



071-50392-00006 AI# 11746

May 14, 2026

via Email: [AirPermitApps@idem.in.gov](mailto:AirPermitApps@idem.in.gov)

via UPS: 1ZA477900302357457

Indiana Department of Environmental Management  
Office of Air Quality – Permits Branch  
Attn: Incoming Permit Application  
Indiana Government Center North  
100 North Senate Avenue, Room 13W  
Indianapolis, IN 46204-2251

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Re: TV Renewal Application  
Valeo North America, Inc.  
Permit ID #071-44283-00006

To whom it may concern:

On behalf of Valeo North America, Inc. (Valeo), BCA Environmental is pleased to submit the enclosed application to renew the existing TV Renewal referenced above for the Valeo facility located in Seymour, Indiana. This permit was issued on 2/18/2022 and therefore expires on 2/18/2027. The following items are included in this packet to satisfy the requirements for the Streamlined Air Permit Renewal Application:

1. A list of current permit numbers,
2. Signed Coversheet and current GSD-01,
3. FED-01 (*not required*)
4. A list of exempt or insignificant activities that have been added to the source
5. A list of emission units that have been removed from the source, and
6. CAM forms (FED-03)

**1. A list of current permit numbers:**

071-44283-00006	TV – Initial / Renewal	Issued on 2/18/2022
071-46652-00006	TV – Administrative Amendment	Issued on 6/21/2023
071-49794-00006	TV – Administrative Amendment	Issued on 12/9/2025

**2. Signed Coversheet and current GSD-01:**

See forms attached.

**3. FED-01:**

There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit. There are no National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included in the permit.

**4. A list of exempt or insignificant activities that have been added to the source:**

For this Air Permit Renewal Application, Valeo North America, Inc. has updated the following:

- Added two (2) boilers constructed in 2018, both with a maximum capacity of 1.50 MMBtu/hr. The boiler unit IDs are 325249 & 325250.

**5. A list of emission units that have been removed from the source:**

For this Air Permit Renewal Application, Valeo will not be removing any emission units from their current permit.

**6. FED-03:**

**Compliance Assurance Monitoring (CAM):**

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of CAM to each emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
HC-2 / PM10	O	None	-	-	-	-
HC-2 / PM2.5	O	None	-	-	-	-
HC-2 / PM*	O	326 IAC 6-3-2	<100	-	-	-
77HC / PM10	DF, O	None	-	-	-	-
77HC / PM2.5	DF, O	None	-	-	-	-
77HC / PM*	DF, O	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
78HC / PM10	DF, O	None	-	-	-	-
78HC / PM2.5	DF, O	None	-	-	-	-
78HC / PM*	DF, O	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
93HC / PM10	DF, O	None	-	-	-	-
93HC / PM2.5	DF, O	None	-	-	-	-
93HC / PM*	DF, O	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
95HC / PM10	DF, O	None	-	-	-	-
95HC / PM2.5	DF, O	None	-	-	-	-
95HC / PM*	DF, O	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-2 / PM10	DF	None	-	-	-	-
AF-2 / PM2.5	DF	None	-	-	-	-
AF-2 / PM*	DF	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-2 / VOC	None	326 IAC 8-1-6	<100	-	N <sup>1</sup>	-
	None	326 IAC 2-2	<100	-	N <sup>1</sup>	-
AF-2 / HAPs (total and single)	None	Area Source Limits	<25 total	-	N <sup>1</sup>	-
	None	326 IAC 2-2	≥10 single	<10 single	N <sup>2</sup>	N
AF-3 / PM10	DF	None	-	-	-	-
AF-3 / PM2.5	DF	None	-	-	-	-
AF-3 / PM*	DF	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-3 / VOC	None	326 IAC 8-1-6	<100	-	N <sup>1</sup>	-
	None	326 IAC 2-2	<100	-	N <sup>1</sup>	-
AF-3 / HAPs (total and single)	None	Area Source Limits	<25 total	-	N <sup>1</sup>	-
			≥10 single	<10 single	N <sup>2</sup>	N
AF-4 / PM10	DF	None	-	-	-	-
AF-4 / PM2.5	DF	None	-	-	-	-

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
AF-4 / PM*	DF	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-4 / VOC	None	326 IAC 8-1-6	<100	-	N <sup>1</sup>	-
	None	326 IAC 2-2	<100	-	N <sup>1</sup>	-
AF-4 / HAPs (total and single)	None	Area Source Limits	<25 total	-	N <sup>1</sup>	-
			≥10 single	<10 single	N <sup>2</sup>	N
AF-5 / PM10	DF	None	-	-	-	-
AF-5 / PM2.5	DF	None	-	-	-	-
AF-5 / PM*	DF	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-5 / HAPs (total and single)	None	Area Source Limits	<25 total	-	-	-
			≥10 single	<10 single	N <sup>2</sup>	
AF-6 / PM10	DF	None	-	-	-	-
AF-6 / PM2.5	DF	None	-	-	-	-
AF-6 / PM*	DF	326 IAC 6-3-2	<100	-	N <sup>1</sup>	-
AF-6 / HAPs (total and single)	None	Area Source Limits	<25 total	-	-	-
			≥10 single	<10 single	N <sup>2</sup>	

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated air pollutant.	
Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for regulated air pollutants (PM10, PM2.5, SO2, NOx, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.	
PM*	For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.
N <sup>1</sup>	CAM does not apply for the listed pollutant because the uncontrolled PTE of the listed pollutant is less than the major source threshold.
Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, O = Overspray Collection Systems, DF = Dry Filter	
N <sup>2</sup> Emission units without air pollution controls are not subject to CAM.	

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to any emission units at the source.

