion line, and two (2) brush adhesive booths.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are Methyl Isobutyl Ketone, and Toluene.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations apply to the proposed equipment.
- None of the Maximum Achievable Control Technology (MACT) standard apply to the installation. 40 CFR Part 63, Subpart PPPP, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products* does not apply to the installation because the conditioned potential emissions of HAPs are below the major source levels.
- 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 emissions of VOCs are conditioned to below major source levels.
- This installation is located in Franklin County, a nonattainment area for ozone (O<sub>3</sub>) and an attainment area for all other 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 model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.
- Emissions testing are not required for the equipment.
- A modification to the installation's intermediate operating permit application is required for this installation within one (1) year of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Henniges Automotive currently owns and operates an automotive product manufacturing plant on Danny Scott Drive in New Haven, Missouri. The plant was formerly owned by GDX Automotive. Table 1 lists all the equipment currently located at the site.

**Table 1: Equipment List for Henniges Automotive\***

Equipment	Emission Point(s)
Two (2) rubber extrusion lines (Lines No. 7 and No. 5)	SE7-X, SE7-01, E5-X, E5-01, E5-MO, E5-FB
Coating booth and electric curing oven	SE6-CB, E4-02
One (1) glass preparation system	N/A
Two (2) corner flockers	CF
Two (2) rubber extrusion Lines (Lines No. 1 and No. 6)	E1-X, E1-01, E1-MO, E1-FB, SE6-X, SE6-01
3.5" extruder	EXT
Cleanup Operations	CLN
One (1) extrusion line	SE3-X, SE3-01, SE3-CB
Seven (7) coating booths	CB3, CB4, SE7-CB, CB7, CB8, E4-CB2, E5-CB
One (1) rubber extrusion line (Line No. 2)	E2-X, E2-01, E2-02, E2-MO, E2-FB
One (1) Rubber Extrusion Line (Line No. 4)	E4-X, E4-01, E4-CB1, E4-FB
Coating Booth	CB-11
One extrusion line (line No. 8), hot air oven, adhesive and flock application, a coating booth, and a wipe-coating operation	E8-X, E8-01, E8-FB, E8-CB, EP-CB9
Wipe on coating/primer process	N/A
169 presses	Presses

N/A – Not Available (Applicant did not provide specific emission point numbers)

\*Table does not include equipment that Henniges Automotive plans to remove as part of this project: Coating booth 6, (permit #072001-015), molding coating booth #1 and #2 (permit #122000-002), equipment associated with the polyurethane bonding process (permit #022004-017), and twenty-four (24) presses (permit number not specified).

The following construction permits have been issued to Henniges Automotive from the Air Pollution Control Program.

**Table 2: Previous Permit Issued to the Installation**

Permit Number	Description
1298-007	Installation of presses and flockers (Superceded by Permit #122000-002)
0899-005	Installation of two (2) new extrusion lines
0899-006	Addition of sixteen (16) new mold presses and a hand wipe station (Superceded by Permit #122000-002)
122000-002	Installation of sixty-three (63) corner plug presses, two (2) corner flockers, sixteen (16) mold presses, two (2) extrusion lines, two (2) molding coating booths, and one (1) 3.5" extruder
032001-013	Installation of coating booth and electric curing oven. (Modification to Permit #0899-005)
072001-015	Installation of new extrusion line, eight (8) coating booths, and twelve(12) injection processes
052002-005	Installation of extrusion line 4 and thirty-one (31) presses
122000-002A	Amendment to Permit number 122000-002
092002-008	Installation of extrusion line and presses
032003-018	Installation of a spray coating booth (CB-11)
022004-017	Installation of a GMX-001 platform and a PVC bonding process.
052004-007	Installation of an extrusion line, sixteen (16) rubber presses, a coating booth, and a wipe-coating operation.
052004-007A	Elimination all HAPs emission limits

The installation received an intermediate operating permit in April, 2007 that limited the VOC and HAPs emissions to below major source levels (100 tpy of VOC, 10 tpy of individual HAPs, and 25 tpy of combined HAPs). Since there is a limit in the operating permit for HAPs and VOC emissions, this limit will now be added to this construction permit. With the issuance of this permit, the installation is considered a minor source for construction permits with VOC emissions limit of 100 tpy, individual HAPs emission limit of 10.0 tpy, and combined HAPs emission limit of 25 tpy.

