



*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 4, 2005

RE: Toyota Motor Manufacturing Indiana, Inc./051-21074-00037

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) 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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
*We make Indiana a cleaner, healthier place to live.*

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Mr. R. J. Reynolds  
Toyota Motor Manufacturing, Indiana, Inc.  
P.O. Box 4000  
Princeton, Indiana 47670

August 4, 2005

Re: 051-21074-00037  
Third Significant Permit Modification to  
Part 70 No.: T 051-11646-00037

Dear Mr. Reynolds:

Toyota Motor Manufacturing, Indiana, Inc., was issued a Part 70 permit on May 7, 2004 for a stationary automobile and light duty truck assembly plant. A letter requesting changes to this permit was received on April 11, 2005. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of re-evaluation of the PSD BACT determined for the gasoline dispensing operation in Plant #1 and Plant #2, and the removal of the daily check monitoring requirements for the dry filters in the PVC undercoat booth (UB).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
APD

cc: File - Gibson County  
U.S. EPA, Region V  
Gibson County Health Department  
Southwest Regional Office  
Air Compliance Section Inspector - Gene Kelso  
Compliance Data Section  
Administrative and Development



Mitchell E. Daniels, Jr.  
 Governor

Thomas W. Easterly  
 Commissioner

100 North Senate Avenue  
 Indianapolis, Indiana 46204  
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**PART 70 OPERATING PERMIT  
 OFFICE OF AIR QUALITY**

**Toyota Motor Manufacturing, Indiana, Inc.  
 4000 Tulip Tree Drive  
 Princeton, Indiana 47670-4000**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 051-11646-00037	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 7, 2004 Expiration Date: May 7, 2009
1 <sup>st</sup> Significant Permit Modification No.: 051-19456-00037, issued on October 28, 2004 2 <sup>nd</sup> Significant Permit Modification No.: 051-19561-00037, issued on January 28, 2005	
3 <sup>rd</sup> Significant Permit Modification No.; 051-21074-00037	Pages Affected: 10, 11, 15, 16, 58, 68, 69, 111, 112, 113, 114 Pages Added: 69a
Issued by: Original signed by Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: August 4, 2005

with low NO<sub>x</sub> burners for NO<sub>x</sub> control, heat input capacity: 58.0 million British thermal units per hour, each.

## PRIMARY SURFACE COATING OPERATIONS

### Electrodeposition (ED) Systems

#### *Plant #1*

- (d) One (1) electrodeposition (ED) system, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5a, with dipping as the application method, and consists of the following:
- (1) One (1) ED tank; and
  - (2) One (1) ED oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1, (CD-01) for VOC control.

#### *Plant #2*

- (e) One (1) electrodeposition (ED) system, installed in 2002, located in the Primary Surface Coating Operations, known as Emission Unit 17a, with dipping as the application method and consists of the following:
- (1) One (1) ED tank; and
  - (2) One (1) ED oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control.

### Primer Surfacers Systems

#### *Plant #1*

- (f) One (1) primer surfacer (guidecoat) system, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5b, equipped with air atomized, electrostatic bells, and high volume low pressure (High Volume Low Pressure) spray guns, wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (2) One (1) primer coat oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB, and one (1) natural gas-fired, regenerative thermal oxidizer, known as Booth Thermal Oxidizer (CD-02) (located in Emission Unit 5c), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. Dry filters are only in place when the fan operates; and

- (5) One (1) anti-chip booth, equipped with wet scrubber to control PM overspray.

#### *Plant #2*

- (g) One (1) primer surfacer (guidecoat) system, installed in 2002, located in the Primary Surface Coating Operations, known as Emission Unit 17b, equipped with air atomized electrostatic bells, and high volume low pressure spray guns (HVLP), wet scrubbers to control PM overspray, and consists of the following:
  - (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (2) One (1) primer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB2, and one (1) regenerative thermal oxidizer known as Booth Thermal Oxidizer #1 (CD-06), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. Dry filters are only in place when the fan operates; and
  - (5) One (1) anti-chip booth, equipped with dry filters to control PM overspray.

#### **Topcoat Systems**

##### *Plant #1*

- (h) One (1) topcoat system, known as Topcoat A, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5c, equipped with air atomized and electrostatic bells and electrostatic spray guns, wet scrubbers to control PM overspray, and consists of the following:
  - (1) One (1) topcoat oven, known as Topcoat Oven A, with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #3 (CD-03), for VOC control;
  - (2) One (1) topcoat booth, known as Topcoat Booth A, with two (2) carbon adsorption systems, known as CATCBC for basecoats and CATCCC for clearcoats, and one (1) natural gas-fired, regenerative thermal oxidizer, known as Booth Thermal Oxidizer #3 (CD-03) for VOC control; and
  - (3) One (1) blackout/cavity wax booth, equipped with a wet scrubber to control PM overspray when using blackout and dry filters to control PM overspray when using wax.
- (i) One (1) topcoat system, known as Topcoat B, installed in 2000, located in the Primary Surface Coating Operations, known as Emission Unit 5c, equipped with air atomized electrostatic bells and electrostatic spray guns, wet scrubbers to control PM overspray, and consists of the following:
  - (1) One (1) topcoat oven, known as Topcoat Oven B, with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #4 (CD-04), for VOC control; and

- (ee) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-9, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 19,500 gallons.
- (ff) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-20, to be located in Emission Unit 26 at Building #505, storage capacity: 19,500 gallons.
- (gg) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-5, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 13,284 gallons.
- (hh) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-17, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.
- (ii) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-6, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 12,000 gallons.
- (jj) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-18, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.

## **GASOLINE DISPENSING**

### *Plant #1*

- (kk) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 12, constructed in 1998, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.

### *Plant #2*

- (ll) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 23, constructed in 2002, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.

## **A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]**

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. (All insignificant natural gas combustion has been included in the plant-wide natural gas combustion shown in Condition A.3 paragraph (a).) (326 IAC 2-2)

- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3-2 and 326 IAC 8-3-5 for Plant #1 and Plant #2 degreasers).
- (c) Cleaners and solvents characterized as follows: having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38°C (100°F) or; having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. (All insignificant cleaners and solvents have been included in the two (2) plant-wide miscellaneous process cleaner operations shown in Condition A.3 paragraphs (z) and (bb).) (326 IAC 2-2)
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3-2)
- (e) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (f) Emergency generators that vary in number from time to time as follows: gasoline generators not exceeding 110 horsepower; diesel generators not exceeding 1,600 horsepower; natural gas turbines or reciprocating engines not exceeding 16,000 horsepower. (326 IAC 2-2)
- (g) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. (326 IAC 6-3-2)
- (h) Other categories with emissions below insignificant thresholds:
  - Welding operations with PM<sub>10</sub> emission less than twenty-five (25) pounds per day:
    - (1) Metal inert gas (MIG) welding stations located in the Stamping / Body Shop, known as Emission Unit 4. (326 IAC 6-3-2)
    - (2) Metal inert gas (MIG) welding stations located in the Stamping / Body Shop, known as Emission Unit 16, to be equipped with wet scrubbers to control PM overspray. (326 IAC 6-3-2)

#### A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Primer Surfacers Systems

#### *Plant #1*

- (f) One (1) primer surfacer (guidecoat) system, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5b, equipped with air atomized, electrostatic bells, and high volume low pressure (High Volume Low Pressure) spray guns, wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (2) One (1) primer coat oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB, and one (1) natural gas-fired, regenerative thermal oxidizer, known as Booth Thermal Oxidizer (CD-02) (located in Emission Unit 5c), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. Dry filters are only in place when the fan operates; and
  - (5) One (1) anti-chip booth, equipped with wet scrubber to control PM overspray.

