

West Virginia Department of Environmental Protection

*Harold D. Ward
Cabinet Secretary*

Title V Operating Permit Revision

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

Permit Action Number: MM01 **SIC:** 3714
Name of Permittee: Toyota Motor Manufacturing, West Virginia, Inc.
Facility Name/Location: Buffalo Plant
County: Putnam
Permittee Mailing Address: P.O. Box 600, Buffalo, WV 25033

Description of Permit Revision: This minor modification incorporates the changes approved under Class II Administrative Update R13-2062R for the installation of a new Hybrid Electric Vehicle Transaxle Line (HV6), the addition of two (2) 550 gallon portable storage tanks, and the installation of four (4) 0.2 MMBtu/hr natural gas-fired HVAC units for a new childcare center.

Title V Permit Information:

Permit Number: R30-07900072-2024
Issued Date: February 6, 2024
Effective Date: February 20, 2024
Expiration Date: February 6, 2029

Directions To Facility: The facility is located directly east of West Virginia State Route 62, approximately one mile south of Buffalo, WV.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder

Laura M. Crowder

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June 10, 2025

Laura M. Crowder
Director, Division of Air Quality

Date Issued

Permit Number: **R30-07900072-2024**
Permittee: **Toyota Motor Manufacturing, West Virginia, Inc.**
Facility Name: **Buffalo Plant**
Permittee Mailing Address: **P.O. Box 600, Buffalo, WV 25033**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 C Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Buffalo, Putnam County, West Virginia
Facility Mailing Address:	P.O. Box 600, Buffalo, WV 25033
Telephone Number:	(304) 937-7000
Type of Business Entity:	Corporation
Facility Description:	The Buffalo Plant is primarily engaged in the manufacturing of automotive engines and automotive transmissions. 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.
SIC Codes:	3714
UTM Coordinates:	413.518 km Easting • 4,272.153 km Northing • Zone 17

Permit Writer: Sarah Barron

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

(R13-2062 Appendix A) Machining, Welding, and Assembly Operations

Source Number	Source Description	Building	Year Constructed or Modified	Maximum Production		Process Type	#/Unit
				(units/hr)	(units/yr)		
Project # 1	Engine Machining	100	1996 (C) 2021 (M)	262	900,000	Cylinder Block/Shipping	1
						Block Lower Case/Shipping	1
						Cylinder Head/Shipping	1
						Crankshaft/Shipping	1
						Camshaft/Shipping	2
						Con Rod/Shipping	4
						Piston Pin/Shipping	4
Project # 2	Engine Assembly	100	2016 (C) 2021 (M)	262	900,000	Inner Assembly	1
						Piston Sub Assembly	4
						Head Sub Assembly	1
						Main Assembly	1
Project # 4	Support Operations	100 & 200	1996 (C) 2022 2025 (M)	596	2,100,000	Q.C. & Maintenance	1
						Tool Regrind	1
Project # 18	A/T Machining Operations	100 & 200	1999 (C) 2022 2025 (M)	334	1,200,000	Case	1
						Housing	1
						Upper & Lower Valve Body	1
						Clutch Drum	1
						Block Lower Case/Shipping	1
						Clutch Hub	1
						Sun Gear Input Shaft	1
						Planetary Carrier	1
						Planetary Ring Gear	1
						Planetary Pinion	1
						Direct Clutch Hub	1
						Planetary Sun Gear	1

Source Number	Source Description	Building	Year Constructed or Modified	Maximum Production		Process Type	#/Unit
				(units/hr)	(units/yr)		
Project # 18 (cont.)	A/T Machining Operations	100 & 200	1999 (C) 2022 2025 (M)	334	1,200,000	Underdrive Clutch Hub	1
						Rear Planetary Sun Gear	1
						Rear Planetary Pinion	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 Sub Assembly	1
						AT Hybrid Transaxle Components	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 Treatment	1
						Rotor Sub-Assembly	1
						Stator Sub-Assembly	1
						Motor/Generator	1

Source Number	Source Description	Building	Year Constructed or Modified	Maximum Production		Process Type	#/Unit
				(units/hr)	(units/yr)		
Project # 19	A/T Assembly Operations	100 & 200	1996 (C) 2022 2025 (M)	334	1,200,000	A/T Component Heat Treat	2
						Transaxle Assembly Main Axis	3
						Assembly Under Drive Part	3
						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
						Electric Stator Welding	1
						Electric Rotor Welding	1

Notes: TBD = To Be Determined (#/Unit) = The number of machines that are proposed for installation

Authorized Storage Tanks Permitted under R13-2062

Emission Point ID	Equipment Description	Capacity (gallons)	Material Stored	Air Pollution Control Device
G1 G2 G3	Gasoline Storage Tank	9,900	Gasoline	Vapor Return
DT-1	Gasoline Day Tank	46	Gasoline	N/A
DT-2	Gasoline Day Tank	46	Gasoline	N/A
DT-ZZ	Day Tank	14.4	Gasoline	N/A
DT-MZ	Day Tank	14.4	Gasoline	N/A

Emission Point ID	Equipment Description	Capacity (gallons)	Material Stored	Air Pollution Control Device
QC-AT	Gasoline Storage Tank	5,075	Gasoline	Vapor Return
DT-AT1	Day Tank	46	Gasoline	N/A
DT-AT2	Day Tank	46	Gasoline	N/A
ET-01	Ethanol/Gasoline Storage Tank	6,000	Gasoline/Ethanol	Vapor Return
n/a – no vent to atmosphere	Ethanol/Gasoline Storage Tank	60	Gasoline/Ethanol	N/A
OST1, OST2	Oil Storage Tank (2 compartments)	11,670	Motor Oil	N/A
OST3	Oil Storage Tank	66	Motor Oil	N/A
OST4, OST5, OST6	Oil Storage Tank (3 compartments)	198	Motor Oil	N/A
OST7	Oil Storage Tank	12,000	Motor Oil	N/A
OST8	ATF Storage Tank	12,000	Trans Fluid	N/A
OST9	Oil Storage Tank	15,000	Motor Oil	N/A
FH1	No. 2 Fuel Oil Tank	550	No. 2 Fuel Oil	N/A
FH2	No. 2 Fuel Oil Tank	550	No. 2 Fuel Oil	N/A
FH3	No. 2 Fuel Oil Tank	550	No. 2 Fuel Oil	N/A
FH4	Kerosene Tank	550	Kerosene	N/A
T17	Sulfuric Acid Tank	3,000	Sulfuric Acid	N/A

Authorized Emergency Generators Permitted under G60-D005

Source ID	Source Description	Date Constructed	Design Brake Horsepower	Area	Fuel
GEN-11E	Ford LRG-4251 20RZ (4SRB)	1-11-2005	41	Emergency Lighting	PNG
GEN-11W	Ford LRG-4251 20RZ (4SRB)	1-11-2005	41	Emergency Lighting	PNG
GEN-12	Ford LRG-4251 20RZ (4SRB)	1-11-2005	41	Emergency Lighting	PNG
GEN-13	Ford LRG-4251 20RZ (4SRB)	9-1-2004	41	Emergency Lighting	PNG
GEN-14	GM-4.3L 45RZG (4SRB)	8-14-2006	68	Emergency Lighting	PNG
GEN-15	GM-4.3L 45RZG (4SRB)	8-14-2006	68	Emergency Lighting	PNG
GEN-SEC	GM-4.3L 45RZG (4SRB)	10-23-2005	68	Security	PNG
GEN-SBR	GM-5.7L 60RZG (4SRB)	2-18-2007	105	Wastewater	PNG
GEN-Pharm	General Motors GM-5.7L 30REZG (4SRB)	2-27-2014	49	Emergency Lighting	PNG
GEN-IS-2	Doosan D14.6L 250REZXB (4SRB)	7-21-2015	402	Computer Data Center	PNG
GEN-Café	General Motors GM-5.7L 60REZGB (4SRB)	2018	105	Cafeteria	PNG

Source ID	Source Description	Date Constructed	Design Brake Horsepower	Area	Fuel
GEN-AT HT	Caterpillar 14.2L DG300 GC (4SRB)	10-20-2020	460	AT Heat Treatment	PNG
GEN-Carb	Caterpillar 14.2 DG300 GC (4SRB)	2023	460	Carburizing	PNG
DG-5031	John Deere 6081AR001 200RE0ZJB	10-10-2005	347	BLDG 100	No. 2 Fuel Oil

Notes: PNG = Pipeline Natural Gas

Other Engines

Source ID	Source Description	Date Constructed	Design Brake Horsepower	Area	Fuel
2 Fire Pumps	Detroit Diesel	May, 1998	368 each	Fire Pump	Diesel

Engine Head Laser Welding

Emission Unit	Emission Point	Emission Unit Description	Year Installed	Design Capacity	Control Device
LC-1	-	Laser Welding Machine	2017	900,000 units/yr	LC-C1 to LC-C9
LC-2	-	Laser Welding Machine	2017		
LC-3	-	Laser Welding- Machine	2017		
LC-4	-	Laser Welding Machine	2017		
LC-5	-	Laser Welding Machine	2019		
LC-6	-	Laser Welding Machine	2019		
LC-7	-	Laser Welding Machine	2021		
LC-8	-	Laser Welding Machine	2021		
LC-9	-	Laser Welding Machine	2021		
SW-1	SW-E1	Solvent Washer	2017	900,000 units/yr	SW-C1
SW-2	SW-E1	Solvent Washer	2017		
SW-3	SW-E2	Solvent Washer	2019		SW-C2

Authorized Test/Firing Benches

Emission Unit	Emission Point	Emission Unit Description	Design Capacity	Control Device
QE1S	QCE1	Engine Test Cell #1	100,000 gal/yr gasoline	Catalytic Converter (TC-1)
QE2S	QCE2	Engine Test Cell #2		Catalytic Converter (TC-2)

Emission Unit	Emission Point	Emission Unit Description	Design Capacity	Control Device
QE3S	QCE3	Engine Test Cell #3	100,000 gal/yr gasoline	Catalytic Converter (TC-3)
QE4S	QCE4	Engine Test Cell #4		Catalytic Converter (TC-4)
QE5S	QCE5	Engine Test Cell #5		Catalytic Converter (TC-5)
QE6S	QCE6	Engine Test Cell #6		Catalytic Converter (TC-6)
QE7S	QCE7	Engine Test Cell #7		Catalytic Converter (TC-7)
QA3S	QCA3	Transmission Test Cell #3		Catalytic Converter (TC-AT1)
QA4S	QCA4	Transmission Test Cell #4		Catalytic Converter (TC-AT4)
E1S	ZZFB	Engine Firing Bench	3750 gal/yr gasoline	None
E2S	MZFB	Engine Firing Bench		None
E3S	FB-3	Engine Firing Bench		None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2062 RQ	December 05, 2022 March 4, 2025
G60-D005G	February 14, 2023

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance
CBI	Confidential Business Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations		
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant		
HON	Hazardous Organic NESHA	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
m	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
mm	Million	USEPA	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour	UTM	Universal Transverse Mercator
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	VEE	Visual Emissions Evaluation
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.
[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.40]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a 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. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
- [45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B.]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. **[40 C.F.R. §61.145(b) and 45CSR34]**
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. **[45CSR§4-3.1 State-Enforceable only.]**
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. **[45CSR§11-5.2]**
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. **[W.Va. Code § 22-5-4(a)(~~14~~15)]**
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. The permittee shall prepare and maintain an emission point map of the facility. Excluding HVAC units, this map shall consist of a diagram of the location and identification of all emission points at the facility that vent to ambient air. A legend shall be prepared with the map that identifies the emission point type and source(s) contributing to that emission point. This map shall be prepared within ninety (90) days of permit issuance and thereafter be updated as necessary to reflect current facility operations. The map(s) shall be retained on-site and be made available to the Director or his/her duly authorized representative upon request.

[Permit no. R13-2062 – Specific Requirement A.8.I]

3.2. Monitoring Requirements

- 3.2.1. TMMWV shall use a computerized system to schedule preventative maintenance jobs and insure the completion of these jobs.

THE SYSTEM:

- a. The periodical maintenance requirements of the control equipment are first entered into a computerized system database according to manufacturer's specifications.
- b. The computerized system keeps the information in the form of PM Information Reports which creates work orders as needed to insure the jobs are scheduled.
- c. The PM Information Report(s) may reference Facility Maintenance Ledgers to provide direction for completion of the required maintenance on a production machine.
- d. Periodical Maintenance Cards provide specific direction on the job to insure proper completion.
- e. Once the maintenance is completed, the team members will close out the work order, which provides records of the completed work within the database.

[Monitoring Plan according to the requirements of R13-2062C; approved 2-24-03, 45CSR§30-12.7]

- 3.2.2. Effective communications of equipment conditions are accomplished using the following:
 - a. **Andon Board:** A ceiling mounted display used to show machine conditions through the use of color text. The andon board is designed to be clearly visible to the majority of locations within the associated production area.

- b. **Andon Yellow Indication:** The yellow status on the andon board typically communicates that the equipment is requiring attention from production/maintenance. The equipment is operating within specifications but is forecasting the status of the machine so preventative maintenance can be performed.
- c. **Andon Red Indication:** The red status on the andon board typically communicates that a fault has occurred due to either equipment failure or that the operation is not within specifications.
- d. **Mist and Dust Collector Log Sheets:** The Mist and Dust collector log sheet is a record of corrective and preventative action, which provides status of the equipment condition upon inspection. This form is not used as a long-term record (provided for through a computerized system).
- e. All maintenance performed on equipment is logged into a computerized system, which creates and maintains a database used to provide scheduling of preventative maintenance and providing records of repair history.
- f. **Machine Mounted Collectors:** All maintenance performed on machine mounted equipment is logged into a computerized system. Periodic operation checks are performed by production personnel to insure the units are operating.

[Monitoring Plan according to the requirements of R13-2062C; approved 2-24-03, 45CSR§30-12.7]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved

test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(~~14-15-16~~) and 45CSR13; Permit no. R13-2062 – Specific Requirement A.6.b]

- 3.3.2. a. The permittee shall develop, or continue the application of, a plan to test representative sources of air pollutants at the facility permitted herein so as to determine compliance with the limits contained in this permit. This plan shall, henceforth from the date of issuance of this permit, be subject to approval of the Director.
- b. At a minimum of once annually or at any other reasonable time required by the Director, the permittee shall submit a report to the Director detailing the testing that has taken place at the facility to the end of achieving compliance with 3.3.2.a. Also included in this report will be a proposal for any future testing required at the facility to meet the requirements under 3.3.2.a. The proposal for future testing is subject to the approval of the Director.
- c. Tests that may be required by the Director to determine compliance with 3.3.2.a of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method upon discretion. Compliance testing shall be conducted at maximum permitted load unless otherwise specified or approved by the Director.
 1. Tests to determine compliance with particulate emission limits shall be conducted, as applicable, in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 C.F.R. 60, Appendix A and EPA Method 201, 201A, and 202 as set forth in 40 C.F.R. 51.
- d. With regard to any testing required by the Director, the permittee shall submit to the Director a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

[45CSR§30-5.1.c.]

- 3.3.3. The permittee shall develop and revise as necessary a plan to periodically test representative sources of air pollutants at the facility permitted herein so as to determine compliance with the limits contained in this permit. This plan shall, upon revision, be subject to the approval of the Director. All performance tests conducted as result of this plan shall be in accordance with the requirements under Condition 3.3.1. The minimum source categories and associated pollutants required to be tested as a part of this plan are given in the following table:

Minimum Performance Test Requirements

Source Category	Pollutant(s) of Concern
Process Exhaust Vents	Particulate Matter ⁽¹⁾
Mist Collectors that Vent Outside the Building	Particulate Matter ⁽¹⁾
Dust Collectors	Outlet Particulate Matter ⁽¹⁾ Concentration
Engine Test Cells	CO, NO _x

NOTES:

(1) Filterable Only.

[Permit no. R13-2062 – Specific Requirement A.6.a]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;
 - The analytical techniques or methods used;
 - The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, General Permit Registration G60-D005 and G60-D, 4.2.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records. All records required in this permit shall be made available to the Director or his duly

authorized representative upon request, and, when requested by the Director, certified as accurate on the form provided as Appendix B of R13-2062.

[45CSR§30-5.1.c.2.B., 45CSR13, Permit no. R13-2062 – Specific Requirement A.8.n]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA, and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8.
[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Reserved.**

- 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Reserved.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

- 3.5.10. The permittee shall submit to the Director, upon request, a report containing the records as required under Sections 3.1.9, 4.1.19, 4.4.1, 4.4.2, 4.4.3, 4.4.7, 4.4.8, 4.4.9, 4.4.10, 5.4.1, 5.4.5, and 5.4.6 (certified using the form included as Appendix B of R13-2062) for the previous rolling twelve (12) month period. If, during the previous annual period, the permittee had been out of compliance with any part of this permit, it shall be noted along with the following information: 1) the source/equipment/process that was non-compliant and the specific requirement of this permit that was not met, 2) the date the permittee discovered that the source/equipment/process was out of compliance, 3) the date the Director was notified, 4) the corrective measures to get the source/equipment/process back into compliance, and 5) the date the source began to operate in compliance. The submission of any non-compliance report shall give no enforcement action immunity to episodes of non-compliance contained therein.

[Permit no. R13-2062 – Specific Requirement A.8.k]

3.6. Compliance Plan

- 3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. **40 C.F.R. Part 60 Subpart Kb** – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984* – Per 40 C.F.R. §60.110b(a), this subpart applies to volatile organic liquid storage vessels with a capacity greater than or equal to 75 cubic meters (19,813 gallons). As each storage vessel at the facility has a capacity less than 19,813 gallons, Subpart Kb is inapplicable to the facility.
 - b. **40 C.F.R. Part 64** – *Compliance Assurance Monitoring (CAM)* – The emission units at the facility do not have pre-control device potential emissions which exceed Title V major source thresholds. Therefore, per 40 C.F.R. §64.2(a)(3), the facility is not subject to CAM.

4.0 Machining, Welding, and Assembly Operations [Project # 1 to 19] & Surface Coating Operations

4.1. Limitations and Standards

- 4.1.1. The machining, welding, and assembly operations authorized to take place by this permit at the subject facility are listed in Section 1.1 (R13-2062 Appendix A). The operations shall be within the listed production limits.

[Permit no. R13-2062 – Specific Requirement A.1.a]

- 4.1.2. Maximum hourly and annual emission rates of volatile organic compounds (VOCs) and volatile organic compound-hazardous air pollutants (VOC-HAPs) shall be those as set forth in the following table. All annual emission limits are on a twelve (12) month continuous rolling total basis. A twelve (12) month continuous rolling total is the sum of the measured quantity for the previous twelve (12) consecutive months.

Project Activity VOC and VOC-HAP Emission Limits

Project Activity Numbers	Grouping Description	VOC Emission Limits ⁽¹⁾		VOC-HAP Emission Limits
		lb/hr	TPY	TPY
1, 2, 4 ⁽³⁾	Engine Machining, Assembly and Support	121.95	143.81	0.68 ⁽²⁾
4 ⁽³⁾ , 18, 19	Automatic Transmission Machining, Assembly, and Support	70.59	72.95	
<i>Project Activity Totals ⁽⁴⁾ =</i>		<i>192.54</i>	<i>216.76</i>	<i>0.68</i>

NOTES:

- (1) These limits represent aggregate limits for all of the listed project activities (excludes all combustion exhaust emissions and storage tank emissions but does include emissions from the Carburizer Heat Treat Process, Laser Welding, Solvent Washers, and Transaxle [Electric Motor](#) Varnishing).
- (2) Facility-wide aggregate limit. VOC-HAPs that count against the emission limit are those compounds listed under Section 112(b) of the CAAA.
- (3) Project Activity 4 contributes two-thirds to the first listed major grouping and one-third to the second listed major grouping.
- (4) Listed for information purposes, the project activity grouping limits are in effect.

[Permit no. R13-2062 – Specific Requirement A.1.b]

- 4.1.3. Maximum hourly and annual emission rates of particulate matter (PM) and particulate matter-hazardous air pollutants (PM-HAPs) shall be those as set forth in the following table. All annual emission limits are on a twelve (12) month continuous rolling total basis. A twelve (12) month continuous rolling total is the sum of the measured quantity for the previous twelve (12) consecutive months.

Project Activity/Exhaust Fans PM and PM-HAP Emission Limits ⁽¹⁾

Project Activity #	Project Description	PM Emission Limits ⁽²⁾		PM-HAP Emission Limits ⁽³⁾	
		lb/hr	TPY	lb/hr	TPY
1	Engine Machining	1.14	1.96	0.02	0.01
2	Engine Assembly	0.20	0.34	0.00	0.00
4	Support	0.07	0.17	0.00	0.00
18	Automatic Transmission Machining	1.04	1.41	0.01	0.02
19	Automatic Transmission Assembly & Welding	0.03	0.04	0.00	0.00
<i>Project Activity Totals ⁽⁴⁾ =</i>		<i>2.48</i>	<i>3.92</i>	<i>0.03</i>	<i>0.03</i>
-	Exhaust Fans	8.76	38.82	0.12	0.20

NOTES:

- (1) PM/PM-HAP emission limits are on a per Project Activity basis (excludes all combustion exhaust emissions but does include emissions from Transaxle [Electric Motor](#) Varnishing). All PM emissions not stacked directly to the roof are routed to the Exhaust Fan Project, which includes the particulate matter emissions from the laser cladding operations.
- (2) For the purposes of this permit, total PM limits are also limits for PM₁₀ and PM_{2.5}.
- (3) PM-HAPs that count against emission limits are those compounds listed under Section 112(b) of the CAAA.
- (4) Listed for information purposes, the project activity grouping limits are in effect.

[Permit no. R13-2062 – Specific Requirement A.1.c]

- 4.1.4. Pursuant to 45CSR7, Section 3, the permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any operation permitted under Section 4.1.1 or 4.1.21 which is greater than twenty (20) percent opacity, except smoke and/or particulate matter emitted from any operation permitted under Section 4.1.1 or 4.1.21 which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

[Permit no. R13-2062 – Specific Requirement A.1.g, Other Requirements B.5; 45CSR§§7-3.1 and -3.2]

- 4.1.5. No surface coating shall be applied that has VOC content in excess of those limits as listed in West Virginia Legislative Rule 45CSR21, Section 19.3. Definitions of the types of surface coatings listed in Section 19.3 shall be those as given to them in 45CSR21.

[Permit no. R13-2062 – Specific Requirement A.3.a; 45CSR§21-19.3]

- 4.1.6. For the purposes of this permit, emissions from surface coating operations are counted against the limits permitted under Condition 4.1.2 and should be recorded under Condition 4.4.1.

[Permit no. R13-2062 – Specific Requirement A.3.b]

- 4.1.7. Pursuant to 45CSR21, Section 40.3(a)(1), the permittee shall utilize mist collectors, RTOs, and reductions in VOC content so as to achieve, at a minimum, a facility-wide 90 percent reduction in VOC emissions below the total (aggregate) maximum theoretical VOC emissions. “Maximum theoretical emissions” shall have the definition given to it under 45CSR21, Section 2.44. Pursuant to 45CSR21, Section 40.3(b), the permittee may comply with Sections 4.1.7 and 4.1.8 through the submission and approval of an “alternative emissions reduction plan.” The permittee shall, upon request, produce calculations using actual emissions from the previous twelve (12) full calendar months that verify compliance with the 90% reduction requirement given under 45CSR21, Section 40.3(a)(1).

[Permit no. R13-2062 – Specific Requirement A.5.a; 45CSR§§21-40.3(a)(1) and (b); State Enforceable Only]

- 4.1.8. The permittee shall use dust and mist collectors on the emission sources as specified in Permit Applications R13-2062 through R13-2062RQ and R13-2273, and any amendments or revisions thereto. Said collectors shall be installed, maintained, and operated so as to each achieve the minimum control efficiency listed.

