

# Fact Sheet



***For Final Renewal Permitting Action Under 45CSR30 and  
Title V of the Clean Air Act***

Permit Number: **R30-09500001-2023**

Application Received: **April 28, 2022**

Plant Identification Number: **03-54-095-00001**

Permittee: **MPM Silicones, LLC**

Facility Name: **Sistersville Facility**

Mailing Address: **10851 Energy Highway, Friendly, WV 26146-9720**

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Physical Location:	Friendly, Tyler County, West Virginia
UTM Coordinates:	492 km Easting • 4370.5 km Northing • Zone 17
Directions:	The facility is located along West Virginia State Route 2 at Long Reach, 6 miles south of Sistersville.

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## **Facility Description**

MPM Silicones, LLC's Sistersville Facility is in a rural setting and is situated on approximately 1300 acres of land. The facility is engaged in specialty chemical manufacturing and manufactures a broad range of silicone and silane products, plus organic chemical intermediates related to the silanes and silicones products. To support manufacturing operations, the Sistersville Facility operates two boilers to supply steam and a hazardous waste combustor to treat some of the waste generated on-site. The site operates 24 hours a day and consists of a number of continuous and batch processes.

SIC: 2869, NAICS: 325199

## Emissions Summary

### Plantwide Emissions Summary [Tons per Year]

Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	50.55	16.85
Nitrogen Oxides (NO <sub>x</sub> )	74.88	29.60
Particulate Matter (PM <sub>2.5</sub> )	28.14	4.24
Particulate Matter (PM <sub>10</sub> )	28.14	4.24
Total Particulate Matter (TSP)	28.14	4.24
Sulfur Dioxide (SO <sub>2</sub> )	0.28	0.15
Volatile Organic Compounds (VOC)	496.22	205.56

*PM<sub>10</sub> is a component of TSP.*

Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Acrylonitrile	1.30	0.46
Allyl Chloride	1.00	0.31
Aniline	0.40	0.16
Chlorine	3.1	0.02
Cumene	0.2	0.09
Ethyl Chloride (Chloroethane)	69.8	1.81
Ethylbenzene	0.50	0.13
Glycol Ethers	6.10	2.21
Hexane, n-	0.30	0.14
Hydrogen Chloride (Hydrochloric Acid)	23.50	19.66
Methanol	56.24	35.64
Methyl Chloride	7.70	3.67
Methyl Methacrylate	0.08	0.04
Methylene Chloride	3.28	0.01
Propionaldehyde	40.73	2.12
Toluene	139.26	22.26
Xylene	2.20	0.97
Total HAPs	355.69	89.70

*Some of the above HAPs may be counted as PM or VOCs.*

*Changes in the Potential Emissions for VOCs, NO<sub>x</sub>, Hydrogen Chloride, Propionaldehyde, and Toluene are due to recalculating the potential to emit to reflect updates from current permits, the change in emissions due to the new boilers, and a decrease in fugitive emissions following the shutdown of a process unit.*

### Title V Program Applicability Basis

This facility has the potential to emit 496.22 tpy of volatile organic compounds (VOCs), 69.8 tpy of ethyl chloride, 23.50 tpy of hydrogen chloride, 56.24 tpy of methanol, 40.73 tpy of propionaldehyde, 139.26 tpy of toluene, and 355.69 tpy of aggregate hazardous air pollutants. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, MPM Silicones, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### Legal and Factual Basis for Permit Conditions

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

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Open Burning Prohibited.
	45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.
	45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.
	45CSR11	Standby Plans for Emergency Episodes.
	45CSR13	NSR Permits.
	45CSR16	Standards of Performance for New Stationary Sources.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating Permit Requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants.
	40 C.F.R. Part 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
	40 C.F.R. Part 60 Subpart NNN	Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations.
	40 C.F.R. Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
	40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
	40 C.F.R. Part 61 Subpart M	Asbestos Inspection and Removal.
	40 C.F.R. Part 61 Subpart FF	National Emission Standard for Benzene Waste Operations.
	40 C.F.R. Part 63 Subpart SS	National Emission Standards for Closed Vent Systems, Control Devices, Recovery

	Devices, and Routing to a Fuel Gas System or a Process.
40 C.F.R. Part 63 Subpart EEE	National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors.
40 C.F.R. Part 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).
40 C.F.R. Part 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.
40 C.F.R. Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.
40 C.F.R. Part 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants: Site Remediation.
40 C.F.R. Part 68	Chemical Accident Prevention Provisions.
40 C.F.R. Part 82, Subpart F	Ozone Depleting Substances.
State Only: 45CSR4	No Objectionable Odors.

