



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: August 10, 2007
RE: Toyota Tsusho America, Inc. / 051-24995-00049
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

August 10, 2007

Mr. Mark Effinger
Toyota Tsusho America, Inc.
RR 1 Box 174C
Princeton, Indiana 47670

Re: Registered Construction and Operation Status,
051-24995-00049

Dear Mr. Effinger:

The application from Toyota Tsusho America, Inc., received on July 5, 2007, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1, it has been determined that the following stationary automobile window assembly plant to be located at RR 1 Box 174C, Princeton, Indiana 47670, is classified as registered:

- (a) one (1) window assembly line, designated as Line 1, approved for construction in 2007, which assembles glass windows for automobiles at a maximum capacity of 510 units/per hour, exhausting to the atmosphere, and consisting of the following emission units:
 - (1) one (1) rear door bonding line, approved for construction in 2007, with a maximum production rate of 180 parts/per hour;
 - (2) one (1) back window bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
 - (3) one (1) rear quarter bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
 - (4) one (1) rear quarter sunshade hook bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
- (b) one (1) window assembly line, designated as Line 2, approved for construction in 2007, which assembles glass windows for automobiles at a maximum capacity of 355 units/per hour, exhausting to the atmosphere, and consisting of the following emission units:
 - (1) one (1) front door and slide bonding line, approved for construction in 2007, with a maximum production rate of 200 parts/per hour;
 - (2) one (1) quarter bonding line, approved for construction in 2007, with a maximum production rate of 100 parts/per hour;
 - (3) one (1) quarter sunshade hook bonding line, approved for construction in 2007, with a maximum production rate of 55 parts/per hour;
- (c) one (1) natural gas-fired office heater, designated as H1, approved for construction in 2007, rated at 0.05 MMBtu/hr, exhausting externally;

- (d) one (1) natural gas-fired warehouse space heater, designated as H2, approved for construction in 2007, rated at 0.05 MMBtu/hr, exhausting externally;
- (e) one (1) natural gas-fired heater, designated as H3, approved for construction in 2007, rated at 0.1 MMBtu/hr, exhausting externally;
- (f) one (1) natural gas-fired air makeup unit, designated as H4, approved for construction in 2007, rated at 0.2 MMBtu/hr, exhausting externally;

The following conditions shall be applicable:

1. 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

2. 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

This registration is the first approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

If you have any questions on this matter, please contact Brian Williams, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5375 or at 1-800-451-6027 (ext 45375).

Sincerely,

Original document signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

bmw

cc: File - Gibson County
Gibson County Health Department
Air Compliance Section - Derrick Ohning
IDEM Southwest Regional Office
Permit Tracking
Compliance Data Section
Permits Administrative and Development
Billing, Licensing and Training Section – Dan Stamatkin

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

Company Name:	Toyota Tsusho America, Inc.
Address:	RR 1 Box 174C, Princeton, Indiana 47670
Phone #:	(812) 385-0594
Registration #:	051-24995-00049

Certification by the Authorized Individual

I hereby certify that Toyota Tsusho America, Inc. is still in operation and is in compliance with the requirements of Registration 051-24995-00049.

Name (typed):

Title:

Signature:

Phone Number:

Date:

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Toyota Tsusho America, Inc.
Source Location: Rural Route 1 Box 174C, Princeton, Indiana 47670
County: Gibson
SIC Code: 3714 (Manufacturing of Motor Vehicle Parts and Accessories)
Application No.: 051-24995-00049
Reviewer: Brian M Williams

On July 5, 2007, the Office of Air Quality (OAQ) received an application from Toyota Tsusho America, Inc. relating to the construction and operation of a stationary automobile window assembly plant.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following:

- (a) one (1) window assembly line, designated as Line 1, approved for construction in 2007, which assembles glass windows for automobiles at a maximum capacity of 510 units/per hour, exhausting to the atmosphere, and consisting of the following emission units:
 - (1) one (1) rear door bonding line, approved for construction in 2007, with a maximum production rate of 180 parts/per hour;
 - (2) one (1) back window bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
 - (3) one (1) rear quarter bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
 - (4) one (1) rear quarter sunshade hook bonding line, approved for construction in 2007, with a maximum production rate of 110 parts/per hour;
- (b) one (1) window assembly line, designated as Line 2, approved for construction in 2007, which assembles glass windows for automobiles at a maximum capacity of 355 units/per hour, exhausting to the atmosphere, and consisting of the following emission units:
 - (1) one (1) front door and slide bonding line, approved for construction in 2007, with a maximum production rate of 200 parts/per hour;
 - (2) one (1) quarter bonding line, approved for construction in 2007, with a maximum production rate of 100 parts/per hour;
 - (3) one (1) quarter sunshade hook bonding line, approved for construction in 2007, with a maximum production rate of 55 parts/per hour;
- (c) one (1) natural gas-fired office heater, designated as H1, approved for construction in 2007, rated at 0.05 MMBtu/hr, exhausting externally;

- (d) one (1) natural gas-fired warehouse space heater, designated as H2, approved for construction in 2007, rated at 0.05 MMBtu/hr, exhausting externally;
- (e) one (1) natural gas-fired heater, designated as H3, approved for construction in 2007, rated at 0.1 MMBtu/hr, exhausting externally;
- (f) one (1) natural gas-fired air makeup unit, designated as H4, approved for construction in 2007, rated at 0.2 MMBtu/hr, exhausting externally;

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

No previous air approvals have been issued to this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the application be approved as a registration. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 5, 2007. Additional information was submitted by the source via email on July 19, 2007.

Emission Calculations

See Appendix A of this TSD for detailed emissions calculations (Appendix A, pages 1 through 5).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit (PTE) is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.003
PM-10	0.013
SO ₂	0.001
NO _x	0.175
VOC	14.99
CO	0.147

HAPs	Potential To Emit (tons/year)
Methanol	0.047
Toluene	0.156
Trichloroethylene	0.132
Xylene	0.159
Benzene	3.679E-06
Dichlorobenzene	2.102E-06
Formaldehyde	1.314E-04
Hexane	3.154E-03
Lead	8.760E-07
Cadmium	1.927E-06
Chromium	2.453E-06
Manganese	6.658E-07
Nickel	3.679E-06
TOTAL HAPs	0.498

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of pollutants are less than 25 tons per year, but the PTE of VOC is greater than 10 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1. A registration will be issued.
- (b) The PTE (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

County Attainment Status

The source is located in Gibson County (Patoka Township).

Pollutant	Status
PM10	Attainment or Unclassifiable
PM2.5	Attainment or Unclassifiable (Patoka Township)
SO ₂	Attainment
NO ₂	Attainment or Unclassifiable
1-Hour Ozone	Attainment or Unclassifiable
8-Hour Ozone	Attainment or Unclassifiable
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standard. Gibson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Montgomery Township in Gibson County, has been classified as nonattainment for PM2.5. However, this source is located in Patoka Township. Therefore, the source is located in an area of Gibson County that has been classified as attainment or unclassifiable for PM2.5.

U. S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

- (c) Gibson County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard.
- (e) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (f) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD and Emission Offset Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.003
PM-10	0.013
SO ₂	0.001
NO _x	0.175
VOC	14.99
CO	0.147
Worst Single HAP	0.159
Combination HAPs	0.498

- (a) This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This new source is not a Emission Offset major stationary source because no regulated nonattainment pollutant is emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the PTE of:

- (a) each criteria pollutant is less than 100 tons per year,

- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on the potential to emit calculations of the source (see Appendix A pages 1 through 5).