#### *Plant #2*

- (g) One (1) primer surfacer (guidecoat) system, installed in 2002, located in the Primary Surface Coating Operations, known as Emission Unit 17b, equipped with air atomized electrostatic bells, and high volume low pressure spray guns (HVLP), wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (2) One (1) primer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB2, and one (1) regenerative thermal oxidizer known as Booth Thermal Oxidizer #1 (CD-06), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. Dry filters are only in place when the fan operates; and
  - (5) One (1) anti-chip booth, equipped with dry filters to control PM overspray.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

31, 2004, whichever comes first, the Permittee shall perform control efficiency testing utilizing methods as approved by the Commissioner.

#### D.4.12 Thermal Oxidizer Temperature and Duct Pressure or Fan Amperage [326 IAC 2-7]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers for measuring operating temperature. For the purposes of measuring temperature, continuous shall mean no less often than once per fifteen (15) minutes.
- (b) The specified temperature value for each thermal oxidizer is the three (3) hour average temperature during the most recent control device performance test that demonstrates compliance with the limits in Conditions D.4.2, D.4.3, and D.4.5 as approved by IDEM, at which the overall control efficiency was determined. Prior to the performance test on a thermal oxidizer, the Permittee shall take appropriate steps in accordance with Section C - Compliance Response Plan - Preparation Implementation, Records and Reports whenever a three (3) hour average temperature is more than 28°C (50°F) below 1,350°F. A three (3) hour average temperature that is more than 28°C (50°F) below 1,350°F is not considered a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a violation of this permit.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate steps in accordance with Section C - Compliance Response Plan - Preparation Implementation, Records and Reports whenever a three (3) hour average temperature is more than 28°C (50°F) below the three (3) hour average temperature observed during the compliance stack test. A three (3) hour average temperature that remains more than 28°C (50°F) below the observed temperature is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a violation of this permit.
- (d) In order to demonstrate compliance with Conditions D.4.3 and D.4.5, the Permittee shall determine the appropriate duct pressure or fan amperage from the most recent compliance stack test.
- (e) On and after the date of that the approved stack test results become available the duct pressure or fan amperage shall be maintained within the normal range as established by the most recent compliance stack test. The Permittee shall observe the duct pressure or fan amperage once per day when the natural gas-fired regenerative thermal oxidizers are in operation.

#### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### D.4.13 Monitoring [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, daily visual inspections shall be performed for all surface coating booths used in vehicle production to verify that for the wet scrubber systems:
  - (1) The continuous underflow water wash is operating properly to provide full coverage of the flood pan.
  - (2) Weekly observations shall be made of the wet scrubbers to determine whether

visible overspray is leaving the booths.

- (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters only if the exhaust fan is used. To monitor the performance of the dry filters,

weekly observations shall be made of the overspray from the surface coating booth stack, if the fan was operating that week, while one (1) or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response. Failure to take response steps in accordance with Section C Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **Compliance Assurance Monitoring Requirements**

#### D.4.14 Monitoring Determination Method [40 CFR 64]

- (a) The Permittee shall monitor the two (2) carbon adsorbers, known as CAPSB and CAPSB2, as follows:
  - Desorption inlet temperature is measured with a thermocouple located in the inlet of the desorption zone. The minimum tolerance of the thermocouple is 4\_F or 0.75% of the temperature, whichever is greater. During coating operations, a three (3) hour period (as described in Section 9 of the CAM Plan- Data averaging period and Frequency) during which the average temperature measured is lower than the specified indicator value will require a review of the process. This involves checking to confirm that an excursion has occurred (check for false readings or faulty equipment, etc.). If there is an excursion, the Permittee must record it and if necessary, initiate corrective action.
- (b) The Permittee shall monitor the three (3) natural gas-fired regenerative thermal oxidizers known as CD-01, CD-02, and CD-06, as follows:
  - (1) During coating operations, a three (3) hour period (as described in Section 9 the CAM Plan - Data averaging period and Frequency) during which the average temperature measured is lower than the specified value by more than 28\_C (50\_F) will require a review of the process. This involves checking to confirm that an excursion has occurred (check for false readings or faulty equipment, etc.). If there is an excursion, the Permittee must record it and if necessary, initiate corrective action.
  - (2) The specified value for the thermal oxidizer is the average temperature during the most recent control device performance test at which the destruction efficiency was determined. The temperature sensor is to be located in the exhaust stream of the combustion chamber as recommended by the manufacturer or consistent with the configuration utilized to measure the combustion temperature during the most recent control device performance test.