## PROJECT DESCRIPTION

Henniges Automotive proposes to install a spray coating booth, a primer spray booth, two infrared ovens, three off line flockers, a PVC extrusion line and two (2) drip and brush adhesive booths. The spray coating booth (CB7a) and the primer spray booth (CB6a) have maximum hourly design rates (MHDR) of two (2) gallons per hour and one (1) gallons per hour, respectively. The off line flockers (OLF-1, OLF-2, OLF-3) each has MHDR of 0.4 gallons per hour. The drip and brush adhesive booths (CLGB-1, CLGB-2) each has MHDR of 0.5 gallons per hour. The PVC extruder has a maximum hourly design rate of 120.2 pounds per hour of PVC processed. The infrared ovens are electrically powered and do not emit any combustion products.

As part of this project, Henniges Automotive also plans to remove twenty-four (24) presses, coating booth #6 (CB6), molding coating booth #1 (MCB), molding coating booth #2 (MCB) and equipment associated with the polyurethane bonding process (PVC-Bond).

Currently, Henniges Automotive has applied for a permit to install a regenerative thermal oxidizer at this installation (Project 2007-10-074). However, the two projects can be considered separate projects because each project is independent of each other. The regenerative thermal oxidizer is being added to control emissions from extrusion lines 4 and 5 due to increase in usage of the L1951 coating used for these lines. Equipment in this project (2007-11-031) are being added to relocate equipment from a plant in Indiana. The equipment in this project does not use L1951 coating and their installation should have no effect on extrusion lines 4 and 5.

### EMISSIONS/CONTROLS EVALUATION

The VOC and HAPs emissions from the primer spray booth (CB6a), the coating spray booth (CB7a), the three (3) off line flockers (OLF-1, OLF-2, OLF-3), and the two (2) adhesive booths (CLGB-1, CLGB-2) were calculated using the VOC and HAPs content (%) obtained from Material Safety Data Sheets (MSDS) and assuming that all VOC and HAPs evaporate during operations. There is no data available to calculate VOC and HAPs emissions from the PVC extrusion line. However, Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 14.2, *Manufacture of Rubber Products* does give the emission factors for rubber extrusion. It is assumed that emissions from rubber extrusion should be similar to that of emissions from plastic extrusion and the emission factors for rubber extrusion were used in the emissions evaluation.

The equipment should not generate particulate matter emissions. The chemicals (coatings, sealants, etc.) used are in liquid form and are considered adhesives. The transfer rate from the application device to the surface should be high. Also, AP-42 data from the rubber extrusion process shows that the PM emission rates from the extrusion process are on the order of magnitude of  $10^{-8}$  pounds of particulate matter per pounds of rubber extruded.

No control devices will be used with the proposed equipment to control emissions.

**Table 2: Emissions Summary (tons per year)**

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2006 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	N/D	N/D	N/A	N/A
SO <sub>x</sub>	40.0	N/D	N/D	N/A	N/A
NO <sub>x</sub>	40.0	N/D	N/D	N/A	N/A
VOC	40.0	<100.00*	21.53	107.37	<100.00**
CO	100.0	N/D	N/D	N/D	N/A
HAPs	10.0/25.0	<10.0/15.0*	0.06	11.30	<10.0/25.0**

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

\*Limit given in intermediate operating permit OP2007-011 (Project #2002-01-134)

\*\*Limit is for the entire installation.

## 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 VOC and HAPs are conditioned below major source levels.

## APPLICABLE REQUIREMENTS

Henniges Automotive shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

## GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110  
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

- *Control of Emissions from Industrial Surface Coating Operations*, 10 CSR 10-5.330.

## 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.

\_\_\_\_\_  
Chia-Wei Young  
Environmental Engineer

\_\_\_\_\_  
Date

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, received 11/8/2007, designating GDX Automotive as the owner and operator of the installation.
- E-mail dated 12/17/2007 asking to change the name of the owner from GDX Automotive to Henniges Automotive.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.







Ms. Judy Schnaath  
Sr. EH & S Specialist  
Henniges Automotive  
101 Danny Scott Drive  
New Haven, MO 63068

RE: New Source Review Permit - Project Number: 2007-11-031

Dear Ms. Schnaath:

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 Chia-Wei Young at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH: cwyl

Enclosures

c: St. Louis Regional Office  
PAMS File 2007-11-031  
Permit Number: