

HENTHORN

Environmental Services

www.henthornenv.com • 517 Sixth Avenue • St. Albans, WV 25177 • (304) 727-1445

December 21, 2015

William F. Durham, Director
Division of Air Quality
WV Department of Environmental Protection
601 57th Street
Charleston, West Virginia 25304

Re: Toyota Motor Manufacturing, West Virginia, Inc.
Application for Class II Update
Plant ID No. 079-00072
Buffalo, West Virginia


Dear Mr. Durham:

Enclosed are the original and two DVDss of the application of Toyota Motor Manufacturing, West Virginia, Inc., for a Class II Administrative Update of Permit No. R13-2062K. The Class II update application fee of \$300.00 will be paid by telephone call after filing of the application with the agency. The affidavit of publication will be provided as soon as possible. Thank you for your assistance in this matter. Should you have any questions, please call me.

Sincerely,



Jennie L. Henthorn



Specializing in Strategic Environmental Planning and Permitting

Toyota Motor Manufacturing, West Virginia, Inc.

Buffalo, West Virginia

Plant ID No. 079-00072

Application for
Class II Administrative Update to
Permit No. R13-2062K

December 2015

Table of Contents

Application for Permit	1
Attachment A – Business Certificate	5
Attachment B – Location Map	6
Attachment C – Schedule of Installation.....	7
Attachment D – Regulatory Discussion	8
Attachment E – Plot Plan	9
Attachment F – Process Flow Diagram	10
Attachment G – Process Description.....	12
Attachment I – Emissions Unit Table.....	13
Attachment L – Emissions Unit Data Sheets.....	15
Attachment N – Supporting Emissions Calculations	19
Attachment O – Monitoring/Recordkeeping/Reporting Plans	24
Attachment P – Public Notice.....	25
Attachment S – Title V Permit Revision Information.....	26



WEST VIRGINIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

- ☐ CONSTRUCTION ☐ MODIFICATION ☐ RELOCATION
☐ CLASS I ADMINISTRATIVE UPDATE ☐ TEMPORARY
☒ CLASS II ADMINISTRATIVE UPDATE ☐ AFTER-THE-FACT

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

- ☒ ADMINISTRATIVE AMENDMENT ☐ MINOR MODIFICATION
☐ SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): Toyota Motor Manufacturing, West Virginia, Inc.		2. Federal Employer ID No. (FEIN): 5 5 0 7 5 0 8 6 7	
3. Name of facility (if different from above):		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: PO Box 600, 1 Sugar Maple Lane Buffalo, WV 25033		5B. Facility's present physical address: 1 Sugar Maple Lane Buffalo, WV 25033	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES , provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . – If NO , provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation: Toyota Motor Engineering & Manufacturing, North America			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i> ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES , please explain: Applicant owns site – If NO , you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Motor vehicle transmission & powertrain parts manufacturing		10. North American Industry Classification System (NAICS) code for the facility: 33635	
11A. DAQ Plant ID No. (for existing facilities only): 0 7 9 – 0 0 0 7 2		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R30-07900072-2013 R13-2062K G60-C005B	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

The facility lies directly east of West Virginia State Route 62, approximately one mile south of Buffalo, West Virginia

12.B. New site address (if applicable): NA	12C. Nearest city or town: Buffalo, WV	12D. County: Putnam
12.E. UTM Northing (KM): 4272.153	12F. UTM Easting (KM): 413.518	12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:

Model change for transmission and additional engine assembly line

14A. Provide the date of anticipated installation or change: 04/01/2016

- If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: / /

14B. Date of anticipated Start-Up if a permit is granted:
06/01/2017

14C. Provide a **Schedule** of the planned **Installation** of/**Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:

Hours Per Day 24 Days Per Week 7 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? ☒ **YES** ☐ **NO**

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**) .

- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

23. Provide a **Process Description** as **Attachment G**.

- Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.

– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

- | | | |
|--|--|--|
| <input type="checkbox"/> Bulk Liquid Transfer Operations | <input type="checkbox"/> Haul Road Emissions | <input type="checkbox"/> Quarry |
| <input type="checkbox"/> Chemical Processes | <input type="checkbox"/> Hot Mix Asphalt Plant | <input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities |
| <input type="checkbox"/> Concrete Batch Plant | <input type="checkbox"/> Incinerator | <input type="checkbox"/> Storage Tanks |
| <input type="checkbox"/> Grey Iron and Steel Foundry | <input type="checkbox"/> Indirect Heat Exchanger | |
| <input checked="" type="checkbox"/> General Emission Unit, specify | | |

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

- | | | |
|--|---|--|
| <input type="checkbox"/> Absorption Systems | <input type="checkbox"/> Baghouse | <input type="checkbox"/> Flare |
| <input type="checkbox"/> Adsorption Systems | <input type="checkbox"/> Condenser | <input type="checkbox"/> Mechanical Collector |
| <input type="checkbox"/> Afterburner | <input type="checkbox"/> Electrostatic Precipitator | <input type="checkbox"/> Wet Collecting System |
| <input type="checkbox"/> Other Collectors, specify | | |

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

☐ YES ☒ NO

➤ If **YES**, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's **"Precautionary Notice – Claims of Confidentiality"** guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

- | | |
|--|---|
| <input type="checkbox"/> Authority of Corporation or Other Business Entity | <input type="checkbox"/> Authority of Partnership |
| <input type="checkbox"/> Authority of Governmental Agency | <input type="checkbox"/> Authority of Limited Partnership |

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

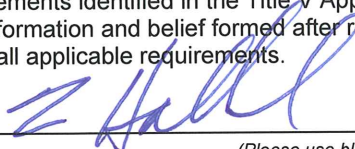
35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned ☐ **Responsible Official** / ☐ **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE 
(Please use blue ink)

