# West Virginia Department of Environmental Protection Division of Air Quality

# **Fact Sheet**



# For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on January 15, 2019.

Permit Number: **R30-07900072-2019**Application Received: **October 21, 2022**Plant Identification Number: **03-54-079-00072**Permittee: **Toyota Motor Manufacturing, WV** 

Facility Name: **Buffalo Plant** 

Mailing Address: P.O. Box 600, Buffalo, WV 25033

Permit Action Number: MM04 Revised: March 07, 2023

Physical Location: Buffalo, Putnam County, West Virginia

UTM Coordinates: 413.518 km Easting • 4,272.153 km Northing • Zone 17

Directions: The facility is located directly east of West Virginia State Route 62,

approximately one mile south of Buffalo, WV.

#### **Facility Description**

Toyota Motor Manufacturing, WV (TMMWV) is primarily engaged in the manufacturing of automotive engines and automotive transmissions. As part of this manufacturing process, the plant contains machining, assembly, engine testing, and support operations. To support these operations, the plant is equipped with heating ventilation and air conditioning units, as well as various storage tanks (e.g., gasoline, motor oil, etc.).

SIC Code: 3714

This minor modification incorporates the revisions made with the Class II Administrative Update R13-2062Q. The modification includes the installation of hybrid vehicle transaxle lines and hybrid electric motor lines, as well as the installation of a natural gas-fired heating unit and the installation of one 15,000 gallon engine oil storage tank.

#### **Emissions Summary**

This modification results in the following emission changes:

Change in Facility-Wide Potential Emissions (tons per year)		
Regulated Pollutant	Change in Potential Emissions	
Carbon Monoxide (CO)	+ 0.35	
Nitrogen Oxides (NO <sub>X</sub> )	+ 0.42	
Volatile Organic Compounds (VOCs)	+ 0.02	
Sulfur Dioxide (SO <sub>2</sub> )	0	
Particulate Matter – 10 (PM <sub>10</sub> )	+ 0.03	
Particulate Matter – 2.5 (PM <sub>2.5</sub> )	+ 0.03	
Hazardous Air Pollutants (HAPs)	0	

## **Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 227.38 tpy of VOCs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Toyota Motor Manufacturing, WV is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air
		Pollution from Combustion of Fuel in
		Indirect Heat Exchangers.
	45CSR13	NSR Permit Requirements.
	45CSR30	Operating Permit Requirement.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### **Active Permits/Consent Orders**

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of
Consent Order Number	Issuance
R13-2062Q	December 05, 2022

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under

the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

This minor modification incorporates the revisions made with the Class II Administrative Update R13-2062Q. The revision includes the installation of equipment for hybrid vehicle transaxle lines to increase the existing production of transmission/transaxle units (emission units include machining, welding, carburizing, and motor testing equipment), two hybrid electric motor lines for motor stator manufacturing (emission units include welding and varnishing equipment), and three hybrid electric motor lines in the transaxle lines (emission units include machining, welding, and resin setting equipment), as well as the installation of a natural gas-fired heating unit and a 15,000 gallon tank for motor oil.

The following changes have been made to the Title V operating permit for this modification:

- I. Section 1.0. Emission Units and Active R13, R14, and R19 Permits
  - A. The Emission Units Table was updated as follows:
    - 1. Project #4
      - a. The year modified has been updated to 2022.
      - b. The annual production limit has been changed from 1,800,000 units/yr to 2,100,000 units/yr.
    - 2. Project #18
      - a. Building #100, the modification year 2022, and process types Rotor Sub-Assembly and Stator Sub-Assembly were added to this section of the Emission Units Table.
      - b. The annual maximum production limit has been updated to 1,200,000 units/yr from 900,000 units/yr.
    - 3. Project #19
      - a. Building #100, the modification year 2022, and process types Electric Stator Welding and Electric Rotor Welding were added to this section of the Emission Units Table.
      - b. The annual maximum production limit has been updated to 1,200,000 units/yr from 900,000 units/yr.
    - 4. Authorized Storage Tanks Permitted under R13-2062
      - a. The 15,000 gallon Oil Storage Tank, OST9, has been added to the table.
  - B. The table of active permits was updated with R13-2062Q which was issued on December 05, 2022.
- II. Section 2.0. General Conditions
  - A. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
  - B. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.
- III. Section 3.0. Facility-Wide Requirements
  - A. The U.S. EPA address has been updated in Condition 3.5.3.