#### D.4.15 Test Plan and Schedule [40 CFR 64]

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The indicator ranges for carbon adsorber CAPSB2 and the regenerative thermal oxidizer known as CD-06, will be established within six (6) months after start-up of the equipment or within six (6) months after the issuance of this permit, whichever comes first.

## SECTION D.10

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Storage Tanks and Gasoline Dispensing

#### STORAGE TANKS

- (cc) Two (2) horizontal, above ground, fixed roof, domed, white, gasoline storage tanks, known as T-505-11 and T-505-12, equipped with Stage I vapor recovery systems, submerged fill pipes and venting as a method of conservation, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 18,938 gallons, each.
- (dd) Two (2) horizontal, above ground, fixed roof, domed, white, gasoline storage tanks, known as T-505-21 and T-505-22, equipped with Stage I vapor recovery systems, submerged fill pipes and venting as a method of conservation, to be located in Emission Unit 26 at Building #505, storage capacity: 18,938 gallons, each.
- (ee) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-9, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 19,500 gallons.
- (ff) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-20, to be located in Emission Unit 26 at Building #505, storage capacity: 19,500 gallons.
- (gg) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-5, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 13,284 gallons.
- (hh) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-17, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.
- (ii) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-6, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 12,000 gallons.
- (jj) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-18, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.

#### GASOLINE DISPENSING

##### *Plant #1*

- (kk) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 12, constructed in 1998, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.

##### *Plant #2*

- (ll) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 23, constructed in 2002, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

### **D.10.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-6] [326 IAC 2-2]**

Pursuant to 326 IAC 8-4-6 (Gasoline Dispensing Facilities):

- (a) The Permittee shall not allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:
  - (1) A submerged fill pipe.
  - (2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
  - (3) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications. Pursuant to CP 051-5391-00037, issued on August 9, 1996, the Stage I vapor recovery system shall always be in operation when the four (4) gasoline storage tanks, known as T-505-11, T-505-12, T-505-21, and T-505-22, are in operation and the Stage II vapor recovery system shall always be in operation, when the gasoline tank filling in the Assembly Shop is in operation, unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.
- (b) If the owner or employees of the owner of a gasoline dispensing facility are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is connected between the transport and the storage tank and is operating according to manufacturer's specifications.
- (c) All vapor collection and control systems shall be retested for vapor leakage and blockage, and successfully pass the test, at least every five (5) years or upon major system replacement or modification. A major system modification is considered to be replacing, repairing, or upgrading seventy-five percent (75%) or more of a vapor collection and control system of a facility.

### **D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]**

Pursuant to 326 IAC 8-4-9 (Leaks from transports and vapor collection systems, records) the source will operate a vapor control system. The requirements are as follows:

- (a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:
  - (1) Annual leak detection testing before the end of the twelfth (12<sup>th</sup>) calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425 (e), as follows:
    - (A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H<sub>2</sub>O (six (6) inches H<sub>2</sub>O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H<sub>2</sub>O (one (1) inch H<sub>2</sub>O) in five (5) minutes.