DATE: 12/21/15
(Please use blue ink)

35B. Printed name of signee: Tim Hollander

35C. Title: General manager,
Administration

35D. E-mail: tim.hollander@toyota.com

36E. Phone: 812-385-6825

36F. FAX: 304-937-7599

36A. Printed name of contact person (if different from above): Marc Crouse

36B. Title: Specialist, Env. Engineer

36C. E-mail: marc.crouse@toyota.com

36D. Phone: 304-937-7528

36E. FAX: 304-937-7599

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input checked="" type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input checked="" type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input checked="" type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- ☐ Forward 1 copy of the application to the Title V Permitting Group and:
- ☐ For Title V Administrative Amendments:
- ☐ NSR permit writer should notify Title V permit writer of draft permit,
- ☐ For Title V Minor Modifications:
- ☐ Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
- ☐ NSR permit writer should notify Title V permit writer of draft permit.
- ☐ For Title V Significant Modifications processed in parallel with NSR Permit revision:
- ☐ NSR permit writer should notify a Title V permit writer of draft permit,
- ☐ Public notice should reference both 45CSR13 and Title V permits,
- ☐ EPA has 45 day review period of a draft permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

Attachment A

Business Certificate

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**TOYOTA MOTOR MANUFACTURING WEST VIRGINIA INC
1 SUGAR MAPLE LN
BUFFALO, WV 25033-9430**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1044-3969**

This certificate is issued on: **06/15/2011**

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

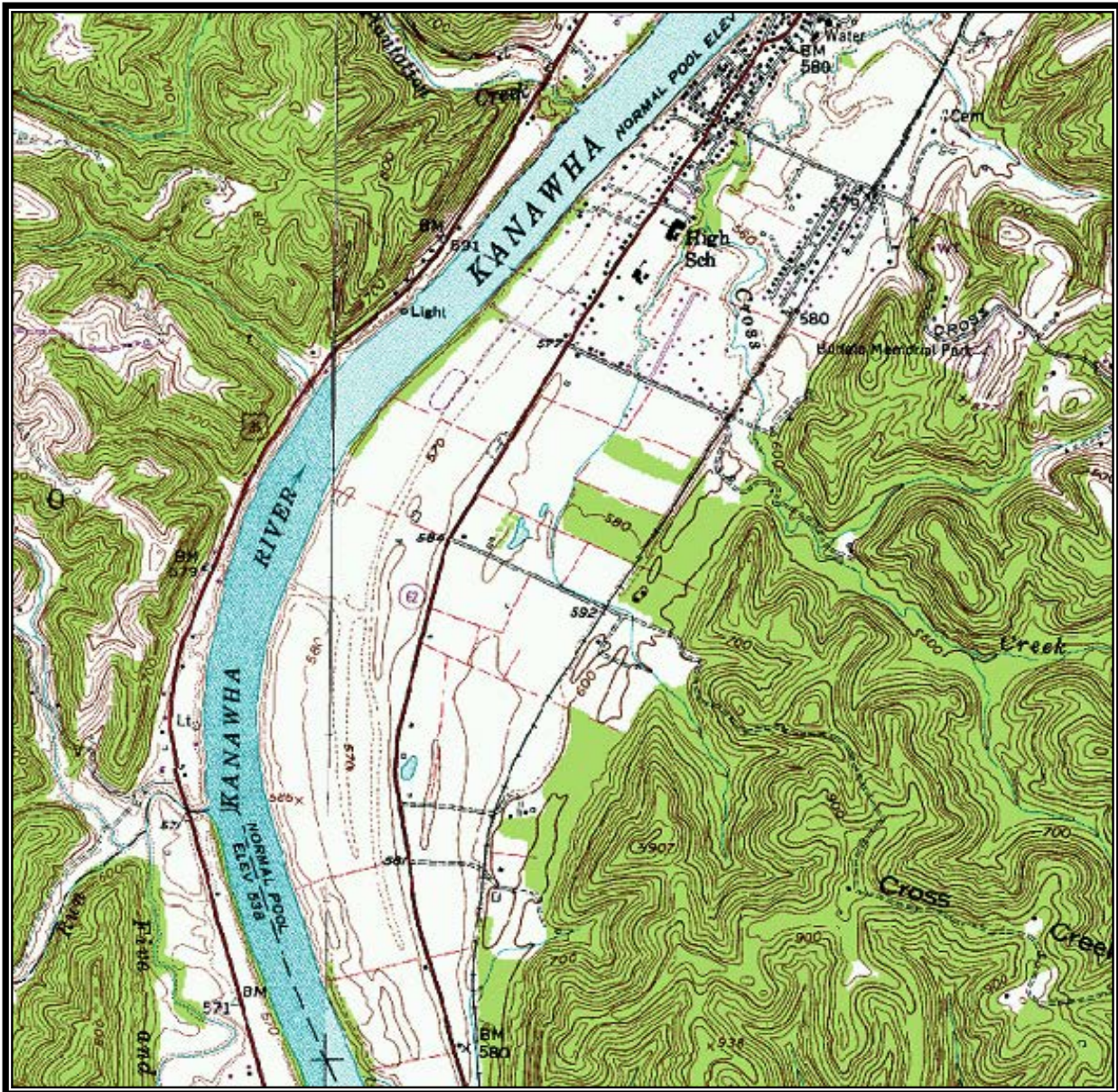
TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4
L0391847040

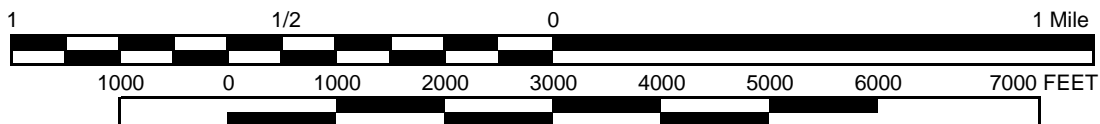
Attachment B

Location Map

Toyota Motor Manufacturing, WV Inc.



SCALE: 1:24 000



ATTACHMENT B - AREA MAP

USGS 7.5 minute Series
Topographic Map
Winfield and Mt. Olive, WV Quadrangles

Attachment C

Schedule of Installation

Attachment C
Schedule of Planned Installation and Start-Up

Unit	Installation Schedule	Start-Up Schedule
Automatic Transmission - 8-speed	4/1/2016	6/1/2017
Engine Assembly	6/1/2016	6/1/2017

Attachment D

Regulatory Discussion

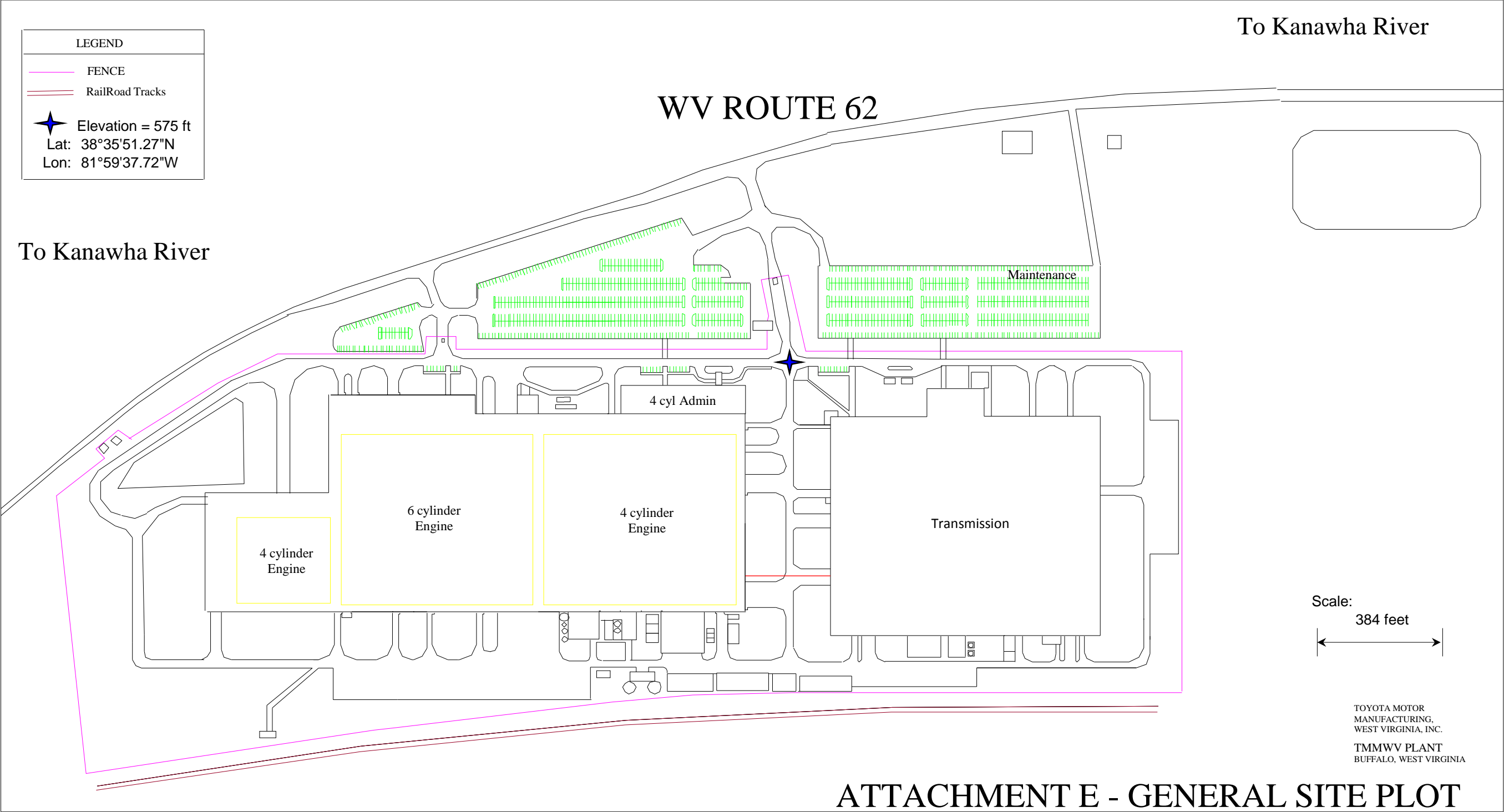
Attachment D

Regulatory Discussion

As no change in emissions will occur based on the revisions to the Automatic Transmission and 4-Cylinder Engine Processes, no regulations are invoked as part of this revision. This application is being submitted as a Class II administrative update to allow an increase to the permitted production limits for these processes.