Thank you in advance for your assistance during this application review process. Please let me know if you need additional information or would like to discuss further. I can be reached at (574) 213-3875 or via email at [pmoyer@bcaconsultants.com](mailto:pmoyer@bcaconsultants.com).

Sincerely,



Peyton Moyer  
Project Scientist  
BCA Environmental Consultants, LLC

CC: Molly Harden—Valeo North America, Inc.



**AIR PERMIT APPLICATION COVER SHEET**  
 State Form 50639 (R4 / 1-10)  
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**IDEM – Office of Air Quality – Permits Branch**  
 100 N. Senate Avenue, MC 61-53 Room 1003  
 Indianapolis, IN 46204-2251  
 Telephone: (317) 233-0178 or  
 Toll Free: 1-800-451-6027 x30178 (within Indiana)  
 Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

**NOTE S:**

- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for all air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
- Submit the completed air permit application packet, including all forms and attachments, to **IDEM Air Permits Administration** using the address in the upper right hand corner of this page.
- IDEM will send a bill to collect the filing fee and any other applicable fees.
- Detailed instructions for this form are available on the Air Permit Application Forms website.

FOR OFFICE USE ONLY	
PERMIT NUMBER:	
DATE APPLICATION WAS RECEIVED:	
<b>3 FEB 2002</b> <b>4 00 15 PM</b> <b>*%&amp; 10" 2</b> <b>7 B&amp;N BM</b>	

1. Tax ID Number:

**PART A: Purpose of Application**

Part A identifies the purpose of this air permit application. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

2. Source / Company Name: Valeo North America, Inc.      3. Plant ID: 071 – 00006

4. Billing Address: 1231 A Ave. North

City: Seymour      State: IN      ZIP Code: 47274 –

5. Permit Level:     Exemption     Registration     SSOA     MSOP     FESOP     TVOP     PBR

6. Application Summary: Check all that apply. Multiple permit numbers may be assigned as needed based on the choices selected below.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Initial Permit   | <input checked="" type="checkbox"/> Renewal of Operating Permit | <input type="checkbox"/> Asphalt General Permit            |
| <input type="checkbox"/> Review Request   | <input type="checkbox"/> Revocation of Operating Permit         | <input type="checkbox"/> Alternate Emission Factor Request |
| <input type="checkbox"/> Interim Approval | <input type="checkbox"/> Relocation of Portable Source          | <input type="checkbox"/> Acid Deposition (Phase II)        |
| <input type="checkbox"/> Site Closure     | <input type="checkbox"/> Emission Reduction Credit Registry     |  |

Transition (between permit levels)      From:      To:

- Administrative Amendment:     Company Name Change     Change of Responsible Official
- Correction to Non-Technical Information     Notice Only Change
- Other (specify):

- Modification:     New Emission Unit or Control Device     Modified Emission Unit or Control Device
- New Applicable Permit Requirement     Change to Applicability of a Permit Requirement
- Prevention of Significant Deterioration     Emission Offset     MACT Preconstruction Review
- Minor Source Modification     Significant Source Modification
- Minor Permit Modification     Significant Permit Modification
- Other (specify):

7. Is this an application for an initial construction and/or operating permit for a "Greenfield" Source?     Yes     No

8. Is this an application for construction of a new emissions unit at an Existing Source?     Yes     No

### PART B: Pre-Application Meeting

Part B specifies whether a meeting was held or is being requested to discuss the permit application.

9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project?

No       Yes:      *Date:*

10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project?

No       Yes:      *Proposed Date for Meeting:*

### PART C: Confidential Business Information

Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file.

Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

11. Is any of the information contained within this application being claimed as **Confidential Business Information**?

No       Yes

### PART D: Certification Of Truth, Accuracy, and Completeness

Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit.

For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(34) must certify the air permit application. For all other applicants, this person is an "authorized individual" as defined in 326 IAC 2-1.1-1(1).

*I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.*

Robert Stecker  
Name (typed)

Signature



Senior Site General Manager  
Title

Date

5/14/25



# OAQ GENERAL SOURCE DATA APPLICATION

## GSD-01: Basic Source Level Information

State Form 50840 (R5 / 1-10)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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IDEM – Office of Air Quality – Permits Branch  
100 N. Senate Avenue, MC 61-53 Room 1003  
Indianapolis, IN 46204-2251  
Telephone: (317) 233-0178 or  
Toll Free: 1-800-451-6027 x30178 (within Indiana)  
Facsimile Number: (317) 232-6749  
[www.IN.gov/idem](http://www.IN.gov/idem)

### NOTES:

- \* The purpose of GSD-01 is to provide essential information about the entire source of air pollutant emissions. GSD-01 is a required form.
- \* Detailed instructions for this form are available on the Air Permit Application Forms website.
- \* All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

### PART A: Source / Company Location Information

1. Source / Company Name: Valeo North America, Inc.		2. Plant ID: 071 – 00006	
3. Location Address: 1231 Avenue A North			
City: Seymour	State: IN	ZIP Code: 47274 –	
4. County Name: Jackson		5. Township Name: Jackson	
6. Geographic Coordinates:			
Latitude: 38.929860		Longitude: -85.911203	
7. Universal Transferal Mercadum Coordinates (if known):			
Zone:	Horizontal:	Vertical:	
8. Adjacent States: Is the source located within 50 miles of an adjacent state?			
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – Indicate Adjacent State(s): <input type="checkbox"/> Illinois (IL) <input type="checkbox"/> Michigan (MI) <input type="checkbox"/> Ohio (OH) <input checked="" type="checkbox"/> Kentucky (KY)			
9. Attainment Area Designation: Is the source located within a non-attainment area for any of the criteria air pollutants?			
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – Indicate Nonattainment Pollutant(s): <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> NO <sub>x</sub> <input type="checkbox"/> O <sub>3</sub> <input type="checkbox"/> PM <input type="checkbox"/> PM <sub>10</sub> <input type="checkbox"/> PM <sub>2.5</sub> <input type="checkbox"/> SO <sub>2</sub>			
10. Portable / Stationary: Is this a portable or stationary source?			
		<input type="checkbox"/> Portable	<input checked="" type="checkbox"/> Stationary