[Permit no. R13-2062 – Specific Requirement A.5.b]

- 4.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[Permit no. R13-2062 – Other Requirements B.5; 45CSR§7-5.1]

- 4.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[Permit no. R13-2062 – Other Requirements B.5; 45CSR§7-5.2]

- 4.1.11. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[Permit no. R13-2062 – Other Requirements B.5; 45CSR§7-9.1]

- 4.1.12. **Variance.** – If the provisions of 45CSR21 cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-9.3]

- 4.1.13. With respect to any source at a facility subject to 45CSR§21-40, which source has maximum theoretical emissions of 6 pounds per hour or more and is constructed, modified or begins operating after the effective date of 45CSR21, comply with a control plan developed on a case-by-case basis approved by the Director that meets the definition of reasonably available control technology (RACT) in 45CSR§21-2.60 for both fugitive and non-fugitive emission sources.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.3(c); State Enforceable Only]

- 4.1.14. All RACM control plans, RACT control plans, and alternative emissions reduction plans approved by the Director pursuant to 45CSR§21-40 shall be embodied in a consent order or permit in accordance with 45CSR13 or 45CSR30, as required. A facility owner or operator may at any time petition the Director to approve revisions to these plans. The decision concerning said petition shall be issued by the Director in accordance with 45CSR13 or 45CSR30, as required, or a consent order. Any such revisions shall be subject to the public participation requirements of 45CSR13 or 45CSR30.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.4(e); State Enforceable Only]

- 4.1.15. An owner or operator of a non-coating source that is exempt from the emission limitations in 45CSR§21-40.3 shall submit, upon request by the Director, records that document that the source is exempt from these requirements.

a. These records shall be submitted to the Director within 30 days from the date of request.

b. If such records are not made available, the source will be considered subject to the limits in 45CSR§21-40.3.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.6(b); State Enforceable Only]

- 4.1.16. The owner or operator of any facility containing sources subject to 45CSR§21-40, shall comply with the requirements in 45CSR§21-5 except that such requirements, as they apply to sources solely subject to 45CSR§21-40 may be modified by the Director upon petition by the owner or operator. Any such modified requirements shall be embodied in the facility's control plan (RACM, RACT or alternative plan) and reflected in the associated consent order or permit issued pursuant to 45CSR13 or 45CSR30.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.8(c); State Enforceable Only]

- 4.1.17. The owner or operator of a subject coating line or operation shall notify the Director in the following instances:

a. Any record showing use of any non-complying coatings shall be reported by sending a copy of such record to the Director within 30 days following that use; and

b. At least 30 calendar days before changing the method of compliance from the use of complying coatings to daily-weighted averaging or control devices, the owner or operator shall comply with all requirements of §45-21-4.4.a or §45-21-4.5.a, respectively. Upon changing the method of compliance from the use of complying coatings to daily-weighted averaging or control devices, the owner or operator shall comply with all requirements of the section of this regulation applicable to the coating line or operation.

[Permit no. R13-2062 – Other Requirements B.8; 45CSR§21-4.3(c)]

- 4.1.18. Reserved.

4.1.19. Use of any material containing any constituent identified in Section 112(b) of the 1990 Clean Air Act Amendments as a Hazardous Air Pollutant (HAP), as amended and revised, shall be in accordance with the following:

- a. The permittee shall maintain records of all specific HAP compounds used at the facility as required under Section 4.4.1; and
- b. No material containing any toxic air pollutant (TAP) as defined by West Virginia Legislative Rule 45CSR27, Section 2.10, shall be used without prior approval of the Director.

[Permit no. R13-2062 – Specific Requirement A.8.j]

4.1.20. The permittee shall use catalytic converters on each test cell, as required in Condition 5.1.5.a, at all times the test cells are in operation. Use of catalytic converters shall be in accordance with the following requirements:

- a. Catalyst life will be limited to that which is recommended by the manufacturer.
- b. The permittee shall install an alarm system to notify the operator if the catalyst temperature exceeds the normal operating range as determined under Condition 4.2.1. Upon such notification, the operator will immediately initiate shut-down activity of the associated testing operation.

[Permit no. R13-2062 – Specific Requirement A.5.c]

4.1.21. The laser clad copper coating of engine heads shall be in accordance with the following requirements:

- a. The solvent washers, identified as SW-1, SW-2, and SW-3, shall be designed, maintained, and operated so as to evacuate all VOC/HAP emissions from the units to regenerative thermal oxidizers (RTOs), identified as SW-C1 and SW-C2;
- b. All emissions from laser cleaning in the cladding process shall be evacuated to mist collectors;
- c. The facility is currently authorized to operate nine (9) laser welding machines (LC-1 through LC-9). The maximum aggregate throughput of heads processed through the laser cleaning/welding machines shall not exceed 900,000 heads/year on a twelve (12) month continuous rolling total basis;
- d. VOC and HAP emissions from all the solvent washers, as emitted after control by the RTOs (combustion exhaust emission limits from the RTO given under Condition 4.1.22) shall not exceed 3.97 TPY and 0.20 TPY, respectively, and shall count toward the appropriate project activity limits under Condition 4.1.2;
- e. Particulate matter and PM-HAP emissions from the laser welding machines shall not exceed 1.14 TPY and 0.20 TPY, respectively, and shall count toward the “Exhaust Fans” limit in Condition 4.1.3.

[Permit no. R13-2062 – Specific Requirement A.1.d]

4.1.22. The RTOs (SW-C1 and SW-C2) used to control VOC/HAP emissions from the solvent washers used in the laser clad copper coating operations shall be designed, maintained, and operated so as to each achieve a minimum hydrocarbon destruction and removal efficiency (DRE) of 95%. Each RTO shall be designed to not exceed an MDHI of 0.51 mmBtu/hr and combustion exhaust emissions (does not include uncombusted

VOC/HAP pass-through emissions from the solvent washers) from each unit shall not exceed the following limits:

Per-RTO Combustion Exhaust Emission Limits ⁽¹⁾

Pollutant	lb/hr	TPY
CO	0.09	0.40
NO _x	0.11	0.48

NOTES:

(1) Exhaust emissions based on a vapor HHV of 470 Btu/scf and emission factors taken from AP-42, Section 1.4. As the annual emissions are based on 8,760 hours of operation, there are no annual limits on hours of operation or waste gas combusted.

[Permit no. R13-2062 – Specific Requirement A.5.d]

4.1.23. The ~~transaxle sub-assembly process and electric motor~~ Electric Motor varnishing process shall be in accordance with the following requirements:

- a. The facility is currently authorized to operate four (4) transaxle varnishing baking units (MG-VB-S1/2, MG1-VB-R1/2, MG3-RB-S1/2/3, MG3-RB-R1/2/3). Each unit must be controlled by a fabric filter with a minimum collection efficiency of 95%; and
- b. Particulate matter emissions from the transaxle varnishing baking units shall not exceed 0.09 TPY and shall count toward the appropriate project activity limits under Condition 4.1.32.

[Permit no. R13-2062 – Specific Requirement A.1.f]

4.1.24. The RTOs (SW-C1 and SW-C2) are subject to 45CSR6. The requirements of 45CSR6 include but are not limited to the following:

- a. The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the flares into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity	Factor F
Less than 15,000 lb/hr	5.43
15,000 lb/hr or greater	2.72

[45CSR§6-4.1]

- b. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty percent (20%) opacity or greater.

[45CSR§6-4.3]

- c. The provisions of 4.1.24.b shall not apply to smoke which is less than forty percent (40%) opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR§6-4.4]
- d. No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5]
- e. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6]
- f. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§6-8.2]

[Permit no. R13-2062 – Other Requirements B.4]

4.1.25. The carburizing heat treat process shall be in accordance with the following requirements:

- a. The facility is currently authorized to operate five (5) carburizing heat treat lines (C-HT #1 through C-HT #5). The use of acetylene in the non-combustion heat treat process shall not exceed an aggregate amount in all cells of 27,531,405 Liters/year on a 12-month rolling yearly total basis; and
- b. VOC and HAP emissions from the use of acetylene in the non-combustion heat treat process shall not exceed 11.38 TPY and 0.17 TPY, respectively, and shall count toward the appropriate project activity limits under Condition 4.1.2.

[Permit no. R13-2062 – Specific Requirement A.1.e]

4.2. Monitoring Requirements

- 4.2.1. The permittee shall develop, or continue the application of, a compliance monitoring plan with respect to the operation of the control devices. This plan will identify the following:
 - a. Control device parameters that can be monitored to ensure operation of the control devices at or above their minimum control efficiencies. This must include direct monitoring of the catalytic converter catalyst temperature.
 - b. Reasonable operating ranges for the control device parameters that ensure operation of the control devices at or above their minimum control efficiencies.
 - c. Validation of the ranges identified under b. above either with manufacturer's recommendations or on-site testing.

As necessary or as reasonably required by the Director, the permittee shall revise and submit the plan as detailed above to the Director. This plan shall be subject to the approval of the Director. A copy of the approved plan shall be kept on-site and made available to the Director or his/her duly authorized representative upon request.

[Permit no. R13-2062 – Specific Requirement A.7.a]

- 4.2.2. The permittee shall develop, or continue the application of, a routine maintenance, repair, and replacement plan with respect to all emissions generating equipment and control devices and maintain records of all scheduled and non-scheduled maintenance performed on the equipment. These records need not include maintenance tasks that have no potential effect on emissions performance. A copy of the plan shall be kept on-site and made available to the Director or his/her duly authorized representative upon request.

[Permit no. R13-2062 – Specific Requirement A.7.b]

- 4.2.3. At least monthly, visual emission checks of each emission point subject to an opacity limit shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 C.F.R. 60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 C.F.R. 60 Appendix A, Method 9 evaluation within one (1) month. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on-site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.

[Permit no. R13-2062 – Specific Requirement A.7.c]

- 4.2.4. Reserved.

4.3. Testing Requirements

- 4.3.1. The owner or operator of any source subject to 45CSR§21-40.3 shall demonstrate compliance with 45CSR§21-40.3 by using the applicable test methods specified in 45CSR§§21-41 through 46 or by other means approved by the Director. Notwithstanding the requirements of 45CSR§21-41.1, EPA approval for alternate test methods to demonstrate compliance shall not be required for sources which are subject solely to emission control requirements specified in 45CSR§21-40.3.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.5; State Enforceable Only]

- 4.3.2. The owner or operator of the subject VOC sources shall perform all testing and maintain the results of all tests and calculations required under 45CSR§21-40.3 and 45CSR§21-40.5 to demonstrate that the subject source is in compliance.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.8(a); State Enforceable Only]

- 4.3.3. Upon startup of a new coating line or operation, or upon changing the method of compliance for an existing coating line or operation from the use of complying coatings or daily-weighted averaging to control devices, the owner or operator of the subject coating line or operation shall perform a compliance test. Testing shall be performed pursuant to the procedures in 45CSR§§21-41 through 44. The owner or operator of the subject coating line or operation shall submit to the Director the results of all tests and calculations necessary to demonstrate that the subject coating line or operation is or will be in compliance with the applicable section of this regulation on and after the initial startup date.

[Permit no. R13-2062 – Other Requirements B.8; 45CSR§21-4.5(a)]

4.3.4. Reserved.

4.3.5. Reserved.

4.4. Recordkeeping Requirements

4.4.1. For the purposes of determining on-going compliance with the limits set forth in Section 4.1.2, the permittee shall maintain records of the following on a project activity grouping (as listed under the table in Section 4.1.2) basis:

- a. The hours of operation of each project activity grouping; and
- b. The name and product number of each coolant, washing fluid, solvent, etc. (referred to hereafter as “material”) used in the operation of each project activity grouping that is not excluded under Section 4.4.1.e; and
- c. The mass of VOC and speciated HAPs of each material and the volume of each material used each month.
- d. Within fifteen (15) days of the last day of each month, the permittee shall file a summary report that contains the following information: hourly, monthly, and rolling twelve-month emission rates for VOCs and speciated HAPs from each of the project activity groupings listed under Section 4.1.2. The VOC and speciated HAP emission rates shall be calculated using the following formulas:
 - i. The mass of VOCs and speciated HAPs per volume of each material shall be determined by one of the following methods:
 - a. Certified Product Data Sheets (“Certified Product Data Sheets” shall have the definition assigned to them under 40 C.F.R. 63 Subpart KK) or an equivalent provided by the material supplier, or
 - b. A test conducted, or have conducted, by the permittee to determine the applicable quantities using either Method 24 of 40 C.F.R. 60 or a test method approved in advance by the Director, or
 - c. Material Safety and Data Sheets if the material is used in an aggregate amount less than 100 gallons on an annual basis and for which either of the above two options is not reasonable, or
 - d. Another method on a material case-by-case basis as approved in advance by the Director.
 - ii. The mass of VOCs and speciated HAPs of each material used on a monthly basis, shall be calculated using the following formula:

$$Mass_{(pounds\ of\ VOCs, HAPs / Month)} = A \times B$$

Where: A = monthly material usages in gallons per month

B = VOCs and speciated HAPs content of the materials used in pounds per gallon as determined under Section 4.4.1.d.i.

- iii. The annual, monthly, and hourly emission rates of VOCs and speciated HAPs shall be calculated in the following manner:

- a. The annual emission rate of VOCs and aggregate and speciated HAPs shall be calculated as the sum of the monthly emission rates of VOCs and speciated HAPs, respectively, from the previous twelve (12) months.
- b. The monthly emission rate of VOCs and aggregate and speciated HAPs shall be calculated, on a monthly basis, using the following formula:

$$Emission\ rate_{(pounds\ of\ VOCs, HAPs / Month)} = Mass_{(pounds\ of\ VOCs, HAPs / Month)}$$

- c. The hourly emission rates of VOCs and aggregate and speciated HAPs shall be calculated, on a monthly basis, using the following formula:

$$Emission\ rate_{(pounds\ of\ VOCs, HAPs / Hour)} = Emission\ rate_{(pounds\ of\ VOCs, HAPs / Month)} / D$$

Where: D = Monthly hours of specific project activity operations

- e. Materials may be excluded from actual emissions reporting under this section when/if used during non-production/assembly purposes (e.g., janitorial) only.
- f. When calculating actual emissions from any process/operation that uses an emission factor, the actual emissions must be based on one of the following:
- i. The same emission factor and calculation methodology that was used to generate the potential-to-emit of the process/operation in the applicable permit application except using actual production data; or
- ii. The use of an emission factor that was based on an approved performance test and per approval of the Director.

[Permit no. R13-2062 – Specific Requirement A.8.a]

- 4.4.2. For the purposes of determining compliance with the VOC emissions reduction requirement set forth in Section 4.1.7, the permittee shall, within fifteen (15) days of the last day of each month, file a report that contains the annual VOC emissions reduction percentage.

[Permit no. R13-2062 – Specific Requirement A.8.b]

- 4.4.3. For the purposes of determining compliance with the maximum production throughput limits set forth in Section 4.1.1, the applicant shall maintain monthly and annual records of the production levels for each Project Activity permitted therein.

[Permit no. R13-2062 – Specific Requirement A.8.c]

- 4.4.4. The owner or operator of the subject VOC source shall maintain Section 4.3.2 records in a readily accessible location for a minimum of 3 years and shall make Section 4.3.2 records available to the Director upon verbal or written request.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-40.8(b); State Enforceable Only]

4.4.5. Recordkeeping

- a. Each owner or operator of a source subject to 45CSR§21-5 shall maintain up-to-date, readily accessible records of any equipment operating parameters specified to be monitored in the applicable section of 45CSR21 as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. These records shall be maintained for at least 3 years. The Director may at any time require a report of these data.
- b. A log of operating times for capture systems, control devices, monitoring equipment, and the associated source; and
- c. A maintenance log for the capture system, control devices, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

[Permit no. R13-2062 – Other Requirements B.7; 45CSR§21-5.3(b)]

- 4.4.6. On and after the initial startup date, the owner or operator of a coating line or operation complying by the use of complying coatings shall collect and record all of the following information each day for each coating line or operation and maintain the information at the facility for a period of 3 years.
- a. The name and identification number of each coating, as applied, on each coating line or operation; and
 - b. The mass of VOC per volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation.

[Permit no. R13-2062 – Other Requirements B.8; 45CSR§21-4.3(b)]

- 4.4.7. Solvent Washers Compliance Demonstration. For the purposes of determining on-going compliance with the limits set forth in 4.1.21.d, the permittee shall maintain records of the actual (as calculated) VOC/HAP uncontrolled emissions generated in the solvent washing operations using the calculation methodologies as specified under 4.4.1. Actual controlled VOC/HAP emissions may then be calculated using the minimum control efficiency of the RTOs as specified under 4.1.22.