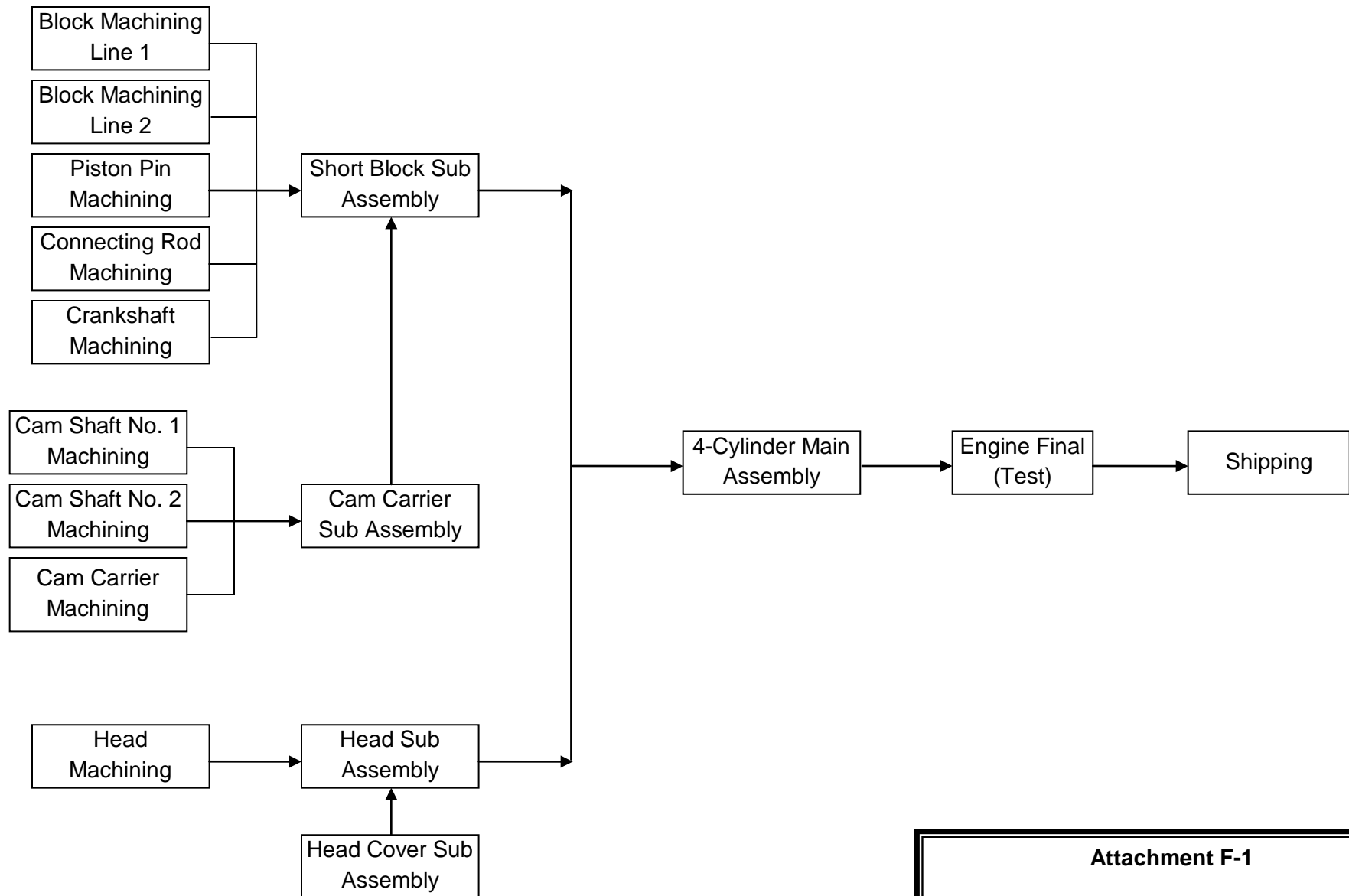
Attachment E

Plot Plan



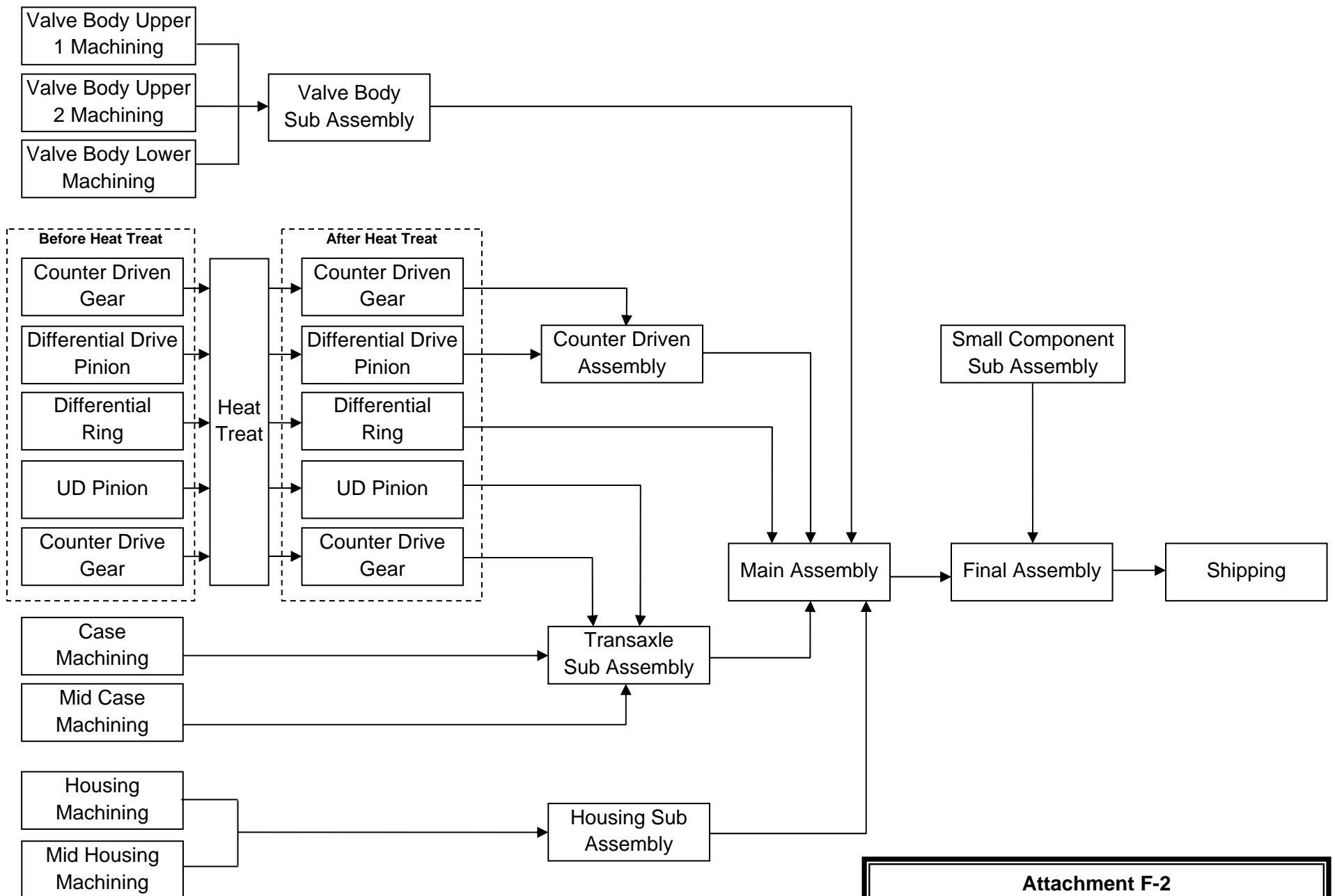
Attachment F

Process Flow Diagram



Attachment F-1

Toyota Motor Manufacturing,
West Virginia, Inc.
4-Cylinder Engine Process Flow Diagram



Attachment G

Process Description

Attachment G

Process Description

Automatic Transmission Model Change

Toyota Motor Manufacturing, West Virginia, Inc., (Toyota) will have an automatic transmission model change. The operations will include machining, gear manufacturing (including heat treat) and assembly operations, all similar to existing automatic transmission operations currently in place at the facility. The new equipment will support changes for the new production model, with Toyota maintaining compliance with the current emissions limitations for the facility. For ease of review, changes proposed to the current permit are highlighted in yellow in Attachments I, L, and N.

Engine Assembly Line Increase Production

Toyota Motor Manufacturing, West Virginia, Inc., (Toyota) will install a new 4-cylinder engine assembly line to increase production. The new assembly line will be similar to existing engine assembly operations currently in place at the facility. The new equipment will allow an increase in production, with Toyota maintaining compliance with the current emissions limitations for the facility.

Permit Modification

This permit modification is specific to the automatic transmission model change and engine assembly line for increased production. No changes are required to the facility's hours of operation, emissions limitations, or recordkeeping requirements to accommodate the planned increase in production. Toyota's other existing operations are addressed in detail in Permit R30-079000072-2013.

Attachment I

Emissions Unit Table

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Source Number	Emission Unit Description	Year Installed/Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
Project #1	4-Cylinder Machining and Shipping	2016	900,000 units/yr	Modification	--
	Cylinder Block/Shipping				
	Block Lower Case/Shipping				
	Cylinder Head/Shipping				
	Crankshaft/Shipping				
	Camshaft/Shipping				
	ConRod/Shipping				
	Piston Pin/Shipping				
Project #2	4 Cylinder Assembly	2016	900,000 units/yr	Modification	--
	Inner Assembly				
	Piston Sub Assembly				
	Head Sub Assembly				
	Main Assembly				
Project #19	A/T Machining Operations	2016	900,000 units/yr	Modification	--
	Case				
	Housing				
	Upper and Lower Valve Body				