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

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

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance
R13-0016	August 6, 1973
R13-0050	April 18, 1974
R13-0657	April 15, 1982
R13-0952C	June 30, 2005
R13-1649B	October 31, 2006
R13-1746B	December 15, 2006
R13-1748A	January 5, 2006
R13-2030A	October 12, 1999
R13-2180D	January 8, 2013

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<b>Permit or Consent Order Number</b>	<b>Date of Issuance</b>
R13-2338N	May 26, 2022
R13-2806A	March 12, 2014
G60-D030B	May 26, 2022

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

### **Determinations and Justifications**

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

I. Section 1.1. – Emission Units Table

A. The following equipment has been added to the Emission Units Table:

1. Kettle K-65 of Emission Group 101;
  - a. The kettle was removed from the Title V operating permit with the issuance of R30-09500001-2012. However, K-65 is included in Section 1.0. of R13-2338 and in this renewal permit application. The control devices associated with K-65 each have applicable requirements in the operating permit.
2. Emission Groups 346 and 347 at the request of the permittee;
  - a. Currently, the emission units in neither of these groups have applicable requirements.
3. Emergency engines E-2334 and P-6 (2021) of Emission Groups 649 and 949, respectively; and
  - a. These engines are subject to limits under G60-D030B; the applicable requirements are included in Section 11.0. of this permit.
4. A section for Distribution and Scrubber S-169 were added to the Emission Units Table.
  - a. This scrubber has applicable requirements in Section 8.0. of the Title V operating permit.

B. The following emission units have been reported as permanently out-of-service and have been removed from the table:

1. Kettle K-12 from Emission Group 306;
2. Emission Group 348 and its emission units E-1070 and E-1198; and
3. Diesel Fire Water Pumps P-5 and P-6 from Emission Group 949.

C. The column for the “R13 Permit Section 1.0. List” in the Emission Units Table was updated for several emission units.

D. The design capacity of tanks T-1534 and T-1655 were corrected to 30,000 gallons as is reported in the renewal application and R13-2338 which the tanks are subject to.

- II. Section 2.11. – Operational Flexibility
  - A. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
- III. Section 2.22. – Credible Evidence
  - A. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.
- IV. Section 3.4. – Recordkeeping Requirements – Facility-Wide Requirements
  - A. Added references to Permit R13-2180 Condition 4.4.1., Permit R13-1746 Condition 4.4.1., and General Permit Registration G60-D030 and G60-D Condition 4.2.1. in the authority of Condition 3.4.1. in the renewal permit.
- V. Section 3.5. – Reporting Requirements – Facility-Wide Requirements
  - A. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.
- VI. Section 3.7. – Permit Shield – Facility-Wide Requirements
  - A. The requirements listed below have been determined to be non-applicable to the facility.
    - 1. Part 82 Subpart B – *Protection of Stratospheric Ozone – Servicing of Motor Vehicle Air Conditioners*
      - a. This subpart applies to any person performing service on a motor vehicle that involves the refrigerant in the motor vehicle air conditioner. The facility does not conduct on-site maintenance of the motor vehicles involving the refrigerant of the air conditioner.
    - 2. NESHAP Subpart DD – *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*
      - a. Subpart DD applies to a facility that is a major source of HAP emissions and that conducts waste management or recovery operations for off-site materials as defined in 40 C.F.R. §63.680(b). Although the facility stores, treats, and disposes of used solvents, these materials are generated on-site and thus do not meet the definition of 40 C.F.R. §63.680(b)(1)(ii).
    - 3. NESHAP Subpart JJJ – *National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins*
      - a. Subpart JJJ contains the provisions for organic HAPs emitted during the manufacture of thermoplastics. The facility does not own or operate any thermoplastic product process units.
    - 4. 45CSR17 – *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter*
      - a. Where applicable, the facility is subject to the fugitive particulate matter emission requirements for 45CSR7. For this reason, the facility is exempt from 45CSR17 through 45CSR§17-6.1.
  - B. The distribution area scrubber, S-169, was added to the list of control devices that are not subject to CAM. The pre-control device potential emissions from the scrubber neither meet nor exceed major source thresholds. Therefore, CAM is not applicable to S-169.