Toyota Motor Manufacturing, Indiana, Inc.  
Princeton, Indiana  
00037  
Reviewer: MSS/MES

3<sup>rd</sup> Significant Permit Modification 051-21074-00037  
Modified by: Aida De Guzman

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- (B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
  - (i) After completing the test under clause (A), use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.
  - (ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H<sub>2</sub>O (five (5) inches H<sub>2</sub>O).
- (2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1), and retesting to prove compliance with the criteria of subdivision (1).
- (b) The annual test data remain valid until the end of the twelfth (12<sup>th</sup>) calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (b) and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a).
- (c) The Permittee shall:
  - (1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
    - (A) Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H<sub>2</sub>O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H<sub>2</sub>O) in the gasoline transport;
    - (B) A reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60, Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and
    - (C) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.
  - (2) Within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1).
- (d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with (a).
- (e) If the commissioner allows alternative test procedures, such method shall be submitted to the U.S. EPA as a SIP revision.

- (f) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the four (4) gasoline storage tanks, known as T-505-11, T-505-12, T-505-21, and T-505-22, and the two (2) gasoline dispensing units, known as Emission Units 12 and 23, if in use. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

#### D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the four (4) gasoline storage tanks (T-505-11, T-505-12, T-505-21, and T-505-22), and the two (2) gasoline dispensing units, known as Emission Units 12 and 23, when using Stage II vapor recovery system as the control devices.

### **Compliance Determination Requirements**

#### D.10.4 VOC

In order to comply with Condition D.1.1, the Stage I and Stage II vapor recovery systems for VOC control shall be in operation at all times when gasoline is being stored, transferred, or dispensed. Stage II vapor recovery system is not required to operate in the Assembly Shops if vehicles are equipped with onboard refueling vapor recovery (ORVR) systems.

#### D.10.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) To demonstrate compliance with Condition D.10.2, the Permittee shall perform testing required in Condition D.10.2.
- (b) If the commissioner allows alternative test procedures in (c)(1)(B) of Condition D.10.2, such method shall be submitted to the U.S. EPA as a SIP revision.
- (c) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in (c)(1)(B) of Condition D.10.2. Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the four (4) gasoline storage tanks, known as T-505-11, T-505-12, T-505-21, and T-505-22, and the two (2) gasoline dispensing units, known as Emission Units 12 and 23. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

### **Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]**

#### D.10.6 Vapor Recovery System Operation

For the Stage I and Stage II vapor recovery systems in order to document compliance with Condition D.1.1, the Permittee shall perform daily checks of the key operating parameters on days in which the filling of gasoline storage tanks is conducted, including venting for the Stage I and Stage II vapor recovery systems, if in use.

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

**Technical Support Document (TSD) for a Significant Permit  
Modification to a Part 70 Operating Permit**

**Source Background and Description**

Source Name:	Toyota Motor Manufacturing, Indiana, Inc.
Source Location:	Route 41, Princeton, Indiana 47670
County:	Gibson
SIC Code:	3711
Operation Permit No.:	T051-11646-00037
Operation Permit Issuance Date:	May 7, 2004
Permit Modification No.:	051-21074-00037
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a modification application from Toyota Motor Manufacturing, Indiana, Inc., relating to the request changes to the Part 70 permit as follows:

- (a) To allow the source to use "onboard refueling vapor recovery (ORVR) system with a minimum evaporative capture efficiency of 95%" as required by the Federal Clean Air Act (42 U.S.C. § 7521(a)(6), in lieu of "Stage II vapor recovery system". Stage II vapor recovery system was determined as BACT for the gasoline filling operation in PSD permit CP051-5391-00037. The Stage II recovery system has been tested at achieving an overall control of 90%.
- (b) Toyota is requesting the removal in the Part 70 permit the daily checks of the dry filters in the PVC undercoat booth (UB).

Originally the process was designed to accommodate a high VOC underbody primer surfacer (3.0 to 4.0 lb/gal), where exhaust fan was installed to ensure safe removal of VOC from the booth. Dry filters were included to eliminate PM overspray from the process. Toyota switched to a low VOC underbody primer surfacer (0.30 to 0.35 lb/gal). As a result of this material substitution, the booth's exhaust is no longer necessary to manage VOC removal. Additionally, the new underbody primer surfacer has a high viscosity which prevents it from being atomized. Therefore, no PM overspray will result.