	Clutch Drum				
	Block Lower Case/Shipping				
	Clutch Hub				
	Sun Gear Input Shaft				
	Planetary Carrier				
	Planetary Gear Ring				
	Planetary Pinion				
	Direct Clutch Hub				
	Planetary Sun Gear				
	Underdrive Clutch Hub				
	Carrier Cover				
	Carrier				
	Pinion				
	Ring Gear				
	Clutch Drum				
	Counter Drive Gear				
	Counter Driven Gear and Sub Assembly				
	Pinion Differential Drive				
	Differential Ring Gear				
	Input Shaft Sub Assembly				
	Clutch Hub Assembly				
	Carrier Sub Assembly				
	Carrier & Hub Sub Assembly				
	Output Shaft Sub Assembly				
	Clutch Drum Sub Assembly				
	Carrier & Rear Ring Sub Assembly				
	A/T Component Heat Treat				

Source Number	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
Project #19	A/T Assembly Operations	2016	900,000 units/yr	Modification	--
	Transaxle Assembly Main Axis				
	Assembly under Drive Part				
	Main Assembly				
	Underdrive Assembly				
	Counter Driven Assembly				
	Differential Drive Pinion Gear Assembly				
	Differential Sub Assembly				
	Valve Body Assembly				
	Oil Pump Assembly				
	Gear Assembly				
	Transaxle Oil Pan Sub Assembly				
	Clutch Assembly				
	Carrier Gear Assembly				

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

Attachment L

Emissions Unit Data Sheet

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): Projects #1-19

1. Name or type and model of proposed affected source: Manufacturing operations for engines and transmissions
2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.
3. Name(s) and maximum amount of proposed process material(s) charged per hour: Project #1, 2, – 900,000 units/yr Project #5, 11 – 550,000 units/yr Project #3 – 450,000 units/yr Project #4 – 1,100,000 units/yr Project #6 – 150,000 units/yr Project #10 – 591,298 units/yr Project #12 – 100,000 units/yr Projects #18, 19 – 900,000 units/yr
4. Name(s) and maximum amount of proposed material(s) produced per hour: See Attachment I
5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants: N/A

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): (a) Type and amount in appropriate units of fuel(s) to be burned:		
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:		
(c) Theoretical combustion air requirement (ACF/unit of fuel):		
@	°F and	psia.
(d) Percent excess air:		
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:		
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:		
(g) Proposed maximum design heat input:		
		$\times 10^6$ BTU/hr.
7. Projected operating schedule:		
Hours/Yr	2250	