VII. Section 4.1. – Limitations and Standards – Silanes Production

- A. In Condition 4.1.19., the conditional exemption from the requirements of Condition 4.3.5. has been removed.
  - 1. Condition 4.1.19. was initially added to the operating permit with the issuance of R13-2338H and R30-09500001-2006 (SM01) and derives its authority from 40 C.F.R. §60.660(c)(4), which has been updated since this condition was added to the operating permit. 40 C.F.R. §60.660(c)(4) currently states: “Each affected facility that has a total resource effectiveness (TRE) index value greater than 8.0 is exempt from all provisions of this subpart [Part 60 Subpart NNN] except for §§60.662; 60.664(e), (f), and (g); and 60.665(h) and (l).”
  - 2. Condition 4.3.5. directs the permittee to recalculate the TRE index value to an affected facility whenever process changes are made as required by 40 C.F.R. §60.664(g). As 40 C.F.R. §60.664(g) is listed as an exception to the exemptions from Subpart NNN, the permittee is not exempt from the terms of Condition 4.3.5. in the event that an affected facility has a TRE index value greater than 8.0.

VIII. Section 4.3. – Testing Requirements – Silanes Production

- A. Condition 4.3.2. contains the requirement for 40 C.F.R. §60.664(a) which states “For the purpose of demonstrating compliance with §60.662, all affected facilities shall be run at full operating conditions and flow rates during any performance test.” As 40 C.F.R. §60.664(g) [Condition 4.3.5.] also contains a performance test requirement depending on the initial and the recalculated TRE index value, a reference to Condition 4.3.5. was added to Condition 4.3.2., and it was specified that the requirement is for the purpose of demonstrating compliance with 40 C.F.R. §60.662.

IX. Section 6.0. – Polymers II

- A. Emission Group 348 was removed from the section header, and Emission Groups 346 and 347 were added to the section header.

X. Section 6.1. – Limitations and Standards – Polymers II

- A. Conditions 6.1.6., 6.1.7., and 6.1.8. were corrected in this renewal. The associated tables and requirements of these conditions became mismatched in the non-marked up (“clean”) version of minor modification permit R30-09500001-2017 (MM01/MM02/MM03).
- B. Condition 6.1.11. was updated to incorporate Condition 4.1.11. of R13-2180 which had not previously been included in the Title V operating permit. This condition was included with the requirements found in Condition 4.1.4. of R13-0952. Both of the NSR permitting conditions contain the same requirements for the operation and maintenance of control equipment. For these reasons, the heading for the K-84 unit has been removed and a reference to the Section 1.0. pollution control equipment identified as permitted in R13-2180 has been included.
- C. Condition 6.1.24., which contains MON MACT requirements, has been updated with a compliance date to account for amendments that have been made to Subpart A and Subpart FFFF of the NESHAP. Following the compliance date (August 12, 2023), 40 C.F.R. §63.2525(j) will no longer apply to the Startup, Shutdown, and Malfunction Plan required by 40 C.F.R. §63.6(e)(3).
- D. Conditions 6.1.25. and 6.1.26. have been added to the Title V renewal permit. The conditions are included in the active permit R13-2180D as Conditions 4.1.9. and 4.1.10. and contain requirements from 45CSR§§6-4.4. and -4.6. that are applicable to the thermal oxidizer E-2229.