### PART B: Source Summary

11. Company Internet Address (optional):	
12. Company Name History: Has this source operated under any other name(s)?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – Provide information regarding past company names in Part I, Company Name History.	
13. Portable Source Location History: Will the location of the portable source be changing in the near future?	
<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> No <input type="checkbox"/> Yes – Complete Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source.	
14. Existing Approvals: Have any exemptions, registrations, or permits been issued to this source?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – List these permits and their corresponding emissions units in Part M, Existing Approvals.	
15. Unpermitted Emissions Units: Does this source have any unpermitted emissions units?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – List all unpermitted emissions units in Part N, Unpermitted Emissions Units.	
16. New Source Review: Is this source proposing to construct or modify any emissions units?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – List all proposed new construction in Part O, New or Modified Emissions Units.	
17. Risk Management Plan: Has this source submitted a Risk Management Plan?	
<input checked="" type="checkbox"/> Not Required <input type="checkbox"/> No <input type="checkbox"/> Yes → Date submitted	
EPA Facility Identifier:	– –

**PART C: Source Contact Information**

**IDEM will send the original, signed permit decision to the person identified in this section. This person MUST be an employee of the permitted source.**

18. Name of Source Contact Person: Molly Harden

19. Title (optional): EHS Manager

20. Mailing Address: 1231 Avenue A North

City: Seymour

State: IN

ZIP Code: 47274 -

21. Electronic Mail Address (optional): molly.harden@valeo.com

22. Telephone Number: ( 812 ) 524 - 5237

23. Facsimile Number (optional): ( ) -

**PART D: Authorized Individual/Responsible Official Information**

IDEM will send a copy of the permit decision to the person indicated in this section, if the Authorized Individual or Responsible Official is different from the Source Contact specified in Part C.

24. Name of Authorized Individual or Responsible Official: Robert Stecker

25. Title: Senior Site General Manager

26. Mailing Address: 1231 Avenue A North

City: Seymour

State: IN

ZIP Code: 47274 -

27. Telephone Number: ( 812 ) 524 - 5170

28. Facsimile Number (optional): ( ) -

29. Request to Change the Authorized Individual or Responsible Official: Is the source officially requesting to change the person designated as the Authorized Individual or Responsible Official in the official documents issued by IDEM, OAQ? The permit may list the title of the Authorized Individual or Responsible Official in lieu of a specific name.

No  Yes - **Change Responsible Official to:**

**PART E: Owner Information**

30. Company Name of Owner: Valeo North America

31. Name of Owner Contact Person: Robert Stecker

32. Mailing Address: 1231 Avenue A North

City: Seymour

State: IN

ZIP Code: 47274 -

33. Telephone Number: ( 812 ) 524 - 5170

34. Facsimile Number (optional): ( ) -

34. Operator: Does the "Owner" company also operate the source to which this application applies?

No - Proceed to Part F below.  Yes - Enter "SAME AS OWNER" on line 35 and proceed to Part G below.

**PART F: Operator Information**

35. Company Name of Operator: SAME AS OWNER

36. Name of Operator Contact Person:

37. Mailing Address:

City:

State:

ZIP Code: -

38. Telephone Number: ( ) -

39. Facsimile Number (optional): ( ) -

**PART G: Agent Information**

40. **Company Name of Agent:** BCA Environmental Consultants, LLC

41. **Type of Agent:**  Environmental Consultant  Attorney  Other (specify):

42. **Name of Agent Contact Person:** Peyton Moyer

43. **Mailing Address:** 212 S Main St., Suite 1

City: Goshen	State: IN	ZIP Code: 46526 -
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44. **Electronic Mail Address (optional):** pmoyer@bcaconsultants.com

45. **Telephone Number:** ( 574 ) 213 - 3875

46. **Facsimile Number (optional):** ( ) -

47. **Request for Follow-up:** Does the "Agent" wish to receive a copy of the preliminary findings during the public notice period (if applicable) and a copy of the final determination?  No  Yes

**PART H: Local Library Information**

48. **Date application packet was filed with the local library:** 5/14/2026

49. **Name of Library:** Jackson County Public Library

50. **Name of Librarian (optional):**

51. **Mailing Address:** 303 W 2nd St

City: Seymour	State: IN	ZIP Code: 47274 -
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52. **Internet Address (optional):**

53. **Electronic Mail Address (optional):**

54. **Telephone Number:** ( 812 ) 522 - 3412

55. **Facsimile Number (optional):** ( ) -

**PART I: Company Name History (if applicable)**

Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A.

56. Legal Name of Company	57. Dates of Use
Osram Sylvania, Inc.	Prior to 8/1/1998
Valeo Lighting Systems North America, L.L.C.	08/02/1998 to 1/21/2014
Valeo North America	1/21/2014 to
	to
	to
	to
	to
	to
	to
	to

58. **Company Name Change Request:** Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ?

No  Yes - **Change Company Name to:**



**PART L: Source Process Description**

Complete this section to summarize the main processes at the source.

64. Process Description	65. Products	66. SIC Code	67. NAICS Code
Automotive Lighting Production	Exterior Automotive Lighting	3647	336321

**PART M: Existing Approvals (if applicable)**

Complete this section to summarize the approvals issued to the source since issuance of the main operating permit.