**Existing Approvals**

The source was issued a Part 70 Operating Permit (T051-11646-00037) on May 7, 2004. The source has since received the following:

- (a) First Significant Permit Modification No.: 051-19456-00037, issued on October 28, 2004; and
- (b) Second Significant Permit Modification No.: 051-19561-00037, issued on January 28, 2005.

## Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. 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 purpose of this review was received on April 11, 2005, with additional information received on May 4, 2005 and May 9, 2005.

## Justification of the Modification

The Part 70 permit is being modified through a Significant Permit Modification, pursuant to 326 IAC 2-7-12, since it involves a PSD BACT re-opening, which does not qualify as a minor permit modification or administrative amendment.

## Federal Rule Applicability

All federal rules applicable to this source shall remain applicable unless otherwise specified by this document.

## State Rule Applicability

326 IAC 2-2 (Prevention of Significant Deterioration)

The gasoline filling operation went through the requirements of 326 IAC 2-2, PSD review in CP 051-5391-00037, issued on August 9, 1996. In this permit the PSD BACT determined for this operation was the use of a Stage II vapor recovery system to control VOC emissions.

The USEPA BACT/RACT/LAER Clearinghouse was reviewed to determine the latest BACT for gasoline filling operation. No existing or new BACT entries have been found for this operation. However, the Bay Area Air Quality District has permitted New United Motor Manufacturing, Inc., Fremont California for the installation of onboard refueling vapor recovery (ORVR) system for manufactured vehicles as an alternative for their existing Phase II/Stage II Vapor Recovery System. Also, Texas Commission on Environmental Quality has accepted ORVR as BACT, as an alternative to Phase II/Stage II Vapor Recovery System for Toyota Assembly- San Antonio, Bexar County Plant.

Additionally, the Clean Air Act Amendment of 1990 (enacted Nov. 15, 1990) requires that within 1 year after the date of its enactment new light duty vehicles beginning in the fourth model year after the model year shall be equipped with onboard refueling vapor recovery (ORVR) systems.

Based on this explanation ORVR will be acceptable as BACT in lieu of Phase II/Stage II Vapor Recovery System for gasoline filling operation.

## Changes to the Part 70 Permit

The Part 70 will be modified to incorporate the new ORVR and the change in the monitoring requirements for the PVC UB dry filters (additions are **bolded** and deletions are ~~struck-through~~ for emphasis):

### A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

#### PLANT-WIDE COMBUSTION

(a) through (c) no change

## PRIMARY SURFACE COATING OPERATIONS

(d) and (e) no change

### Primer Surfacer Systems

#### *Plant #1*

- (f) One (1) primer surfacer (guidecoat) system, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5b, equipped with air atomized, electrostatic bells, and high volume low pressure (High Volume Low Pressure) spray guns, wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (2) One (1) primer coat oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB, and one (1) natural gas-fired, regenerative thermal oxidizer, known as Booth Thermal Oxidizer (CD-02) (located in Emission Unit 5c), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. **Dry filters are only in place when the fan operates;** and
  - (5) One (1) anti-chip booth, equipped with wet scrubber to control PM overspray.

#### *Plant #2*

- (g) One (1) primer surfacer (guidecoat) system, installed in 2002, located in the Primary Surface Coating Operations, known as Emission Unit 17b, equipped with air atomized electrostatic bells, and high volume low pressure spray guns (HVLP), wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (2) One (1) primer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB2, and one (1) regenerative thermal oxidizer known as Booth Thermal Oxidizer #1 (CD-06), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. **Dry filters are only in place when the fan operates;** and
  - (5) One (1) anti-chip booth, equipped with dry filters to control PM overspray.