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- XI. Section 6.2. – Monitoring Requirements – Polymers II
- A. “Reserved” from Condition 6.2.2. has been replaced with the monitoring requirement found in Condition B.4. of R13-2030A. Condition 6.2.2. of the renewal permit contains the parametric monitoring requirements for the water flow for scrubbers E-1281 and E-1537 that are to be used to determine compliance with the Title V Operating Permit Conditions 6.1.1. through 6.1.3. Although the applicability of the monitoring requirement was discussed in the 2006 Title V Fact Sheet, it was not written into the operating permit.
- XII. Section 6.4. – Recordkeeping Requirements – Polymers II
- A. The reference authority of Condition 6.4.4. has been corrected. The requirement is from Condition 4.4.7. of R13-0952, but was previously cited in the authority as Condition 4.4.4.
- B. Similarly to Condition 6.1.11., references to R13-2180 have been added to the recordkeeping requirements found in Conditions 6.4.7. and 6.4.8. of the renewal permit.
- C. Condition 6.4.16. has been added to this renewal permit. This condition contains the recordkeeping requirement for the monitoring of scrubbers E-1281 and E-1537 as detailed in Condition 6.2.2. of this renewal and required under Condition B.5. of R13-2030A.
- XIII. Section 7.0. – New Product Development
- A. Emission Group 412 was added to the heading of Section 7.0. This emission group contains emission points (4002 and 4006) and uses control devices (S-75 and C-80) which have applicable requirements that are included in Section 7.0.
- XIV. Section 7.1. – Limitations and Standards – New Product Development
- A. The authority of Condition 7.1.2. has been adjusted to remove the reference to Condition 4.1.7. of R13-2338 and to return the authority for all of the emission points to 45CSR§30-5.1.c. Condition 7.1.2. sets requirements to demonstrate compliance with the HCl concentration standards established in Condition 7.1.1. of the Title V operating permit (Condition 4.1.8 of R13-2338). Condition 4.1.7. of R13-2338 applies to demonstrating compliance with the emission limits set in Condition 4.1.1. of R13-2338 (Condition 4.1.1. of the Title V operating permit), which differs from the concentration standards of HCl that were established in Condition 7.1.1. of the Title V operating permit and Condition 4.1.8. of R13-2338.
1. Conditions 4.1.1. and 4.1.7. of R13-2338 are relevant to Emission Group 409 (Emission Points 4002 and 4004). In the application for R13-2338L, Condition 4.1.7. is stated to be applicable to reactor K-36 of Emission Group 409. Condition 4.1.7. sets how compliance with the emission limits set in Condition 4.1.1. is demonstrated.
  2. In order to clearly show that these R13-2338 conditions are applicable to Emission Points 4002 and 4004, Condition 7.1.10. has been added to the renewal permit with a reference to the corresponding Title V permit conditions.
- B. Condition 7.1.9. has been added to the operating permit. This condition applies 4.1.12. of R13-2338 to Emission Points 4002 and 4004 and 45CSR§7-3.2. to Emission Points 4001, 4002, 4004, and 4006.
- XV. Section 7.2. – Monitoring Requirements – New Product Development
- A. Attachment A of the permit contains parametric monitoring requirements for Emission Unit C-448. Condition 7.2.4. has been added to the operating permit in order to show that the monitoring requirement of Condition 4.2.1. is also applicable to Emission Unit C-448.



XVI. Section 7.4. – Recordkeeping Requirements – New Product Development

- A. Similarly to Condition 7.1.2., the authorities of Conditions 7.4.3. and 7.4.4. have been adjusted to remove the references to the R13-2338 Conditions 4.4.4. and 4.4.5., respectively.
- B. Conditions 7.4.5. and 7.4.6. have been added in order to clarify the applicability of R13-2338 requirements to emission units C-448 and/or S-75.
  - 1. Condition 7.4.5. provides an alternate recordkeeping method for Conditions 7.4.1. and 7.4.2. that is permitted under R13-2338.
  - 2. Condition 7.4.6. provides references to the Title V Permit Conditions 4.4.3., 4.4.4., and 4.4.5. Each of these conditions contains R13-2338 recordkeeping requirements which are related to the applicable Title V Conditions 4.1.1., 4.1.7., and 4.2.1.