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:				
@	°F and			psia
a.	NO _x		lb/hr	grains/ACF
b.	SO ₂		lb/hr	grains/ACF
c.	CO		lb/hr	grains/ACF
d.	PM ₁₀	14.76	lb/hr	64.86 grains/ACF
e.	Hydrocarbons		lb/hr	grains/ACF
f.	VOCs	202.48	lb/hr	227.66 grains/ACF
g.	Pb		lb/hr	grains/ACF
h.	Specify other(s)			
	VOC-HAPs	0.38	lb/hr	0.43 grains/ACF
	PM-HAPs	0.40	lb/hr	0.46 grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p>MONITORING No changes to current requirements are proposed</p>	<p>RECORDKEEPING No changes to current requirements are proposed</p>
<p>REPORTING No changes to current requirements are proposed</p>	<p>TESTING No changes to current requirements are proposed</p>
<p>MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p>RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p>REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p>TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty N/A</p>	

Attachment N

Emissions Calculations

Attachment N-1

Facility-Wide Emissions Summary^a

Description	CO		NOx		VOCs		SO ₂		PM ₁₀ /PM _{2.5}		PM		PM-HAPs		VOC-HAPs		CO ₂ e
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY
Mach, Assm, & Weld	0.00	0.00	0.00	0.00	202.48	227.66	0.00	0.00	6.74	29.73	6.74	29.73	0.40	0.46	n/a	0.43	0.00
Exhaust Vents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.02	35.13	8.02	35.13	0.00	0.00	0.00	0.00	0.00
Combustion Sources	14.91	43.03	19.09	52.76	0.98	2.85	3.14	3.41	1.55	4.10	1.55	4.10	0.00	0.00	0.00	0.00	63,047.53
G60-C005B Generators	15.50	3.85	9.20	2.32	0.13	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.61
Storage Tanks	0.00	0.00	0.00	0.00	1.03	4.51	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Engine Testing	156.31	99.10	29.95	34.75	27.06	12.86	1.10	0.20	2.98	1.52	2.98	1.52	0.00	0.00	0.00	0.00	1,455.00
TOTALS	186.72	145.98	58.24	89.83	231.68	247.97	4.34	3.71	19.29	70.48	19.29	70.48	0.40	0.46	0.00	0.43	64,617.14

^a No changes to the current emissions limitations are proposed as part of this Class II Administrative Update

Attachment N-2
Projects^a

Source Number	Source Description	Building	Year Constructed	Maximum Production		Process Type	#/Unit	To Be Added	PM Limits		PM-HAP Limits		VOC Limits		VOC-HAP Limits
				units/hr	units/yr				lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/yr
Project #1	4 Cylinder Machining and Shipping	100	1996	262	900,000	Cylinder Block/Shipping	1		1.18	5.17	0.02	0.02	74.90	84.27	859.41
						Block Lower Case/Shipping	1								
						Cylinder Head/Shipping	1								
						Crankshaft/Shipping	1								
						Camshaft/Shipping	2								
						ConRod/Shipping	4								
						Piston Pin/Shipping	4								
Project #2	4 Cylinder Assembly			262	900,000	Inner Assembly	1		0.04	0.18	0	0			
						Piston Sub Assembly	4								
						Head Sub Assembly	1								
						Main Assembly	1								
Project #3	4 Cylinder Engine Welding			200	450,000	Intake Manifold	1		1.28	5.61	0	0			
						Exhaust Manifold	1								
Project 6	4 Cilinder Engine Assembly			200	150,000	Inner Assembly	1		0.07	0.31	0	0			
						Piston Sub Assembly	1								
						Head Sub Assembly	1								
						Main Assembly	1								
Project #5	6&8 Cylinder Engine Assembly	100	1996	262	550,000	Inner Assembly	1		0.11	0.65	0	0	53.95	60.55	
						Upper Assembly	1								
						Piston Sub Assembly	6-8								
						Head Sub Assembly	2								
						Final Assembly	1								
Project #11	6 Cylinder Engine Machining	100	1996	262	550,000	Cylinder Block/Shipping	1		0.79	3.47	0.01	0.01			
						Cylinder Head/Shipping	2								
						Crankshaft/Shipping	1								
						ConRod/Shipping	6								
						Camshaft/Shipping	4								
						Piston Pin/Shipping	6								
Project #12	6 Cylinder Engine Welding			200	100,000	Exhaust Manifold	1		0.64	2.81	0.36	0.41			
Project #10	Passenger Car Axle Machining 1				591,298	Knuckle	2		0.2	0.89	0	0	73.63	82.84	
						Hub	2								
						Rr. Axle Shaft	2								
						Carrier Machining	2								
						Lower Arm	2								
Project #18	A/T Machining Operations	200	1999	334	900,000	Case	1		1.91	8.36	0.01	0.02			
						Housing	1								
						Upper and Lower Valve Body	1								
						Clutch Drum	1								
						Block Lower Case/Shipping	1								
						Clutch Hub	1								