[Permit no. R13-2062 – Specific Requirement A.8.g.2]

- 4.4.8. Laser Welding Compliance Demonstration
- a. For the purposes of determining compliance with the maximum aggregate head laser welding limit set forth in 4.1.21.c, the applicant shall maintain monthly and annual records of the aggregate number of heads laser welded; and
 - b. For the purposes of determining on-going compliance with the laser welding machine limits set forth in 4.1.21.e, the permittee shall maintain records of the actual (as calculated) particulate matter/HAP emissions generated in the laser cladding machines using the calculation methodology as used in Attachment N of Permit Application R13-2062P. Actual powder usages and the associated MSDS shall be used in the calculations. These records shall be prepared and maintained according to the same schedule as given under 4.4.1.

[Permit no. R13-2062 – Specific Requirement A.8.g.1]

4.4.9. Carburizing Heat Treat Lines Compliance Demonstration

- a. For the purposes of determining compliance with the maximum acetylene consumption rate limit set forth in Condition 4.1.25.a, the applicant shall maintain monthly and annual records of the aggregate amount of acetylene consumed.

[Permit no. R13-2062 – Specific Requirement A.8.g.3]

4.4.10. Transaxle Varnishing Process Compliance Demonstration

- a. For the purposes of determining on-going compliance with the transaxle sub-assembly process, electric motor varnishing limits set forth in Condition 4.1.23.b, the permittee shall maintain records of the actual (as calculated) particulate matter generated in the varnishing operations using the calculation methodology as used in Attachment N of Permit Application R13-2062Q.

[Permit no. R13-2062 – Specific Requirement A.8.g.4]

4.5. Reporting Requirements

- 4.5.1. Upon startup of a new coating line or operation, or upon changing the method of compliance for an existing subject coating line or operation from the use of complying coatings or control devices to daily-weighted averaging, the owner or operator of the subject coating line or operation shall certify to the Director that the coating line or operation is or will be in compliance with 45CSR§21-4.4 on and after the initial startup date. Such certification shall include:
 - a. The name and location of the facility;
 - b. The address and telephone number of the person responsible for the facility;
 - c. Identification of subject sources;
 - d. The name and identification number of each coating line or operation which will comply by means of daily weighted averaging;
 - e. The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation;
 - f. The method by which the owner or operator will create and maintain records each day as required in Section 45CSR§21-4.4.b;
 - g. An example of the format in which the records required in section 45CSR§21-4.4.b will be kept;
 - h. Calculation of the daily-weighted average, using the procedure in 45CSR§21-43.1, for a day representative of current or projected maximum production levels; and

- i. The time at which the facility's "day" begins if a time other than midnight local time is used to define a "day".

[Permit no. R13-2062 – Other Requirements B.8; 45CSR§21-4.4.(a)]

4.6. Compliance Plan

- 4.6.1. None.

5.0 Combustion Operations, Testing, and Heat Treatment

5.1. Limitations and Standards

- 5.1.1. The facility-wide (excluding the RTOs) aggregate maximum design heat input (MDHI) of all natural gas combustion units and the facility-wide maximum aggregate annual combustion rate of natural gas shall not exceed the values given in the following table:

Description	Source ID	MDHI	N/G Combusted
		mmBtu/hr ⁽¹⁾	mmscf/yr ^{(2) (3)}
HVAC/Comfort	n/a	478.54 179.34	1,053.31
Drying Furnaces	FH03, FH04	3.96	34.77
Carburizing Furnaces	FH1A, FH1B, FH1C, FH2A, FH2B, FH2C	1.37	4.21
RX Gas Generators	FH06, FH07	4.06	35.50
<i>Maximum Aggregate Limitations =</i>		487.93 188.73	1,127.78

NOTES:

- (1) Aggregate of all units.
(2) Only the "Maximum Aggregate Limitation" listed at the bottom is required to be met on a facility-wide basis.
(3) The associated annual emission limits given under Condition 5.1.6. are based on these combustion limits. The hourly limits therein are based on all units operating concurrently at MDHI.

[Permit no. R13-2062 – Specific Requirement A.2.a]

- 5.1.2. The maximum design heat input of propane combustion in the heat treatment process shall not exceed 1.33 mmBtu/hr and, on a twelve (12) month rolling total basis, the use of propane shall not exceed 127,546 gallons. The maximum emissions from the use of propane in heat treatment process shall not exceed the limits as given under Condition 5.1.6.

[Permit no. R13-2062 – Specific Requirement A.2.b]

- 5.1.3. Reserved.
- 5.1.4. Pursuant to 45CSR2, Section 3.1, the permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any indirect heat exchanger which is greater than ten (10) percent opacity based on a six minute block average. Pursuant to 45CSR2, Section 9.1, the visible emission standards set forth in this condition shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.

[Permit no. R13-2062 – Specific Requirement A.2.h, Other Requirements B.2.; 45CSR§§2-3.1 and 9.1]

- 5.1.5. The use of engine test cells and firing benches shall be in accordance with the following:
- a. The test cells/firing benches authorized at the facility are given in the Section 1.1 Emission Units: Authorized Test/Firing Benches table. The test cells/firing benches shall be installed, maintained, and

operated so as to minimize any fugitive escape of pollutants and the equipment/processes shall use, where applicable, the specified control devices.

- b. The nine (9) test cells identified under Condition 5.1.5.a shall not combust, in the aggregate, more than 100,000 gallons of gasoline on a 12-month rolling yearly total basis.
- c. The three (3) firing benches identified under Condition 5.1.5.a shall not combust, in the aggregate, more than 3,750 gallons of gasoline on a 12-month rolling yearly total basis.

[Permit no. R13-2062 – Specific Requirement A.2.d]

- 5.1.6. The maximum hourly and annual aggregate emission rates from the specified combustion sources shall not exceed the limits given in the following table:

Aggregate Combustion Sources Emission Limits

Source	CO		NO _x		PM ⁽¹⁾		SO ₂		VOCs	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Natural Gas (HVAC/Comfort)	14.99 <u>15.06</u>	44.55 <u>44.24</u>	17.85 <u>17.93</u>	53.04 <u>52.67</u>	1.36	4.03 <u>4.00</u>	0.11	0.32	0.99	2.91 <u>2.90</u>
Natural Gas (Heat Treatment)	0.79	3.45	0.94	4.11	0.07	0.31	0.01	0.23	0.05	0.23
Propane (Heat Treatment)	0.11	0.48	0.19	0.83	0.01	0.04	0.02	0.09	0.01	0.06
Test Cells	n/a	25.46	n/a	5.10	n/a	0.31	n/a	0.27	n/a	0.74
Firing Benches	n/a	7.41	n/a	0.21	n/a	0.17	n/a	0.10	n/a	1.61

NOTES:

(1) All particulate matter emissions are assumed to be PM_{2.5} or less and include condensable particulate matter.

[Permit no. R13-2062 – Specific Requirement A.2.f]

- 5.1.7. The maximum hourly emission rates from individual test cells and firing benches shall not exceed the limits given in the following table:

Source	CO		NO _x		PM ⁽¹⁾		SO ₂		VOCs	
	lb/hr	lb/gal	lb/hr	lb/gal	lb/hr	lb/gal	lb/hr	lb/gal	lb/hr	lb/gal
Test Cells	14.60	n/a	2.90	n/a	0.20	n/a	0.20	n/a	0.40	n/a
Firing Benches	41.48	3.95	1.16	0.11	0.95	0.09	0.10	n/a	9.03	0.86

NOTES:

(1) All particulate matter emissions are assumed to be PM_{2.5} or less and include condensable particulate matter.

[Permit no. R13-2062 – Specific Requirement A.2.g]

5.2. Monitoring Requirements

5.2.1. None.

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. For the purposes of determining compliance with the maximum natural gas combustion throughput and propane usage limits set forth in Sections 5.1.1 and 5.1.2, the applicant shall maintain monthly and annual records of the amount of natural gas that is combusted at the facility and the amount of propane used in the heat treatment process, respectively.

[Permit no. R13-2062 – Specific Requirement A.8.d]

5.4.2. Reserved.

5.4.3. Reserved.

5.4.4. Reserved.

5.4.5. For the purposes of determining compliance with maximum gasoline combustion limits set forth in Condition 5.1.5.b and c, the applicant shall maintain monthly and annual records of the aggregate gasoline combusted separately in the engine test cells and in the firing benches.

[Permit no. R13-2062 – Specific Requirement A.8.h]

5.4.6. The permittee shall prepare and maintain a list of all natural gas-fired combustion units at the facility. The list shall include the general location of the unit, its function, and the MDHI of the unit.