XVII. Section 10.1. – Limitations and Standards – Rotary Kiln Incinerator

- A. In paragraph (a)(5)(i) of Condition 10.1.3., the reference to 40 C.F.R. §63.1203(a)(5)(ii) was corrected to 40 C.F.R. §63.1219(a)(5)(ii). The authority for this condition is 40 C.F.R. §63.1219.
- B. The operating parameter limits included in Condition 10.1.5. and the automatic waste feed cutoff triggers of Condition 10.1.7. have been updated in the renewal permit.
  - 1. Per 40 C.F.R. §63.1207(d)(1), the permittee is required to conduct a Comprehensive Performance Test within 61 months following the previous test and to submit a Notification of Compliance documenting compliance with the applicable standards of 40 C.F.R. Part 63 Subpart EEE and identifying operating parameter limits.
  - 2. The operating parameter limits reported in Condition 10.1.5. of the current operating permit were established in the Comprehensive Performance Test conducted from March 5 to 7, 2009 (Notification of Compliance received June 8, 2009) and modified in the testing conducted from June 13 to 14, 2014 (Notification of Compliance received September 12, 2014).
  - 3. The most recent Comprehensive Performance Test took place from July 17 to 19, 2019, and the Notification of Compliance was received October 15, 2019. The table of operating parameter limits in Condition 10.1.5. and the table of automatic waste feed cutoff triggers in Condition 10.1.7. have been updated according to Section 6 of this Notification of Compliance.
  - 4. Cutoff triggers for the hazardous waste viscosity and the pressure drop across the ionizing wet scrubber (IWS) operating limits were added to the table in Condition 10.1.7. The limits for these operating parameters had been included in Condition 10.1.5. of the operating permit since the issuance of the initial permit, but the cutoff triggers associated with these operating parameters had not been included in Condition 10.1.7. of the initial permit or subsequent permits.

XVIII. Section 10.4. – Recordkeeping Requirements – Rotary Kiln Incinerator

- A. The authority of Condition 10.4.9. has been corrected to 40 C.F.R. §63.1206(c)(7)(iv). The numbering of the paragraphs in 40 C.F.R. §63.1206 of Subpart EEE has changed since this condition was initially included in the permit.

- XIX. Section 11.1. – Limitations and Standards – Energy Systems, Boilers, and Reciprocating Internal Combustion Engines
- A. The statement that the permittee “may perform the burner inspection any time prior to the tune-up” was added to Condition 11.1.10.d.i. to reflect changes that have been made in 40 CFR §63.7540(a)(10)(i).
  - B. The requirement for Condition 11.1.11. has been removed from the permit, and the condition has been marked as “Reserved”. This condition required the permittee to conduct a one-time energy assessment of the facility under Condition 4.1.6. of R13-2806. A facility-wide energy assessment was conducted on January 25, 2016, and the requirement has been met.
  - C. “Reserved” has been removed from Conditions 11.1.14. and 11.1.15. and replaced with the applicable requirements of Conditions 5.1.1. and 5.1.3. of General Permit G60-D.
  - D. The following changes have been made to Condition 11.1.16. of the renewal permit:
    - 1. In paragraph a., the emission limitations of Condition 11.1.16. have been updated in accordance with the changes that were made with the issuance of the general permit G60-D030B which superseded G60-C030A. These changes include:
      - a. For 1339-F, total hydrocarbons was removed from the emission limit of NO<sub>x</sub>, and an emission limit for VOC has been added.
      - b. For 60-L, the emission limit for total hydrocarbons has been removed, and an emission limit for VOC has been added.
      - c. For P-1375, the emission limit for PM<sub>10</sub> has been removed, and emission limits for CO and VOC have been added.
      - d. Rows for P-6 (2021) and E-2334 have been added to the table with emission limits for NO<sub>x</sub>, CO, and VOC.
    - 2. Paragraphs b. and c. have been added to the condition to incorporate the applicable requirements found in Conditions 5.1.4. and 5.1.7. of the General Permit G60-D.
  - E. Condition 11.1.17. has been updated as follows:
    - 1. The applicable requirements of 40 C.F.R. §60.4243(a) have been added to this condition as paragraph e. This provision directly applies to Emission Unit 1339-F which was manufactured after July 1, 2008 and must comply with 40 C.F.R. §60.4233(a) and indirectly applies to Emission Unit 60-L by reference in 40 C.F.R. §60.4243(b)(1) (Condition 11.1.17.f.1. of this renewal permit). The subsequent paragraphs of the condition have been renumbered accordingly.
    - 2. References to emergency demand response and to the requirements of 40 C.F.R. §§60.4243(d)(2)(ii) and (iii) have been vacated and, therefore, have been removed from the condition.
    - 3. The authority has been updated to reference G60-D030.
  - F. Conditions 11.1.19. and 11.1.20. have been updated as follows:
    - 1. References to emergency demand response and to the requirements of 40 C.F.R. §§63.6640(f)(2)(ii) and (iii) have been vacated and, therefore, have been removed from these conditions.