Source Number	Source Description	Building	Year Constructed	Maximum Production		Process Type	#/Unit	To Be Added	PM Limits		PM-HAP Limits		VOC Limits		VOC-HAP Limits
				units/hr	units/yr				lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/yr
						Sun Gear Input Shaft	1								
						Planetary Carrier	1								
						Planetary Gear Ring	1								
						Planetary Pinion	1								
						Direct Clutch Hub	1								
						Planetary Sun Gear	1								
						Underdrive Clutch Hub	1								
						Carrier Cover	1								
						Carrier	1								
						Pinion	1								
						Ring Gear	1								
						Clutch Drum	1								
						Counter Drive Gear	1								
						Counter Driven Gear and Sub Assembly	1								
						Pinion Differential Drive	1								
						Differential Ring Gear	1								
						Input Shaft Sub Assembly	1								
						Clutch Hub Assembly	1								
						Carrier Sub Assembly	1								
						Carrier & Hub Sub Assembly	1								
						Output Shaft Sub Assembly	1								
						Clutch Drum Sub Assembly	1								
						Carrier & Rear Ring Sub Assembly	1								
						A/T Component Heat Treat	1								
Project #19	A/T Assembly Operations	200	1996	3334	900,000	Transaxle Assembly Main Axis	2		0.12	0.53	0	0			
						Assembly under Drive Part	2								
						Main Assembly	2								
						Underdrive Assembly	2								
						Counter Driven Assembly	2								
						Differential Drive Pinion Gear Assembly	2								
						Differential Sub Assembly	2								
						Valve Body Assembly	2								
						Oil Pump Assembly	2								
						Gear Assembly	2								
						Transaxle Oil Pan Sub Assembly	2								
						Clutch Assembly	2								
						Carrier Gear Assembly	2								
Project #4	Support	100	1996	429	1,100,000	QC & Maintenance	1		0.4	1.75	0	0	b	b	
						Tool Regrind	1								
	Exhaust Fans								8.02	35.13					
TOTALS									14.76	64.86	0.4	0.46	202.48	227.66	0.43

^a Any changes proposed to the facility's current permit are highlighted in yellow.

^b Project 4 contributes one-third of its VOC emissions to each major grouping

Attachment N-3 Combustion Sources^a

Source Number	Source Description	Emission Point	Date Constructed	Control Device	Design Capacity	Hours limitation	Fuel Usage Limitation	CO Limits		NO _x Limits		PM Limits		SO ₂ Limits		VOC Limits	
						hr/yr	gal/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
QE1S	Engine Test Cell #1	QCE1		TC-1	8760 hr/yr	22500		8.15	91.69	3.07	34.54	0.12	1.35	0.10	0.1	27.06	11.25
QE2S	Engine Test Cell #2	QCE2		TC-2	8760 hr/yr			8.15		3.07		0.12		0.10			
QE3S	Engine Test Cell #3	QCE3		TC-3	8760 hr/yr			8.15		3.07		0.12		0.10			
QE4S	Engine Test Cell #4	QCE4		TC-4	8760 hr/yr			8.15		3.07		0.12		0.10			
QE5S	Engine Test Cell #5	QCE5		TC-5	8760 hr/yr			8.15		3.07		0.12		0.10			
QE6S	Engine Test Cell #6	QCE6		TC-6	8760 hr/yr			8.15		3.07		0.12		0.10			
QE7S	Engine Test Cell #7	QCE7		TC-7	8760 hr/yr			8.15		3.07		0.12		0.10			
QA3S	Transmission Test Cell #3	QCA3		TC-AT1	8760 hr/yr			8.15		3.07		0.12		0.10			
QA4S	Transmission Test Cell #4	QCA4		TC-AT4	8760 hr/yr			8.15		3.07		0.12		0.10			
E1S	4-Cylinder Firing Bench	ZZFB		--	8760 hr/yr		3750	82.96	7.41	2.32	0.21	1.9	0.17	0.2	0.1		1.61
E2S	6-Cylinder Firing Bench	MZFB	--	8760 hr/yr													
E3S	4-Cylinder Firing Bench	FB-3	--	8760 hr/yr													
DG-5031	Diesel Generator 347 BHP ^b		10/10/2005		9.92 mmBtu/hr			0.35	0.35	1.7	1.7	0.23	0.23	3.02	3.02	0.02	0.02
Natural Gas Combustion								14.56	42.67	17.4	51.06	1.32	3.86	0.12	0.39	0.96	2.83
G60-C005B Generators ^c								15.5	3.85	9.2	2.32	0	0	0	0	0.13	0.09
							TOTALS	186.72	145.97	58.2	89.83	4.53	5.61	4.24	3.61	28.17	15.8

^a Any changes proposed to the facility's current permit are highlighted in yellow.

^b Only one diesel generator is allowed onsite

^c Emergency generators are listed individually in general permit and in Table A.7.A of the Title V Permit.

Attachment N-3
Storage Tanks^a

Emission Point ID	Building	Year Installed	Equipment Description	Capacity (gallons)	Compound Stored	Conservation Vent Setting (ounces)	Air Pollution Control Device	Maximum Annual Throughput (Gal)
G1 G2 G3	Outside	1996	Gasoline Storage Tank	9,900	Gasoline	0.5	Vapor Return	150,000
DT-1	100	1996	Gasoline Day Tank	46	Gasoline	0.5	N/A	100,000
DT-2	100	1996	Gasoline Day Tank	46	Gasoline	0.5	N/A	100,000
DT-ZZ	100	1996	Day Tank	14.4	Gasoline	0.5	N/A	100,000
DT-MZ	100	1996	Day Tank	14.4	Gasoline	0.5	N/A	100,000
QC-AT	Outside	1999	Gasoline Storage Tank	5075	Gasoline	0.5	Vapor Return	100,000
DT-AT1	200	1999	Day Tank	46	Gasoline	0.5	N/A	100,000
DT-AT2	200	1999	Day Tank	46	Gasoline	0.5	N/A	100,000
ET-01	100	2012	Ethanol/Gasoline Storage Tank	6000	Gasoline/ Ethanol	0.5	Vapor Return	150,000
n/a- no vent to	100	2012	Ethanol/Gasoline Storage Tank	60	Gasoline/ Ethanol	N/A	N/A	150,000
OST1, OST2	100	1996	Oil Storage Tank (2 compartments)	11,670	Motor Oil	N/A	N/A	1,365,000
OST3	100	1996	Oil Storage Tank	66	Motor Oil	N/A	N/A	1,365,000
OST4, OST5,	100	1996	Oil Storage Tank	198	Motor Oil	N/A	N/A	1,365,000
FH1	100	1996	No. 2 Fuel Oil Tank	550	No. 2 Fuel Oil	N/A	N/A	36,600
FH2	100	1996	No. 2 Fuel Oil Tank	550	No. 2 Fuel Oil	N/A	N/A	36,600
T17	100	1996	Sulfuric Acid Tank	3,000	Sulfuric Acid	N/A	N/A	5,000

^a Any changes proposed to the facility's current permit are highlighted in yellow.