Federal Rule Applicability

- (a) The requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subpart MM, Automobile and Light Duty Truck Surface Coating Operations (40 CFR Parts 60.390 - 60.398) (326 IAC 12) are not included in the registration for this source, because this source is not a major source for HAPs as defined in 40 CFR 63.2 and is not an automobile or light duty truck assembly plant.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the registration for this source.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart IIII, Surface Coating of Automobiles and Light-Duty Trucks (40 CFR Part 63.3080 - 63.3176) are not included in the registration for this source, because this source is not a major source of HAPs as defined in 40 CFR 63.2 and does not surface coat automobiles or light duty trucks as defined by 63.3176. This source assembles automobile windows.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63.3880 - 63.3981) are not included in the registration for this source, because this source is not a major source of HAPs as defined in 40 CFR 63.2.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the registration for this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed after the applicability date of August 7, 1977, however, it is not one of the 28 listed source categories defined in 326 IAC 2-2-1(gg)(1) and the uncontrolled potential to emit of all attainment regulated pollutants is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The requirements of 326 IAC 2-4.1 are not applicable to this source, since the potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Gibson County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

The requirements of 326 IAC 8-1-6 are not applicable, since each of the emission units at this source does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

State Rule Applicability - Surface Coating Operations

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(14), each of the window assembly lines are exempt from the requirements of 326 IAC 6-3, because the potential particulate emissions are less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 8-2-2 (Volatile Organic Compounds, Automobile and Light Duty Truck Coating Operations)

The requirements of 326 IAC 8-2-2 are not applicable to this source, since this source does not perform surface coating of automobiles or light duty trucks as defined in 326 IAC 8-2-2(a). This source assembles automobile windows.

326 IAC 8-2-9 (Volatile Organic Compounds, Miscellaneous Metal Coating Operations)

Pursuant to 326 IAC 8-2-1 (Applicability), this rule applies to facilities constructed after July 1, 1990 located in any county, and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls. The requirements of 326 IAC 8-2-9 are not applicable because the source adheres plastic composite material to the glass automobile windows.

State Rule Applicability – Natural Gas Combustion Sources

326 IAC 4-2-2 (Incinerators)

The natural gas-fired heaters and air makeup unit are not incinerators, as defined by 326 IAC 1-2-34, since they do not burn waste substances. Therefore, these ovens are not subject to 326 IAC 4-2-2.

326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

The natural gas-fired heaters and air makeup unit are not subject to 326 IAC 6-2 as they are not sources of indirect heating.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(14), the natural gas-fired heaters and air makeup unit are each exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight. In addition, they each have a potential particulate emissions less than five hundred fifty one thousandths (0.551) pound per hour.

326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)

The natural gas-fired heaters and air makeup unit are each not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

Conclusion

The operation of this source shall be subject to the conditions of the attached registration, No. 051-24995-00049.

Appendix A: Emissions Calculations

VOCs

From Window Assembly Line 1

Company Name: Toyota Tsusho America, Inc.
Address City IN Zip: RR 1 Box 174C
Permit Number: 051-24995-00049
Plt ID: 051-00049
Reviewer: Brian Williams
Date: July 5, 2007