68. Permit ID	69. Emissions Unit IDs	70. Expiration Date
071-44283-00006	TV Renewal	2/18/2027
071-46652-00006	TV AA	2/18/2027
071-49794-00006	TV AA	2/18/2027

**PART N: Unpermitted Emissions Units (if applicable)**

Complete this section only if the source has emission units that are not listed in any permit issued by IDEM, OAQ.

71. Emissions Unit ID	72. Type of Emissions Unit	73. Actual Dates		
		Began Construction	Completed Construction	Began Operation
	NA			

**PART O: New or Modified Emissions Units (if applicable)**

Complete this section only if the source is proposing to add new emission units or modify existing emission units.

74. Emissions Unit ID	75. NEW	76. MOD	77. Type of Emissions Unit	78. Estimated Dates		
				Begin Construction	Complete Construction	Begin Operation
			NA			

**Appendix A : Emission Calculations  
PTE Summary**

Company Name: Valeo North America, Inc.  
Source Address: 1231 A Avenue North, Seymour IN 47274  
TV Administrative Amendment No.: 071-49794-00006  
Permit Reviewer: Askar Mazitov

Uncontrolled Potential to Emit (tons/yr)							
Emission Unit	PM	PM10	PM2.5 <sup>1</sup>	SO <sub>2</sub>	NOx	VOC	CO
South Wing Manual Spray Paint Booth	7.11	7.11	7.11	-	-	11.38	-
HC-2	87.69	87.69	87.69	-	-	24.15	-
AF-2	2.57	2.57	2.57	-	-	52.52	-
AF-3	2.57	2.57	2.57	-	-	52.52	-
AF-4	2.57	2.57	2.57	-	-	52.52	-
AF-5	2.57	2.57	2.57	-	-	52.52	-
AF-6	2.57	2.57	2.57	-	-	52.52	-
77HC	19.66	19.66	19.66	-	-	27.14	-
78HC	19.66	19.66	19.66	-	-	27.14	-
93HC	19.66	19.66	19.66	-	-	27.14	-
95HC	19.66	19.66	19.66	-	-	27.14	-
Natural Gas Combustion	0.78	3.12	3.12	0.25	41.07	2.26	34.50
PW-1	-	-	-	-	-	0.13	-
<b>Total</b>	<b>187.07</b>	<b>189.41</b>	<b>189.41</b>	<b>0.25</b>	<b>41.07</b>	<b>409.08</b>	<b>34.50</b>

Potential to Emit after Issuance <sup>2,3</sup> (tons/yr)							
Emission Unit	PM	PM10	PM2.5 <sup>1</sup>	SO <sub>2</sub>	NOx	VOC	CO
Unit 3	7.11	7.11	7.11	-	-	11.38	-
HC-2	87.69	87.69	87.69	-	-	24.15	-
AF-2	2.57	2.57	2.57	-	-	18.00	-
AF-3	2.57	2.57	2.57	-	-	18.00	-
AF-4	2.57	2.57	2.57	-	-	18.00	-
AF-5	2.57	2.57	2.57	-	-	18.00	-
AF-6	2.57	2.57	2.57	-	-	25.00	-
77HC	19.66	19.66	19.66	-	-	12.00	-
78HC	19.66	19.66	19.66	-	-	12.00	-
93HC	19.66	19.66	19.66	-	-	12.00	-
95HC	19.66	19.66	19.66	-	-	12.00	-
Natural Gas Combustion	0.78	3.12	3.12	0.25	41.07	2.26	34.50
PW-1	-	-	-	-	-	0.13	-
<b>Total</b>	<b>187.07</b>	<b>189.41</b>	<b>189.41</b>	<b>0.25</b>	<b>41.07</b>	<b>182.93</b>	<b>34.50</b>

## Notes:

- PM2.5 listed is direct PM2.5
- The shaded cells indicate where limits are included.
- Pursuant to 326 IAC 6-3-2(d), the particulate emissions from surface coating operations shall be controlled by dry particulate filters and the Permittee shall operate the control devices in accordance with the manufacturer's specifications. Compliance with this standard, in conjunction with a conservative assumption of 90% capture and control, shall limit PM, PM10, and PM2.5 emissions from the surface coating operations to the values shown.

**Appendix A: Emission Calculations  
HAP Summary**

**Company Name:** Valeo North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazitov

Uncontrolled Potential to Emit (tons/yr)					
Emissions Unit	South Wing Manual Spray Paint Booth	AF-2 through AF-6	Closed Molding	Natural Gas Combustion	Single HAP Total
<b>Organic</b>					
Benzene				8.63E-04	8.63E-04
Cumene	0.00E+00				0.00E+00
Dichlorobenzene				4.93E-04	4.93E-04
Formaldehyde				3.08E-02	3.08E-02
Hexamethylene diisocyanate	1.37E-03				1.37E-03
n-Hexane				0.74	0.74
Methanol		64.28			64.28
MIBK <sup>1</sup>		2.11			2.11
Styrene					0.00
Toluene	0.18			1.40E-03	0.18
Xylene	0.09				9.31E-02
<b>Inorganic</b>					
Cadmium				4.52E-04	4.52E-04
Chromium				5.75E-04	5.75E-04
Lead				2.05E-04	2.05E-04
Manganese				1.56E-04	1.56E-04
Nickel				8.63E-04	8.63E-04
<b>Combined HAP Total per unit</b>	<b>0.27</b>	<b>66.39</b>	<b>0.00</b>	<b>0.78</b>	
<b>Source-wide Combined HAP Total</b>	<b>67.44</b>				