Attachment O

M/R/R/T Plans

Attachment O

Monitoring/Recordkeeping/Reporting/Testing Plan

As no change in emissions will occur based on the revisions to the production limitations for the Automatic Transmission and 4-Cylinder Engine Processes with no increase in emissions limitations for the facility, no changes are proposed for the facility's monitoring, recordkeeping, reporting, or testing requirements.

Attachment P

Legal Advertisement

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Toyota Motor Manufacturing, West Virginia, Inc., has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II Administrative Update for facility revisions to allow an increase in production of 4-cylinder engines and automatic transmissions at its engine and transmission manufacturing facility located at 1 Sugar Maple Lane, Buffalo, WV 25033 in Putnam County, West Virginia. The latitude and longitude coordinates for the facility are: 38.596902° latitude, -81.992677° longitude.

As the increased productions requires no changes to the existing emissions limitations for the facility, the applicant estimates no change in the potential to discharge Regulated Air Pollutants.

Startup of operation is planned to begin on or about the 1st day of June, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 21st day of December, 2015.

By: Toyota Motor Manufacturing, West Virginia, Inc.
Millie Marshall, President
Post Office Box 600
1 Sugar Maple Lane
Buffalo, West Virginia 25033

Attachment S

Title V Permit Revision Information

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary	
Mark all applicable requirements associated with the changes involved with this permit revision:	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS (Subpart(s)_____)	<input type="checkbox"/> Section 112(d) MACT standards (Subpart(s)_____)
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) ⁽¹⁾
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)
⁽¹⁾ If this box is checked, please include Compliance Assurance Monitoring (CAM) Form(s) for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why Compliance Assurance Monitoring is not applicable: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	

2. Non Applicability Determinations
<p>List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.</p> <p>No changes to current non-applicability determination.</p>
<input type="checkbox"/> Permit Shield Requested <i>(not applicable to Minor Modifications)</i>

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? ☐ Yes ☒ No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R13-2062L	Pending	Increase in production only
	/ /	
	/ /	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
	MM/DD/YYYY	
	/ /	
	/ /	

6. Change in Potential Emissions

Pollutant	Change in Potential Emissions (+ or -), TPY
N/A	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

7. Certification For Use Of Minor Modification Procedures (Required Only for Minor Modification Requests)

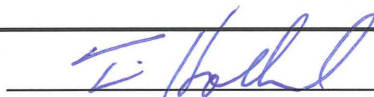
Note: This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:

- i. Proposed changes do not violate any applicable requirement;
- ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;
- iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;
- v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;
- vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.

(Signed):



Date:

12 / 21 / 15
(Please use blue ink)

Named (typed):

(Please use blue ink)

Tim Hollander

Title:

General Manager,
Administration.

Note: Please check if the following included (if applicable):

☐

Compliance Assurance Monitoring Form(s)

☐

Suggested Title V Draft Permit Language

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

Attachment N-3
Combustion Sources^a

Source Number	Source Description	Emission Point	Date Constructed	Control Device	Design Capacity	Hours limitation	Fuel Usage Limitation	CO Limits		NO _x Limits		PM Limits		SO ₂ Limits		VOC Limits	
						hr/yr	gal/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
QE1S	Engine Test Cell #1	QCE1		TC-1	8760 hr/yr	22500		8.15	91.69	3.07	34.54	0.12	1.35	0.10	0.1	27.06	11.25
QE2S	Engine Test Cell #2	QCE2		TC-2	8760 hr/yr			8.15		3.07		0.12		0.10			
QE3S	Engine Test Cell #3	QCE3		TC-3	8760 hr/yr			8.15		3.07		0.12		0.10			
QE4S	Engine Test Cell #4	QCE4		TC-4	8760 hr/yr			8.15		3.07		0.12		0.10			
QE5S	Engine Test Cell #5	QCE5		TC-5	8760 hr/yr			8.15		3.07		0.12		0.10			
QE6S	Engine Test Cell #6	QCE6		TC-6	8760 hr/yr			8.15		3.07		0.12		0.10			
QE7S	Engine Test Cell #7	QCE7		TC-7	8760 hr/yr			8.15		3.07		0.12		0.10			
QA3S	Transmission Test Cell #3	QCA3		TC-AT1	8760 hr/yr			8.15		3.07		0.12		0.10			
QA4S	Transmission Test Cell #4	QCA4		TC-AT4	8760 hr/yr			8.15		3.07		0.12		0.10			
E1S	4-Cylinder Firing Bench	ZZFB		--	8760 hr/yr		3750	82.96	7.41	2.32	0.21	1.9	0.17	0.2	0.1		1.61
E2S	6-Cylinder Firing Bench	MZFB		--	8760 hr/yr												
E3S	4-Cylinder Firing Bench	FB-3		--	8760 hr/yr												
DG-5031	Diesel Generator 347 BHP ^b		10/10/2005		9.92 mmBtu/hr			0.35	0.35	1.7	1.7	0.23	0.23	3.02	3.02	0.02	0.02
Natural Gas Combustion								14.56	42.67	17.4	51.06	1.32	3.86	0.12	0.39	0.96	2.83
G60-C005B Generators ^c								15.5	3.85	9.2	2.32	0	0	0	0	0.13	0.09
TOTALS								186.72	145.97	58.2	89.83	4.53	5.61	4.24	3.61	28.17	15.8

^a Any changes proposed to the facility's current permit are highlighted in yellow.

^b Only one diesel generator is allowed onsite

^c Emergency generators are listed individually in general permit and in Table A.7.A of the Title V Permit.