2. Paragraphs 11.1.19.g. and 11.1.20.b., which each contain the requirement of 40 C.F.R. §63.6604(b), have been removed from the permit. Since 40 C.F.R. §§63.6640(f)(2)(ii) and (iii) have been vacated, this requirement is applicable to neither P-2139 nor E-915. This is because the facility is a major source for HAPs, but the requirement now specifies that the engines operate as specified in 40 C.F.R. §63.6640(f)(4)(ii), which is only applicable to an emergency RICE located at an area source for HAPs.
3. At the request of the permittee, emission unit P-5 has been removed from the citation of Condition 11.1.19. The permittee has reported that P-5 is permanently out-of-service.

G. Condition 11.1.21. has been updated as follows:

1. In an amendment to the C.F.R., fuel quality standards previously found in 40 C.F.R. Part 80 were transposed to Part 1090. In Paragraph c., the reference for the non-road diesel fuel requirements that the permittee must meet has been updated from 40 C.F.R. §80.510(b) to 40 C.F.R. §1090.305.
2. The reference to 40 C.F.R. Parts 89 and 94 has been removed from Paragraph e. of the condition. The provisions of these parts have been moved and applicable requirements to the facility are now found in 40 C.F.R. Part 1068.
3. References to emergency demand response and to the requirements of 40 C.F.R. §§60.4211(f)(2)(ii) and (iii) have been vacated and, therefore, have been removed from the condition.
4. Emission Unit P-6 (2021) has been added to the heading and the citation of this condition. P-6 (2021) is a new diesel-fueled fire-pump engine with a displacement of less than 30 liters per cylinder, a site rating of less than 500 brake HP, and has been permitted under G60-D030B. It has the same applicable requirements as the fire-pump engine P-1375.

Per 40 C.F.R. §63.6590(c), P-6 (2021) shows compliance with NESHAP Subpart ZZZZ by meeting the applicable requirements of NSPS IIII.

H. Conditions 11.1.22. and 11.1.23. have been added to the operating permit and detail the requirements for Emission Unit E-2334 which has been permitted under G60-D030B. E-2334 is an emergency stationary RICE that has a site rating greater than 500 brake HP and is located at a major source of HAP emissions.