(h) through (k) no change

## PLASTIC COATING OPERATIONS

(l) through (q) no change

## MISCELLANEOUS COATING OPERATIONS

(r) through (u) no change

## REPAIR OPERATIONS

(v) through (x) no change

## PLANT-WIDE MISCELLANEOUS OPERATIONS

(y) through (bb) no change

## STORAGE TANKS

(cc) through (jj) no change

## GASOLINE DISPENSING

### *Plant #1*

- (kk) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 12, constructed in 1998, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, **unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.**

### *Plant #2*

- (ll) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 23, constructed in 2002, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, **unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.**

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Primer Surfacer Systems

#### *Plant #1*

- (f) One (1) primer surfacer (guidecoat) system, installed in 1998, located in the Primary Surface Coating Operations, known as Emission Unit 5b, equipped with air atomized, electrostatic bells, and high volume low pressure (High Volume Low Pressure) spray guns, wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (2) One (1) primer coat oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-01), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB, and one (1) natural gas-fired, regenerative thermal oxidizer, known as Booth Thermal Oxidizer (CD-02) (located in Emission Unit 5c), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. **Dry filters are only in place when the fan operates;** and
  - (5) One (1) anti-chip booth, equipped with wet scrubber to control PM overspray.

*Plant #2*

- (g) One (1) primer surfacer (guidecoat) system, installed in 2002, located in the Primary Surface Coating Operations, known as Emission Unit 17b, equipped with air atomized electrostatic bells, and high volume low pressure spray guns (HVLP), wet scrubbers to control PM overspray, and consists of the following:
- (1) One (1) sealer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (2) One (1) primer oven with one (1) natural gas-fired, regenerative thermal oxidizer, known as Oven Thermal Oxidizer #1 (CD-06), for VOC control;
  - (3) One (1) primer coat booth, with one (1) carbon adsorption system, known as CAPSB2, and one (1) regenerative thermal oxidizer known as Booth Thermal Oxidizer #1 (CD-06), for VOC control;
  - (4) One (1) PVC undercoat booth, equipped with dry filters to control PM overspray. **Dry filters are only in place when the fan operates;** and
  - (5) One (1) anti-chip booth, equipped with dry filters to control PM overspray.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.4.1 through D.4.12 no change

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.4.13 Monitoring [326 IAC 2-2]**

- (a) Pursuant to 326 IAC 2-2, daily visual inspections shall be performed for all surface coating booths used in vehicle production to verify that for the wet scrubber systems:
- (1) The continuous underflow water wash is operating properly to provide full coverage of the flood pan.
  - (2) Weekly observations shall be made of the wet scrubbers to determine whether visible overspray is leaving the booths.

- (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters **only if the exhaust fan is used**. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack, **if the fan was operating that week**, while one (1) or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response. Failure to take response steps in accordance with Section C - ~~Compliance Monitoring Plan - Failure to Take Response Steps~~, shall be considered a violation of this permit. - **Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.**
  
- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. **The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.**
  
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

**SECTION D.10**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]: Storage Tanks and Gasoline Dispensing**

**STORAGE TANKS**

- (cc) Two (2) horizontal, above ground, fixed roof, domed, white, gasoline storage tanks, known as T-505-11 and T-505-12, equipped with Stage I vapor recovery systems, submerged fill pipes and venting as a method of conservation, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 18,938 gallons, each.
  
- (dd) Two (2) horizontal, above ground, fixed roof, domed, white, gasoline storage tanks, known as T-505-21 and T-505-22, equipped with Stage I vapor recovery systems, submerged fill pipes and venting as a method of conservation, to be located in Emission Unit 26 at Building #505, storage capacity: 18,938 gallons, each.
  
- (ee) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-9, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 19,500 gallons.
  
- (ff) One (1) horizontal, above ground, fixed roof, domed, white, No. 2 fuel oil storage tank, known as T-505-20, to be located in Emission Unit 26 at Building #505, storage capacity: 19,500 gallons.
  
- (gg) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-5, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 13,284 gallons.
  
- (hh) One (1) horizontal, above ground, fixed roof, domed, white, waste thinner storage tank, known as T-505-17, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.
  
- (ii) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-6, located in Emission Unit 3 at Building #505, constructed in 1998, storage capacity: 12,000 gallons.
  