[Permit no. R13-2062 – Specific Requirement A.8.m]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Storage Tanks [Emission Point IDs: G1, G2, G3, DT-1, DT-2, DT-ZZ, DT-MZ, QC-AT, DT-AT1, DT-AT2, ET-01, OST1 – OST9, FH1, FH2, and T17]

6.1 Limitations and Standards

- 6.1.1. Section 1.1. contains a list of storage tanks authorized to operate at the subject facility.
[Permit no. R13-2062 – Specific Requirement A.4.a]
- 6.1.2. The gasoline storage tanks, emission point identification number G1, G2, G3 (3 compartment), QC-AT, and ET-01 shall be equipped for submerged fill and vapor recovery. The gasoline supply truck(s) must be equipped for vapor recovery and use vapor recovery lines during all times the tank is being filled.
[Permit no. R13-2062 – Specific Requirement A.4.b]
- 6.1.3. The aggregate emissions of VOCs from all storage tanks shall not exceed 4.51 TPY.
[Permit no. R13-2062 – Specific Requirement A.4.c]

6.2 Monitoring Requirements

- 6.2.1. None.

6.3 Testing Requirements

- 6.3.1. None.

6.4 Recordkeeping Requirements

- 6.4.1. None.

6.5 Reporting Requirements

- 6.5.1. None.

6.6 Compliance Plan

- 6.6.1. None.

7.0 Emergency Generators [Emission Point IDs: GEN-11E, GEN-11W, GEN-12, GEN-13, GEN-14, GEN-15, GEN-SEC, GEN-SBR, GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, GEN-Carb, and DG-5031]

7.1. Limitations and Standards

- 7.1.1. The permittee is authorized to operate the emission units GEN-11E, GEN-11W, GEN-12, GEN-13, GEN-14, GEN-15, GEN-SEC, GEN-SBR, GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, GEN-Carb, and DG-5031 with the following emission limits in accordance with all terms and conditions of General Permit Registration G60-D005 and General Permit G60-D.

Emission Limitations

Source ID#	Nitrogen Oxides		Carbon Monoxide		Volatile Organic Compounds	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
GEN-11E	0.63	0.16	1.06	0.26	0.01	0.01
GEN-11W	0.63	0.16	1.06	0.26	0.01	0.01
GEN-12	0.63	0.16	1.06	0.26	0.01	0.01
GEN-13	0.63	0.16	1.06	0.26	0.01	0.01
GEN-14	1.31	0.33	2.21	0.55	0.02	0.01
GEN-15	1.31	0.33	2.21	0.55	0.02	0.01
GEN-SEC	1.31	0.33	2.21	0.55	0.02	0.01
GEN-SBR	1.78	0.45	3.00	0.75	0.02	0.01
GEN-Pharm	0.97	0.24	1.63	0.41	0.01	0.01
GEN-IS-2	1.31	0.33	2.21	0.55	0.02	0.01
GEN-Café	1.78	0.45	3.00	0.75	0.02	0.01
GEN-AT HT	7.72	1.93	13.00	3.25	0.10	0.03
GEN-Carb	7.72	1.93	13.00	3.25	0.10	0.03
DG-5031	1.70	1.70	0.35	0.35	0.02	0.002
TOTAL	29.45	8.64	47.06	12.03	0.39	0.12

[45CR13, General Permit Registration, G60-D005 and G60-D]

- 7.1.2. For the purposes of General Permit G60-D, *emergency generator* means a generator whose purpose is to allow key systems to continue to operate without interruption during times of utility power outages.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.1]

- 7.1.3. *Regulated Pollutant Limitation.* The registrant shall not cause, suffer, allow or permit emissions of any regulated pollutant listed in the General Permit Registration to exceed the emission limit (pounds per hour and tons per year) recorded with the registrant's General Permit Registration. The registrant may request a modification or administrative update to these emission limits.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.2]

- 7.1.4. *Maximum Hourly Limitation.* The maximum hours of operation for any registered emergency generator listed in the General Permit Registration application shall not exceed 500 hours per year. Compliance with the Maximum Yearly Hourly Operation Limitation shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.3]

- 7.1.5. The applicable emergency generator(s) shall be operated and maintained as follows:

- a. In accordance with the manufacturer's recommendations and specifications or in accordance with a site specific maintenance plan; and,
- b. In a manner consistent with good operating practices.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.4]

- 7.1.6. The registrant shall comply with all applicable NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 C.F.R. Part 63, Subpart ZZZZ.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.6]

- 7.1.7. The emission limitations specified in Sections 7.1.1 and 7.1.3 shall apply at all times except during periods of start-up and shut-down provided that the duration of these periods does not exceed 30 minutes per occurrence. The registrant shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start-up and shut-down. The emissions from start-up and shut-down shall be included in the twelve (12) month rolling total of emissions. The registrant shall comply with all applicable start-up and shut-down requirements in accordance with 40 C.F.R. Part 60, Subparts IIII, JJJJ and 40 C.F.R. Part 63, Subpart ZZZZ.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.1.7]

7.2. Monitoring Requirements

- 7.2.1. Reserved.

7.3. Testing Requirements

- 7.3.1. Reserved.

7.4. Recordkeeping Requirements

- 7.4.1. To demonstrate compliance with permit condition 7.1.4, the registrant shall maintain records of the hours of operation of the emergency generator(s) on a monthly basis.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.3.1]

- 7.4.2. To demonstrate compliance with permit section 7.1.5, the registrant shall maintain records of the maintenance performed on each emergency generator.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.3.2]

- 7.4.3. The registrant shall comply with all applicable recordkeeping requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 C.F.R. Part 63, Subpart ZZZZ.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.3.4]

7.5. Reporting Requirements

- 7.5.1. The registrant shall comply with all applicable notification requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 C.F.R. Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 C.F.R. Part 63, Subpart ZZZZ.

[45CSR13, General Permit Registration, G60-D005 and G60-D, Condition 5.5.1]

7.6. Compliance Plan

- 7.6.1. None.

8.0 40 C.F.R. 63 Subpart ZZZZ Requirements for Emergency Generators and 2 Fire Pumps [Emission Point IDs: GEN-11E, GEN-11W, GEN-12, GEN-13, GEN-SEC, DG-5031, and 2 Fire Pumps]

8.1. Limitations and Standards

- 8.1.1. For an existing stationary RICE located at an area source of HAP emissions, the permittee must comply with the requirements in Table 2d to Subpart ZZZZ of Part 63.

Table 2d to Subpart ZZZZ of Part 63

For each...	The permittee must meet the following requirement, except during periods of startup...	During periods of startup, the permittee must...
4. Emergency stationary CI RICE ⁽²⁾ (DG-5031 and 2 Fire Pumps)	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ⁽¹⁾	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE ⁽²⁾ (GEN-11E, GEN-11W, GEN-12, GEN-13, and GEN-SEC)	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ⁽¹⁾	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

NOTES:

- (1) Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d to Subpart ZZZZ of Part 63.
- (2) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d to Subpart ZZZZ of Part 63, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.

[45CSR34; 40 C.F.R. §63.6603(a) and Table 2d of 40 C.F.R. 63 Subpart ZZZZ]

- 8.1.2. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 C.F.R. Part 63 Subpart ZZZZ that apply at all times.
[45CSR34; 40 C.F.R. §63.6605(a)]

- 8.1.3. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by 40 C.F.R. Part 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34; 40 C.F.R. §63.6605(b)]

- 8.1.4. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d to Subpart ZZZZ of Part 63 that apply according to methods specified in Table 6 to Subpart ZZZZ of Part 63.

Table 6 to Subpart ZZZZ of Part 63

For each...	Complying with the requirement to...	The permittee must demonstrate continuous compliance by...
9. Existing emergency stationary RICE located at an area source of HAP	a. Work or Management Practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34; 40 C.F.R. §63.6640(a) and Table 6 of 40 C.F.R. 63 Subpart ZZZZ]

- 8.1.5. The permittee must operate the emergency stationary RICE according to the requirements in paragraphs 8.1.5.a through 8.1.5.c of this condition. In order for the engine to be considered an emergency stationary RICE under 40 C.F.R. Part 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 8.1.5.a through 8.1.5.c, is prohibited. If the permittee does not operate the engine according to the requirements in 8.1.5.a through 8.1.5.c, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.

- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- b. The permittee may operate the emergency stationary RICE for the purpose specified in 8.1.5.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 8.1.5.c counts as part of the 100 hours per calendar year allowed by 8.1.5.b.
- i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records

indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- c. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 8.1.5.b. Except as provided in paragraphs 8.1.5.c.i and 8.1.5.c.ii, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR34; 40 C.F.R. §§63.6640(f), (f)(1), (f)(2), and (f)(4)]

- 8.1.6. The permittee shall comply with Table 8 of 40 C.F.R. 63 Subpart ZZZZ, except per 40 C.F.R. §§63.6645(a)(5), the following do not apply: §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b) through (e), (g) and (h).

[45CSR34; 40 C.F.R. §§63.6645(a)(5) and 63.6665]

8.2. Monitoring Requirements

- 8.2.1. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR34; 40 C.F.R. §§63.6625(e) and (e)(3)]
- 8.2.2. The permittee must install a non-resettable hour meter if one is not already installed.
[45CSR34; 40 C.F.R. §63.6625(f)]
- 8.2.3. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to Subpart ZZZZ of Part 63 apply.
[45CSR34; 40 C.F.R. §63.6625(h)]
- 8.2.4. For each stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to Subpart ZZZZ or in items 1 or 4 to Table 2d to Subpart ZZZZ, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
[45CSR34; 40 C.F.R. §63.6625(i)] (DG-5031 and 2 Fire Pumps)
- 8.2.5. For each stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to Subpart ZZZZ, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the

analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34; 40 C.F.R. §63.6625(j)] (GEN-11E, GEN-11W, GEN-12, GEN-13, and GEN-SEC)

8.3. Testing Requirements

8.3.1. None.

8.4. Recordkeeping Requirements

8.4.1. If complying with the emission and operating limitations, the permittee must keep the following records:

- a. A copy of each notification and report submitted to comply with 40 C.F.R. Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in §63.10(b)(2)(xiv).
- b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34; 40 C.F.R. §63.6655(a)]

8.4.2. The permittee must keep the records required in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ to show continuous compliance with each applicable emission or operating limitation.

[45CSR34; 40 C.F.R. §63.6655(d)]

8.4.3. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.

[45CSR34; 40 C.F.R. §§63.6655(e) and (e)(2)]

8.4.4. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purpose specified in §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

[45CSR34; 40 C.F.R. §§63.6655(f) and (f)(2)]

8.5. Reporting Requirements

- 8.5.1. The permittee shall comply with the reporting requirements of Footnote 2 of Table 2d of 40 C.F.R. 63 Subpart ZZZZ (See Condition 8.1.1).
[45CSR34; Table 2d of 40 C.F.R. 63 Subpart ZZZZ]
- 8.5.2. The permittee must report each instance in which each applicable emission limitation or operating limitation in Table 2d to 40 C.F.R. 63 Subpart ZZZZ is not met. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in §63.6650. If the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to the stationary RICE is met.
[45CSR34; 40 C.F.R. §63.6640(b)]
- 8.5.3. The permittee must also report each instance in which the applicable requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ are not met.
[45CSR34; 40 C.F.R. §63.6640(e)]

8.6. Compliance Plan

- 8.6.1. None.

9.0 40 C.F.R. 60 Subpart JJJJ Requirements for Emergency Generators [Emission Point IDs: GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb]

9.1. Limitations and Standards

- 9.1.1. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 C.F.R. §1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to 40 C.F.R. 60 Subpart JJJJ for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to 40 C.F.R. 60 Subpart JJJJ applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

Engine Type and Fuel	Maximum Engine Power	Manufacture Date	Emission Standards ⁽¹⁾					
			g/HP-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC ⁽³⁾	NO _x	CO	VOC ⁽³⁾
Emergency	25 < HP < 130	1/1/2009	⁽²⁾ 10	387	N/A	N/A	N/A	N/A

NOTES:

- (1) Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.
- (2) The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_x + HC.
- (3) For purposes of 40 C.F.R. 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[45CSR16; 40 C.F.R. §60.4233(d); and Table 1 to 40 C.F.R. 60 Subpart JJJJ] (GEN-Pharm and GEN-Café)

- 9.1.2. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to 40 C.F.R. 60 Subpart JJJJ for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 C.F.R. Part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to 40 C.F.R. 60 Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Engine Type and Fuel	Maximum Engine Power	Manufacture Date	Emission Standards ⁽¹⁾					
			g/HP-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC ⁽²⁾	NO _x	CO	VOC ⁽²⁾
Emergency	HP ≥ 130	1/1/2009	2.0	4.0	1.0	160	540	86

NOTES:

- (1) Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.
- (2) For purposes of 40 C.F.R. 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[45CSR16; 40 C.F.R. §60.4233(e); and Table 1 to 40 C.F.R. 60 Subpart JJJJ] (GEN-IS-2, GEN-AT HT, and GEN-Carb)

- 9.1.3. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in 40 C.F.R. §60.4233 after January 1, 2011.

[45CSR16; 40 C.F.R. §60.4236(c)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.1.4. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 C.F.R. §60.4233 over the entire life of the engine.

[45CSR16; 40 C.F.R. §60.4234] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.1.5. The permittee must operate the emergency stationary ICE according to the requirements in paragraphs a. through c. of this condition. In order for the engine to be considered an emergency stationary ICE under 40 C.F.R. 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a. through c. of this condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs a. through c. of this condition, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

- a. There is no time limit on the use of emergency stationary ICE in emergency situations.
- b. The permittee may operate an emergency stationary ICE for the purpose specified in paragraph b.1. of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. of this condition counts as part of the 100 hours per calendar year allowed by this paragraph b.

1. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph b. of this condition. Except as provided in paragraph c.1. of this condition, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - i. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - ii. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - iv. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR16; 40 C.F.R. §60.4243(d)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.1.6. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[45CSR16; 40 C.F.R. §60.4243(g)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.1.7. If the permittee is an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 C.F.R. §§60.4233(d) or (e), the permittee must demonstrate compliance according to the following method:
- a. Purchasing an engine certified according to procedures specified in 40 C.F.R. 60 Subpart JJJJ, for the same model year and demonstrating compliance according to the following method:
1. If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if the permittee is an owner or operator. The permittee must also meet the requirements as specified in 40 C.F.R. Part 1068, Subparts A through D, as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance.

[45CSR16; 40 C.F.R. §§60.4243(a)(1), (b), and (b)(1)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.1.8. Table 3 to 40 C.F.R. 60 Subpart JJJJ shows which parts of the General Provisions in 40 C.F.R. §§60.1 through 60.19 are applicable.
[45CSR16; 40 C.F.R. §60.4246(a)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

9.2. Monitoring Requirements

- 9.2.1. The permittee must install a non-resettable hour meter.
[45CSR16; 40 C.F.R. §§60.4237(b) and (c)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[45CSR16; 40 C.F.R. §60.4245(b)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)
- 9.4.2. The permittee must keep records of the following information:
- a. All notifications submitted to comply with 40 C.F.R. 60 Subpart JJJJ and all documentation supporting any notification.
- b. Maintenance conducted on the engine.

- c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 C.F.R. Parts 1048, 1054, and 1060, as applicable.
- d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 C.F.R. §60.4243(a)(2), documentation that the engine meets the emission standards.

[45CSR16; 40 C.F.R. §60.4245(a)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

9.5. Reporting Requirements

9.5.1. If the permittee owns or operates an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in 40 C.F.R. §60.4243(d)(3)(i), the permittee must submit an annual report according to the following requirements:

- a. The report must contain the following information:
 - 1. Company name and address where the engine is located.
 - 2. Date of the report and beginning and ending dates of the reporting period.
 - 3. Engine site rating and model year.
 - 4. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - 5. Reserved.
 - 6. Reserved.
 - 7. Hours spent for operation for the purposes specified in 40 C.F.R. §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 C.F.R. §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 C.F.R. 60 Subpart JJJJ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 C.F.R. §60.4.

[45CSR16; 40 C.F.R. §60.4245(e)] (GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

- 9.5.2. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 C.F.R. §60.4233.

[45CSR16; 40 C.F.R. §60.4243(e)] (GEN-Pharm, GEN-IS-2, GEN-Café, GEN-AT HT, and GEN-Carb)

9.6. Compliance Plan

- 9.6.1. None.