Potential to Emit After Issuance <sup>2</sup> (tons/yr)					
Emissions Unit	South Wing Manual Spray Paint Booth	AF-2 through AF-6	Closed Molding	Natural Gas Combustion	Single HAP Total
<b>Organic</b>					
Benzene				8.63E-04	8.63E-04
Cumene	0.00E+00				0.00E+00
Dichlorobenzene				4.93E-04	4.93E-04
Formaldehyde				3.08E-02	3.08E-02
Hexamethylene diisocyanate	1.37E-03				1.37E-03
n-Hexane				0.74	0.74
Methanol		9.90			9.90
MIBK		2.11			2.11
Styrene					0.00
Toluene	0.18			1.40E-03	0.18
Xylene	0.09				0.09
<b>Inorganic</b>					
Cadmium	--	--	--	4.52E-04	4.52E-04
Chromium	--	--	--	5.75E-04	5.75E-04
Lead	--	--	--	2.05E-04	2.05E-04
Manganese	--	--	--	1.56E-04	1.56E-04
Nickel	--	--	--	8.63E-04	8.63E-04
<b>Combined HAP Total per unit</b>	<b>0.27</b>	<b>12.01</b>	<b>0.00</b>	<b>0.78</b>	
<b>Source-wide Combined HAP Total</b>	<b>13.06</b>				

**Notes:**

- MIBK - methyl isobutyl ketone (4-methyl-2-pentanone, CASRN 108-10-1)
- The shaded cells indicate where limits are included.

**Appendix A: Emission Calculations  
Coating Volume Calculations**

**Company Name:** Valeo North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazitov

Coating volumes sprayed per unit are derived from dry coating thickness as follows:

Dry Volume on part (gal) = Max coated surface area (in<sup>2</sup>) x dry film thickness (μm) / 25,400 (μm/in) / 231 (in<sup>3</sup>/gal)

Volume % Volatile = 100 - Volume % Non-Volatile/100

Volume fraction of component = volume of component / [total volume of all components]

Volume fraction volatiles as applied = Σ (component Volume % Volatiles/100 x Volume fraction of component)

Wet volume as applied = Dry Volume on Part (gal) / [1 - Volume fraction as applied]

Wet Volume on Part (gal) = Dry Volume on part / [1 - Volume Percent Volatile (%) / 100] *one-part coatings*

Wet Volume on Part (gal) = Wet volume as applied x Volume fraction of component *multi-part coatings*

Gal of Mat (gal/unit) = Wet Volume on part (gal) / [Transfer Efficiency (%) / 100]

Coating	Emissions Unit	Surface Area (in <sup>2</sup> )	Dry Film Thickness (μm)	Dry Volume on Part (gal)	Volume % Volatile	Volume fraction of component	Volume fraction volatiles as applied	Wet volume as applied (gal)	Wet Volume on Part (gal)	Transfer Efficiency	Gal. of Mat. (gal/unit)
Hard coat	9, 20-23	450	10	7.67E-04	63.96%	1	--	--	2.13E-03	25%	8.51E-03

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations  
South Wing Manual Spray Paint Booth**

Company Name: Valco North America, Inc.  
Source Address: 1231 A Avenue North, Seymour IN 47274  
Permit No.: 071-49794-00008  
Reviewer: Askar Mazitov

**1. VOC and Particulate**

Manufacturer	Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempts	Weight % Organics	Volume % Water & Exempts	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Gallons of Coating (gal/day)	Pounds VOC per Gallon of Coating less Water & Solids	Pounds VOC per gallon of coating	Potential VOC			Particulate Potential (ton/yr)	lb VOC/ gal solids	Application Method	Transfer Efficiency	Substrate
													(lb/hour)	(lb/day)	(ton/yr)					
Red Spot	Argent Paint 303LE21328H	8.54	59.04%	0%	59.04%	0%	31.00%	4.80E-03	100	11.52	5.04	5.04	2.42	58.08	10.60	6.62	16.26	conventional	10%	plastic
Red Spot	Hardener LE9425B	8.10	59.01%	0%	59.01%	0%	34.80%	3.75E-04	100	0.90	4.78	4.78	0.18	4.30	0.79	0.49	13.74	conventional	10%	plastic
N/A	Acetone	6.60	100%	100%	0.00%	100%	0%	3.60E-03	100	6.64	0	0	0	0	0	0	0	conventional	10%	plastic

**Total Potential to Emit** Add worst case coating to all solvents **Totals:** 2.60 62.38 11.38 7.11 16.06  
**PMPM<sub>v</sub>/PM<sub>2.5</sub> PTE After Is suance:** 90% control efficiency 0.71

**METHODOLOGY**

Coating is applied at a ratio of 1 qt (32 oz) of paint:2.5 oz of hardener:12 oz acetone  
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lb/gal) \* (1-Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lb/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used  
Total lb VOC/gal solids = Σ [Density (lb/gal) x Weight % Organics x Gallons of Coating (gal/day)] / Σ [Volume % Non-Volatiles x Gallons of Coating (gal/day)]

**2. Hazardous Air Pollutants**

Material	Density (lb/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Cumene	Weight % HMDI <sup>1</sup>	Weight % Toluene	Weight % Xylene	Cumene Emissions (ton/yr)	HMDI Emissions <sup>2</sup> (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAPs (ton/yr)
Argent Paint 303LE21328H <sup>3</sup>	8.54	4.80E-03	100	0.00%	0%	1.00%	0.00%	0.00E+00	0	0.18	0.00E+00	0.18
Hardener LE9425B	8.10	3.75E-04	100	0%	0.50%	0%	7.00%	0	1.37E-03	0	9.31E-02	9.45E-02
Acetone	6.60	3.60E-03	100	0%	0%	0%	0%	0	0	0	0	0
								0.00E+00	1.37E-03	0.18	0.09	0.27

- Notes:  
1. HMDI - hexamethylene diisocyanate (CASRN 822-06-0)  
2. HMDI emissions are conservatively based on the fraction of the HAP in overspray because the HAP is a reactive component of the paint.  
3. Includes default HAP content for aromatic naphtha (CASRN 84742-96-8) and Stoddard solvent (CASRN 8062-41-3) from Table 3, 40 CFR 63, Subpart M M M M.