- B. Condition 3.5.10. has been updated to account for the changes made with this permit revision.
  - 1. Conditions 4.4.9. and 4.4.10. contain the recordkeeping requirements from A.8.g.3. and A.8.g.4., respectively, of R13-2062Q. Therefore, the records of these conditions must also be included in the report required by Condition 3.5.10. of this permit per A.8.k. of R13-2062Q.
  - 2. With this revision, Condition 5.4.4. no longer contains any of the applicable recordkeeping requirements found in Section A.8. of R13-2062. Therefore, the reference to 5.4.4. has been removed from Condition 3.5.10. of this permit.
- IV. Section 4.0. Machining, Welding, and Assembly Operations & Surface Coating Operations
  - A. The emission limits for the Engine Machining, Assembly and Support group of the "Project Activity VOC and VOC-HAP Emission Limits" table in Condition 4.1.2. have been updated in accordance with R13-2062Q.
  - B. The "Project Activity/Exhaust Fans PM and PM-HAP Emission Limits" table in Condition 4.1.3. have been updated in accordance with R13-2062Q.
  - C. The authority of Condition 4.1.4. has been updated to A.1.g. as the numbering of the paragraphs in Condition A.1. of R13-2062Q has changed.
  - D. Condition 4.1.8. has been updated with R13-2062Q.
  - E. The "Solvent Washers Aggregate VOC/HAP Emission Limits" table in Condition 4.1.21.d. has been removed and replaced with the updated emission limits and requirements of A.1.d.4. in R13-2062Q.
  - F. The footnote to the table in Condition 4.1.22. has been updated in accordance with R13-2062Q.
  - G. "Reserved." has been removed from Condition 4.1.23. and replaced with the transaxle sub-assembly process and electric motor varnishing process requirements of A.1.f. from R13-2062Q.
  - H. The requirements of Condition 4.1.25. have been updated as follows:
    - 1. In paragraph a., the maximum annual usage rate of acetylene in the non-combustion heat treat process has been updated and the maximum hourly usage rate has been removed.
    - 2. In paragraph b., the annual VOC emission limit has been updated, and an annual emission limit for HAPs has been added.
    - 3. The authority of the condition has been updated from Condition A.4.c. to Condition A.1.e. of R13-2062Q.
  - I. The requirements of Condition A.8.a.6. of R13-2062Q have been added to the operating permit as Condition 4.4.1.f.
  - J. The authority of Condition 4.4.7. has been updated to A.8.g.2. due to the change in the numbering of requirements in R13-2062Q.
  - K. The laser welding recordkeeping requirements of Condition A.8.g.1. of R13-2062Q, previously Conditions A.8.g.1 and A.8.i.2. of R13-2062P and Conditions 5.4.4.1. and 4.4.8. of R30-07900072-2019 (MM03), have been consolidated into Condition 4.4.8. of the operating permit. The authority of the condition has been updated. (See V.C.1. of this Fact Sheet.)
  - L. The requirement of Condition A.8.g.3. of R13-2062Q, previously Condition A.8.g.2. of R13-2062P and Condition 5.4.4.2. of R30-07900072-2019 (MM03), has been moved to Condition 4.4.9. of the operating permit. (See V.C.2. of this Fact Sheet.)

- M. The recordkeeping requirement for the transaxle varnishing process has been added to the operating permit as Condition 4.4.10. with Condition A.8.g.4. as the authority.
- V. Section 5.0. Combustion Operations, Testing, and Heat Treatment
  - A. The maximum design heat input and the combustion rate of natural gas of the HVAC/Comfort and of the maximum aggregate limitations have been updated in Condition 5.1.1. Footnote (3) has been added to the table.
  - B. The emission limits for the Natural Gas (HVAC/Comfort) source have been updated in the "Aggregate Combustion Sources Emission Limits" table of Condition 5.1.6. The emission limits for the diesel generator and corresponding Footnote (2) have been removed from the table in accordance with R13-2062O.
  - C. The requirements of Condition 5.4.4. have been removed from this section and the condition has been marked as "[Reserved]".
    - Paragraph 5.4.4.1. previously contained the recordkeeping requirements used to demonstrate
      compliance with the limit on maximum aggregate head laser welding. This requirement has been
      moved to Condition 4.4.8.a. as the limit to which the recordkeeping requirement applies is in
      Section 4.1. and Condition 4.4.8. contains other recordkeeping requirements for laser welding
      operations.
    - 2. The requirement of Condition 5.4.4.2. of R30-07900072-2019 (MM03) has been moved to Condition 4.4.9. The authority for 5.4.4.2. was Condition A.8.g.2. of R13-2062P. 5.4.4.2. previously contained the recordkeeping requirement used to determine compliance with the maximum acetylene consumption rate limit set in Condition 6.1.3. of the operating permit.
      - a. The reference to Condition 6.1.3. appears to be a mistake, as no such condition exists in R30-07900072-2019 (MM03). In condition A.8.g.2. of R13-2062P, the recordkeeping requirement applies to the limit set in Condition A.4.c., which is now Condition A.1.e. of R13-2062Q and Condition 4.1.25.a. of R30-07900072-2019 (MM04).
      - b. Therefore, the condition has been updated to reference Condition 4.1.25.a. and has been moved to Section 4.4.
- VI. Section 6.0. Storage Tanks
  - A. The list of applicable emission point IDs in the heading has been updated to include OST9.
  - B. Condition 6.1.3. has been added to the operating permit with the VOC emissions limit from all storage tanks, which was added with Condition A.4.c. in R13-2062Q.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

None.

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: Not Applicable. Ending Date: Not Applicable.

#### **Point of Contact**

All written comments should be addressed to the following individual and office:

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Division of Air Quality
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# **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

## **Response to Comments (Statement of Basis)**

None.