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Usage of Mat. (lb/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Weight % Xylene	Weight % Trichloroethylene	Potential Xylene tons per year	Potential Trichloroethylene tons per year
Rear Door Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00165	180.000	4.94	4.94	0.19	4.44	0.81	0.00%	0.00%	0.00	0.00
Betaseal 43533 Body Primer	8.1	60.49%	0.0%	60.5%	0.00331	180.000	4.90	4.90	0.36	8.65	1.58	0.00%	0.00%	0.00	0.00
Betaseal X2500 A	10.6	0.75%	0.0%	0.8%	0.01320	180.000	0.08	0.08	0.02	0.43	0.08	0.00%	0.00%	0.00	0.00
Betaseal X2500 B	10.1	2.18%	0.0%	2.2%	0.01320	180.000	0.22	0.22	0.05	1.24	0.23	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00110	180.000	6.50	6.50	0.20	4.75	0.87	0.00%	0.00%	0.00	0.00
Back Window Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00276	110.000	4.94	4.94	0.19	4.54	0.83	0.00%	0.00%	0.00	0.00
Betaseal 43533 Body Primer	8.1	60.49%	0.0%	60.5%	0.00661	110.000	4.90	4.90	0.44	10.56	1.93	0.00%	0.00%	0.00	0.00
Betaseal X2500 A	10.6	0.75%	0.0%	0.8%	0.02650	110.000	0.08	0.08	0.02	0.52	0.10	0.00%	0.00%	0.00	0.00
Betaseal X2500 B	10.1	2.18%	0.0%	2.2%	0.02650	110.000	0.22	0.22	0.06	1.53	0.28	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00165	110.000	6.50	6.50	0.18	4.36	0.79	0.00%	0.00%	0.00	0.00
TB1104	11.4	58.00%	0.0%	58.0%	0.00110	110.000	6.61	6.61	0.07	1.68	0.31	30.00%	25.00%	0.159	0.132
Rear Quarter Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00165	180.000	4.94	4.94	0.19	4.44	0.81	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00110	180.000	6.50	6.50	0.20	4.75	0.87	0.00%	0.00%	0.00	0.00
Rear Quarter Sunshade Hook Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00100	180.000	4.94	4.94	0.11	2.69	0.49	0.00%	0.00%	0.00	0.00
Betaseal 43533 Body Primer	8.1	60.49%	0.0%	60.5%	0.00100	180.000	4.90	4.90	0.11	2.61	0.48	0.00%	0.00%	0.00	0.00
Betaseal X2500 A	10.6	0.75%	0.0%	0.8%	0.00882	180.000	0.08	0.08	0.01	0.29	0.05	0.00%	0.00%	0.00	0.00
Betaseal X2500 B	10.1	2.18%	0.0%	2.2%	0.00882	180.000	0.22	0.22	0.03	0.83	0.15	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00055	180.000	6.50	6.50	0.10	2.38	0.43	0.00%	0.00%	0.00	0.00
								TOTAL	2.53	60.69	11.08			0.159	0.132

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 = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential HAPs Tons per Year = Maximum (units/hr) * Usage of Material (lb/unit) * Weight % HAPs * (8760 hr/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
VOCs
From Window Assembly Line 2**

**Company Name: Toyota Tsusho America, Inc.
Address City IN Zip: RR 1 Box 174C
Permit Number: 051-24995-00049
Plt ID: 051-00049
Reviewer: Brian Williams
Date: July 5, 2007**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Usage of Mat. (lb/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Weight % Toluene	Weight % Methanol	Potential Toluene tons per year	Potential Methanol tons per year
Front Door and Slide Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00055	200.000	4.94	4.94	0.07	1.64	0.30	0.00%	0.00%	0.00	0.00
Betaseal 43533 Body Primer	8.1	60.49%	0.0%	60.5%	0.00388	200.000	4.90	4.90	0.47	11.27	2.06	0.00%	0.00%	0.00	0.00
Betaseal X2500 A	10.6	0.75%	0.0%	0.8%	0.00380	200.000	0.08	0.08	0.01	0.14	0.02	0.00%	0.00%	0.00	0.00
Betaseal X2500 B	10.1	2.18%	0.0%	2.2%	0.00380	200.000	0.22	0.22	0.02	0.40	0.07	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00044	200.000	6.50	6.50	0.09	2.11	0.39	0.00%	0.00%	0.00	0.00
Quarter Bonding Line															
Chemlock 144	7.9	87.06%	0.0%	87.1%	0.00033	100.000	6.90	6.90	0.03	0.69	0.13	75.00%	0.00%	0.108	0.00
Glasgrip 7780	8.1	98.00%	0.0%	98.0%	0.00022	100.000	7.94	7.94	0.02	0.52	0.09	49.00%	49.00%	0.047	0.047
Pliogrip 8000	10.1	1.00%	0.0%	1.0%	0.03040	100.000	0.10	0.10	0.03	0.73	0.13	0.00%	0.00%	0.00	0.00
Pliogrip 6610 B	9.0	5.00%	0.0%	5.0%	0.00758	100.000	0.45	0.45	0.04	0.91	0.17	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00044	100.000	6.50	6.50	0.04	1.06	0.19	0.00%	0.00%	0.00	0.00
Quarter Sunshade Hook Bonding Line															
Betaprime 5500	7.9	62.30%	0.0%	62.3%	0.00022	55.000	4.94	4.94	0.01	0.18	0.03	0.00%	0.00%	0.00	0.00
Betaseal 43533 Body Primer	8.1	60.49%	0.0%	60.5%	0.00044	55.000	4.90	4.90	0.01	0.35	0.06	0.00%	0.00%	0.00	0.00
Betaseal X2500 A	10.6	0.75%	0.0%	0.8%	0.02820	55.000	0.08	0.08	0.01	0.28	0.05	0.00%	0.00%	0.00	0.00
Betaseal X2500 B	10.1	2.18%	0.0%	2.2%	0.02820	55.000	0.22	0.22	0.03	0.81	0.15	0.00%	0.00%	0.00	0.00
Isopropyl Alcohol	6.5	100.00%	0.0%	100.0%	0.00022	55.000	6.50	6.50	0.01	0.29	0.05	0.00%	0.00%	0.00	0.00
								TOTAL	0.89	21.37	3.90			0.156	0.047