**Methodology**

HAP Emissions (tons/yr) = Density (lb/gal) x Gallons of Material (gal/unit) x Maximum (unit/hr) x Weight % HAP/100 x 8,760 (hr/yr) / 2,000 (lb/ton) **volatiles**  
HAP Emissions (tons/yr) = Density (lb/gal) x Gallons of Material (gal/unit) x Maximum (unit/hr) x Weight % HAP/100 x (1-Transfer Efficiency (%)) / 100 x 8,760 (hr/yr) / 2,000 (lb/ton) **HMDI**

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations  
Hard Coat #2**

**Company Name:** Valeo North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazl'ov

**1. VOC and Particulate**

Manufacturer	Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempts	Weight % Organics	Volume % Water & Exempts	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Gallons of Coating (gal/day)	Pounds VOC per Gallon of Coating less Water & Exempts	Pounds VOC per gallon of coating	Potential VOC			Particulate Potential (ton/yr)	lb VOC/gal solids	Application Method	Transfer Efficiency	Substrate									
													(lb/hour)	(lb/day)	(ton/yr)														
Red Spot	LVT610V3	7.63	37.74%	25.00%	12.74%	29%	36.04%	8.51E-03	660	134.83	1.37	0.97	5.46	131.06	23.92	87.69	2.70	conventional	25%	plastic									
Red Spot	LVT820V3	7.68	55.72%	43.10%	12.62%	50%	35.59%	8.62E-03	660	136.56	1.94	0.97	5.51	132.35	24.15	63.58	2.72	conventional	25%	plastic									
<b>Total Potential to Emit</b>													<b>5.61</b>	<b>132.36</b>	<b>24.15</b>	<b>87.89</b>	<b>2.72</b>												
<b>Add worst case coating to all solvents</b>													<b>80%</b>	<b>control efficiency</b>	<b>8.77</b>														
<b>Worst case of all coatings</b>													<b>PM/PM<sub>10</sub>/PM<sub>2.5</sub></b>	<b>PTE After issuance</b>															

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hrs/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lb/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lb/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used  
Total lb VOC/gal solids = Σ [Density (lb/gal) x Weight % Organics x Gallons of Coating (gal/day)] / Σ [Volume % Non-Volatiles x Gallons of Coating (gal/day)]



**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations  
Lean Lens Coaters (77HC, 78HC, 83HC, 86HC & 107HC)**

**Company Name:** Video North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazitov

**1. VOC and Particulate**

Manufacturer	Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempts	Weight % Organics	Volume % Water & Exempts	Volume % Non-Volatiles (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Gallons of Coating (gal/day)	Pounds VOC per Gallon of Coating less Water & Exempts	Pounds VOC per gallon of coating	Potential VOC			Particulate Potential (lb/yr)	lb VOC/gal solids	Application Method	Transfer Efficiency	Substrate		
													(lb/hour)	(lb/day)	(ton/yr)							
<b>77HC</b>																						
Red Spot	UVT 820V1V	8.13	39.94%	0%	39.94%	0%	50.95%	8.51E-03	144	29	3.25	3.25	3.98	96.52	17.43	19.66	6.37	conventional	25%	plastic		
Red Spot	UVT 820V3	7.66	55.72%	43.10%	12.62%	50%	35.59%	0.01	144	34.91	1.94	0.97	1.41	33.83	6.17	16.25	2.72	conventional	25%	plastic		
Red Spot	UVT 820V2	7.66	55.58%	0.00%	55.58%	0%	35.59%	0.01	144	34.91	4.26	4.26	6.20	148.70	27.14	16.27	11.97	conventional	25%	plastic		
<b>Worst case of all coatings</b>													<b>8.20</b>	<b>148.70</b>	<b>27.14</b>	<b>19.88</b>	<b>11.97</b>					
<b>77HC RM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE After issuance</b>													<b>60%</b>	<b>control</b>	<b>efficiency</b>	<b>1.87</b>						
<b>78HC</b>																						
Red Spot	UVT 820V1V	8.13	39.94%	0%	39.94%	0%	50.95%	8.51E-03	144	29	3.25	3.25	3.98	96.52	17.43	19.66	6.37	conventional	25%	plastic		
Red Spot	UVT 820V3	7.66	55.72%	43.10%	12.62%	50%	35.59%	0.01	144	34.91	1.94	0.97	1.41	33.83	6.17	16.25	2.72	conventional	25%	plastic		
Red Spot	UVT 820V2	7.66	55.58%	0.00%	55.58%	0%	35.59%	0.01	144	34.91	4.26	4.26	6.20	148.70	27.14	16.27	11.97	conventional	25%	plastic		
<b>Worst case of all coatings</b>													<b>8.20</b>	<b>148.70</b>	<b>27.14</b>	<b>19.88</b>	<b>11.97</b>					
<b>78HC RM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE After issuance</b>													<b>60%</b>	<b>control</b>	<b>efficiency</b>	<b>1.87</b>						
<b>83HC</b>																						
Red Spot	UVT 820V1V	8.13	39.94%	0%	39.94%	0%	50.95%	8.51E-03	144	29	3.25	3.25	3.98	96.52	17.43	19.66	6.37	conventional	25%	plastic		
Red Spot	UVT 820V3	7.66	55.72%	43.10%	12.62%	50%	35.59%	0.01	144	34.91	1.94	0.97	1.41	33.83	6.17	16.25	2.72	conventional	25%	plastic		
Red Spot	UVT 820V2	7.66	55.58%	0.00%	55.58%	0%	35.59%	0.01	144	34.91	4.26	4.26	6.20	148.70	27.14	16.27	11.97	conventional	25%	plastic		
<b>Worst case of all coatings</b>													<b>8.20</b>	<b>148.70</b>	<b>27.14</b>	<b>19.88</b>	<b>11.97</b>					
<b>83HC RM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE After issuance</b>													<b>60%</b>	<b>control</b>	<b>efficiency</b>	<b>1.87</b>						
<b>86HC</b>																						
Red Spot	UVT 820V1V	8.13	39.94%	0%	39.94%	0%	50.95%	8.51E-03	144	29	3.25	3.25	3.98	96.52	17.43	19.66	6.37	conventional	25%	plastic		
Red Spot	UVT 820V3	7.66	55.72%	43.10%	12.62%	50%	35.59%	0.01	144	34.91	1.94	0.97	1.41	33.83	6.17	16.25	2.72	conventional	25%	plastic		
Red Spot	UVT 820V2	7.66	55.58%	0.00%	55.58%	0%	35.59%	0.01	144	34.91	4.26	4.26	6.20	148.70	27.14	16.27	11.97	conventional	25%	plastic		
<b>Worst case of all coatings</b>													<b>8.20</b>	<b>148.70</b>	<b>27.14</b>	<b>19.88</b>	<b>11.97</b>					
<b>86HC RM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE After issuance</b>													<b>60%</b>	<b>control</b>	<b>efficiency</b>	<b>1.87</b>						
<b>Total Potential to Emit</b>													<b>24.78</b>	<b>684.78</b>	<b>108.56</b>	<b>78.66</b>	<b>7.88</b>					
<b>Add worst case coating to all solvents</b>																						
<b>RM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE After issuance</b>													<b>60%</b>	<b>control</b>	<b>efficiency</b>	<b>7.88</b>						