- (jj) One (1) horizontal, above ground, fixed roof, domed, white, thinner supply storage tank, known as T-505-18, to be located in Emission Unit 26 at Building #505, storage capacity: 12,000 gallons.

## **GASOLINE DISPENSING**

### *Plant #1*

- (kk) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 12, constructed in 1998, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, **unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.**

### *Plant #2*

- (ll) One (1) gasoline dispensing unit located in the Assembly Final Line, known as Emission Unit 23, constructed in 2002, equipped with one (1) natural gas thermal oxidizer, known as Stage II Vapor Recovery System, **unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

### D.10.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-6] [326 IAC 2-2]

Pursuant to 326 IAC 8-4-6 (Gasoline Dispensing Facilities):

- (a) The Permittee shall not allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:
- (1) A submerged fill pipe.
  - (2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
  - (3) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications. Pursuant to CP 051-5391-00037, issued on August 9, 1996, the Stage I vapor recovery system shall always be in operation when the four (4) gasoline storage tanks, known as T-505-11, T-505-12, T-505-21, and T-505-22, are in operation and the Stage II vapor recovery system shall always be in operation, when the gasoline tank filling in the Assembly Shop is in operation, **unless the vehicles are equipped with onboard refueling vapor recovery (ORVR) systems in which case the Stage II Vapor Recovery System need not operate.**

### D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9 (Leaks from transports and vapor collection systems, records) the source will operate a vapor control system. The requirements are as follows:

- (a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:
- (1) Annual leak detection testing before the end of the twelfth (12<sup>th</sup>) calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425 (e), as follows:
    - (A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall

be four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H<sub>2</sub>O (six (6) inches H<sub>2</sub>O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H<sub>2</sub>O (one (1) inch H<sub>2</sub>O) in five (5) minutes.

- (B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
  - (i) After completing the test under clause (A), use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.
  - (ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H<sub>2</sub>O (five (5) inches H<sub>2</sub>O).
- (2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1), and retesting to prove compliance with the criteria of subdivision (1).
- (b) The annual test data remain valid until the end of the twelfth (12<sup>th</sup>) calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (b) and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a).
- (c) The Permittee shall:
  - (1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
    - (A) Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H<sub>2</sub>O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H<sub>2</sub>O) in the gasoline transport;
    - (B) A reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60, Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and
    - (C) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.
  - (2) Within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1).
- (d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with (a).
- (e) If the commissioner allows alternative test procedures, such method shall be submitted to the

U.S. EPA as a SIP revision.

- (f) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the four (4) gasoline storage tanks, known as T-505-11, T-505-12, T-505-21, and T-505-22, and the two (2) gasoline dispensing units, known as Emission Units 12 and 23, **if in use**. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

#### D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the four (4) gasoline storage tanks (T-505-11, T-505-12, T-505-21, and T-505-22), **and** the two (2) gasoline dispensing units, known as Emission Units 12 and 23, **when using Stage II vapor recovery system as the** ~~and their~~ control devices.

### **Compliance Determination Requirements**

#### D.10.4 VOC

In order to comply with Condition D.1.1, the Stage I and Stage II vapor recovery systems for VOC control shall be in operation at all times when gasoline is being stored, transferred, or dispensed. **Stage II vapor recovery system is not required to operate in the Assembly Shops if vehicles are equipped with onboard refueling vapor recovery (ORVR) systems.**

D.10.5 no change

### **Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]**

#### D.10.6 Vapor Recovery System Operation

For the Stage I and Stage II vapor recovery systems in order to document compliance with Condition D.1.1, the Permittee shall perform daily checks of the key operating parameters on days in which the filling of gasoline storage tanks is conducted, including venting for the Stage I and Stage II vapor recovery systems, **if in use**.

D.10.7 and D.10.8 no change

### **Conclusion**

The operation of this automobile and light duty truck assembly plant shall be subject to the conditions of the attached **Significant Permit Modification No.: 051-21074-00037**.