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 = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Weight % Organics * Usage of Material (lb/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Potential HAPs Tons per Year = Maximum (units/hr) * Usage of Material (lb/unit) * Weight % HAPs * (8760 hr/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: Toyota Tsusho America, Inc.
Address City IN Zip: RR 1 Box 174C
Permit Number: 051-24995-00049
Plt ID: 051-00049
Reviewer: Brian Williams
Date: July 5, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

One (1) Office Heater @ 0.050 MMBtu/hr
 One (1) Warehouse Space Heater @ 0.050 MMBtu/hr
 One (1) Break Area Heater @ 0.1 MMBtu/hr
 One (1) Air Makeup Unit @ 0.2 MMBtu/hr

0.4

3.5

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.003	0.013	0.001	0.175	0.010	0.147

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

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 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 4 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: Toyota Tsusho America, Inc.
Address City IN Zip: RR 1 Box 174C
Permit Number: 051-24995-00049
Plt ID: 051-00049
Reviewer: Brian Williams
Date: July 5, 2007

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.679E-06	2.102E-06	1.314E-04	3.154E-03	5.957E-06

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	8.760E-07	1.927E-06	2.453E-06	6.658E-07	3.679E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Summary of Emissions**

Company Name: Toyota Tsusho America, Inc.
Address City IN Zip: RR 1 Box 174C
Permit Number: 051-24995-00049
Plt ID: 051-00049
Reviewer: Brian Williams
Date: July 5, 2007

Unlimited Potential to Emit (Entire Source)							
Process	PM	PM10	SO₂	VOC	CO	NOx	HAPs
Rear Door Bonding Line	0.00	0.00	0.00	3.56	0.00	0.00	0.00
Back Window Bonding Line	0.00	0.00	0.00	4.23	0.00	0.00	0.29
Rear Quarter Bonding Line	0.00	0.00	0.00	1.68	0.00	0.00	0.00
Rear Quarter Sunshade Hook Bonding Line	0.00	0.00	0.00	1.61	0.00	0.00	0.00
Front Door and Slide Bonding Line	0.00	0.00	0.00	2.84	0.00	0.00	0.00
Quarter Bonding Line	0.00	0.00	0.00	0.71	0.00	0.00	0.20
Quarter Sunshade Hook Bonding Line	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Insignificant Natural Gas Combustion	0.003	0.013	0.001	0.010	0.147	0.175	0.003
Total	0.003	0.013	0.001	14.99	0.147	0.175	0.498