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
 Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
 Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lb/gal) \* (1-Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)  
 Pounds VOC per Gallon of Solids = (Density (lb/gal) \* Weight % organics) / (Volume % solids)  
 Total = Worst Coating + Sum of all solvents used  
 Total lb VOC/gal solids = Σ [Density (lb/gal) x Weight % Organics x Gallons of Coating (gal/day)] / Σ [Volume % Non-Volatiles x Gallons of Coating (gal/day)]

Coating	Emission Units	Surface Area (in <sup>2</sup> )	Dry Film Thickness (µm)	Dry Volume on Part (gal)	Volume % Volatile	Volume fraction of component	Volume fraction volatiles as applied	Wet Volume as applied (gal)	Wet Volume on part (gal)	Transfer Efficiency	Gal of Mat. (gal/unit)
Hard Coat <sup>1</sup> UVT820V3	20-24	526	1.00E+01	9.00E-04	64.41%	1	-	-	2.53E-03	25%	0.01

<sup>1</sup> Based upon new Lean 2.1 Lens Coating parameters provided by source

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MMBTU/HR >100**

Company Name: Valeo North America, Inc.  
Source Address: 1231 A Avenue North, Seymour IN 47274  
Permit No.: 071-49794-00006  
Reviewer: Askar Mazitov

Description	Unit ID	Construction Date	Number of Units	Capacity(MMBtu/hr)	
				Unit	Total
see Combustion IA's	HVAC units		17		3.17
see Combustion IA's	AMU units		18		49.90
see Combustion IA's	miscellaneous heaters		17		20.37
Boiler	70928	1994	1	0.75	0.75
Boiler	70935	1994	1	0.75	0.75
Boiler	4817	2012	1	3.00	3.00
Boiler	4818	2012	1	3.00	3.00
Boiler	4819	2012	1	3.00	3.00
Boiler	31314	2013	1	1.85	1.85
Boiler	31312	2013	1	1.85	1.85
Boiler	258388	2013	1	1.50	1.50
Boiler	258748	2013	1	1.50	1.50
Boiler	272743	2014	1	1.50	1.50
Boiler	325249	2018	1	1.50	1.50
Boiler	325250	2018	1	1.50	1.50
Thermal Oxidizer	RTO-2	2007	1	0.17	0.17
Thermal Oxidizer	RTO-3	2015	1	0.17	0.17
Thermal Oxidizer	RTO-4	2015	1	0.17	0.17

Total Heat Input Capacity (MMBtu/hr)	HHV (MMBtu/MMCF)	Potential Throughput (MMCF/yr)
95.65	1,020.00	821.48

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.90	7.60	7.60	0.60	100.00	5.50	84.00
Potential Emission in tons/yr	0.78	3.12	3.12	0.25	**see below 41.07	2.26	34.50

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
PM2.5 emission factor is filterable and condensable PM2.5 combined.  
\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
MMBtu = 1,000,000 Btu  
MMCF = 1,000,000 Cubic Feet of Gas  
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF) / 2,000 lb/ton

**Hazardous Air Pollutants (HAPs)**

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	n-Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	0.08	1.80	3.40E-03	
Potential Emission in tons/yr	8.63E-04	4.93E-04	0.03	0.74	1.40E-03	0.77

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	2.05E-04	4.52E-04	5.75E-04	1.58E-04	8.63E-04	2.25E-03
	<b>Total HAPs</b>					<b>0.78</b>

Methodology is the same as above.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Insignificant Activities**

**Company Name:** Valeo North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazitov

The following units were named in the application for the 2007 Part 70 Renewal (071-18360-00006) except for Flow Coat 2 heater (1.00 MMBtu/hr) and Std Assy Heat heater (1.40 MMBtu), which have been removed (Descriptions of boilers identified as Hardcoat Boiler and HC 2/Arg Boiler in the 2007 application were corrected in SSM 071-30915-00006, issued January 12, 2012):

Unit	Capacity (MMBtu/hr)	Unit	Capacity (MMBtu/hr)	Unit	Capacity (MMBtu/hr)	Description (indirect except as noted)
HVAC 1	0.23	AMU 1	1.19	QA Office	0.12	heater
HVAC 2	0.10	AMU 2	1.19	Office RC	0.06	heater
HVAC 3	0.20	AMU 3	1.19	Br 95 Exp	0.25	heater
HVAC 12	0.12	AMU 4	1.19	Office 95	0.12	heater
HVAC 13	0.18	AMU 5	1.19	Training	0.21	heater
HVAC 14	0.12	AMU 6	1.19	Dock Heat	7.00	heater
HVAC 16	0.18	AMU 7	1.19	Comp Room	1.00	heater
HVAC 18	0.40	AMU 8	1.19	Dock Heat DH	6.93	heater, direct
HVAC 19	0.20	AMU 9	1.19	Cal Lab	0.01	heater
HVAC 22	0.21	AMU 10	1.19	Hardcoat Heat	4.69	heater, direct
HVAC 23	0.35	AMU 17	4.00			
HVAC 24	0.21	AMU 18	4.00			
HVAC 25	0.18	95 AMU 1	5.00			
HVAC 30	0.24	95 AMU 2	5.00			
HVAC 33	0.12	95 AMU 3	5.00			
HVAC 41	0.12	95 AMU 4	5.00			
HVAC 47	0.04	95 AMU 5	5.00			
		95 AMU 6	5.00			
<b>Total</b>	<b>3.17</b>		<b>49.90</b>			<b>20.37</b> tti w/o boilers

HVAC units are assumed combustion for indirect heating (units with a heat exchanger comparable to residential furnace)  
AMU's are assumed combustion for direct heating (combustion products discharged with heated air)  
Except as noted, miscellaneous heaters are assumed combustion for indirect heating because the units are functionally equivalent to HVAC units or described as heaters for processes such as washers.

**Appendix A: Emissions Calculations  
Degreasing/Cleaners**

**Company Name:** Valeo North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit No.:** 071-49794-00006  
**Reviewer:** Askar Mazitov

**Uncontrolled Potential to Emit (lbs/day)**

Location	E mission Unit	Cleaners	Density (lbs/gal)	Consumption (gal/yr)	Weight Volatiles (%)	VOC PTE (lbs/day)	VOC PTE (tn/yr)
Coating Cage	PW-1	Agitene	6.66	40.00	100%	0.73	0.13
<b>Total</b>						<b>0.73</b>	

**Methodology:**

Consumption (gal/yr) = Obtained from the facility  
VOC PTE (lbs/day) = Density (lbs/gal) X Consumption (gal/yr)\* (Weight of Volatiles (%) / 100) / 365 (days/yr)  
VOC PTE (tons/yr) = Density (lbs/gal) X Consumption (gal/yr)\* (Weight of Volatiles (%) / 100) / 2000

**Appendix A: Emission Calculations  
Fugitive Dust Emissions - Paved Roads**

**Company Name:** Vale North America, Inc.  
**Source Address:** 1231 A Avenue North, Seymour IN 47274  
**Permit Number:** 07-149794-00006  
**Reviewer:** Asker Matlow

**Paved Roads at Industrial Site**

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trips/day)	Maximum Weight of Loaded Vehicle (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Freight truck- 3 Axles (entering docks) (one-way trip)	25.0	1.0	25.0	27.0	675.0	450	0.085	2.1	777.7
Freight truck- 3 Axles (entering docks) (one-way trip)	25.0	1.0	25.0	27.0	675.0	450	0.085	2.1	777.7
Freight truck- 3 Axles (entering docks) (one-way trip)	25.0	1.0	25.0	27.0	675.0	100	0.019	0.5	172.8
Freight truck- 3 Axles (entering docks) (one-way trip)	25.0	1.0	25.0	27.0	675.0	100	0.019	0.5	172.8
<b>Totals</b>			<b>100.0</b>		<b>2700.0</b>			<b>5.2</b>	<b>1901.0</b>

Average Vehicle Weight Per Trip =  tons/trip  
 Average Miles Per Trip =  miles/trip

Unmitigated Emission Factor, Ef =  $[k * (sL)^{0.91} * (W)^{1.02}]$  (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	b/WMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.0	27.0	27.0	tons = average vehicle weight
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = soil loading value for paved roads at iron and steel production facilities - Table 13.2.1-3

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eem =  $E * [1 - (p/4N)]$  (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eem =   
 where p =  days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
 N =  days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.508	0.502	0.1231	lb/mile
Mitigated Emission Factor, Eem =	2.293	0.459	0.1128	lb/mile

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)
Freight truck- 3 Axles (entering docks) (one-way trip)	0.89	0.18	0.04
Freight truck- 3 Axles (entering docks) (one-way trip)	0.89	0.18	0.04
Freight truck- 3 Axles (entering docks) (one-way trip)	0.20	0.04	0.01
Freight truck- 3 Axles (entering docks) (one-way trip)	0.20	0.04	0.01
<b>Totals</b>	<b>2.18</b>	<b>0.44</b>	<b>0.11</b>

**Methodology**

Total Weight driven per day (ton/day) = [Maximum Weight of Loaded Vehicle (tons/trip)] \* [Maximum trips per day (trips/day)]  
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]  
 Maximum one-way miles (miles/day) = [Maximum trips per year (trips/day)] \* [Maximum one-way distance (mi/trip)]  
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trips/day)]  
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trips/day)]  
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
 Mitigated PTE (Before Control) (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Mitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)

**Abbreviations**

PM = Particulate Matter  
 PM10 = Particulate Matter (<10 um)  
 PM2.5 = Particulate Matter (<2.5 um)  
 PTE = Potential to Emit