1. As E-2334 was installed after December 19, 2002, the engine is subject to 40 C.F.R. Part 63 Subpart ZZZZ. Condition 11.1.22. contains the applicable requirements from this subpart.
  - a. In order to be considered an emergency stationary RICE under Subpart ZZZZ, E-2334 must meet the definition found in 40 C.F.R. §63.6675 and, therefore, must comply with 40 C.F.R. §63.6640(f). If the engine is not operated in the manner specified in the definition, then E-2334 will not be considered an emergency engine under Subpart ZZZZ and must meet all applicable requirements for non-emergency engines.
  - b. Provided the above emergency engine requirements are met, then E-2334 is subject to limited requirements under Subpart ZZZZ via 40 C.F.R. §§63.6590(b)(1) and (b)(1)(i). Through these provisions, E-2334 does not have to meet any further requirements of Subpart A or Subpart ZZZZ of the NESHAP, except for the initial notification requirements found in 40 C.F.R. §63.6645(f).
2. As E-2334 is a modified/reconstructed compression ignition ICE, with a displacement of greater than or equal to 30 liters per cylinder, and was installed after January 01, 2012, the engine is subject to 40 C.F.R. Part 60 Subpart IIII. Condition 11.1.23. contains the applicable requirements from this subpart.
  - a. The emission standards found in 40 C.F.R. §60.4205(d) via 40 C.F.R. §§60.4205(f) and 60.4206.

- b. The fuel requirements found in 40 C.F.R. §60.4207(d).
- c. The monitoring requirement of 40 C.F.R. §60.4209(a).
- d. The compliance requirements of 40 C.F.R. §§60.4211(a), (e), and (g).
- e. In order to be considered an emergency stationary ICE under Subpart IIII, E-2334 must meet the definition found in 40 C.F.R. §60.4219 which includes demonstrating compliance with 40 C.F.R. §60.4211(f). As previously stated, however, E-2334 must also meet the more stringent requirements of 40 C.F.R. §63.6640(f) (included in this renewal permit as Condition 11.1.22.). For this reason, the provisions of 40 C.F.R. §60.4211(f) have not been included in this condition for applicable requirements to E-2334.

XX. Section 11.2. – Monitoring Requirements – Energy Systems, Boilers, and Reciprocating Internal Combustion Engines

- A. At the request of the permittee, the out-of-service emission unit P-5 has been removed from the citation for Condition 11.2.2.

XXI. Section 11.3. – Testing Requirements – Energy Systems, Boilers, and Reciprocating Internal Combustion Engines

- A. Paragraphs a. and c. of Condition 11.3.3. have been updated in accordance with 40 C.F.R. §60.4212. The reference for alternative testing procedures has been moved to Paragraph a. from Paragraph c. and has been updated in accordance with the amendments to Subpart IIII. The Tier 1, Tier 2, and Tier 3 standards originally included in Part 89 were moved to Part 1039.
- B. Condition 11.3.4. has been added to the permit to state the testing requirements/methods from 40 C.F.R. §60.4213 that are applicable to emission unit E-2334. This provision is applicable to stationary CI ICE with a displacement greater than or equal to 30 liters per cylinder. 40 C.F.R. §60.4213(d) has not been included in this condition as the percent reduction emission standard is not a requirement for this emergency stationary CI ICE.

XXII. Section 11.4. – Recordkeeping Requirements – Energy Systems, Boilers, and Reciprocating Internal Combustion Engines

- A. The following changes have been made to Condition 11.4.5.:
  - 1. The paragraphs of the condition have been renumbered due to the inclusion of the recordkeeping requirement of 40 C.F.R. §60.4245(b). The requirement applies to emission unit 60-L which is a stationary SI emergency ICE that has a site rating of 54 HP, was manufactured after July 1, 2008, and does not meet the non-emergency engine standards of Part 60 Subpart JJJJ.
  - 2. In Paragraph 11.4.5.a.3. of the renewal permit, the reference to 40 C.F.R. Part 90 has been removed. The provisions of Part 90 have been moved to Part 1054.
- B. Citations for P-6 (2021) and E-2334 have been added to the authority of Condition 11.4.9. As emergency ICE, the engines are not subject to initial notification requirements under Part 60 Subpart IIII.
- C. Conditions 11.4.10. and 11.4.11. have been added to the renewal permit to incorporate the recordkeeping requirements of Conditions 5.3.1. and 5.3.2. of the General Permit G60-D.

XXIII. Section 11.5. – Reporting Requirements – Energy Systems, Boilers, and Reciprocating Internal Combustion Engines

- A. Emission Unit P-5 was reported as permanently out-of-service. At the request of the permittee, the citation for P-5 has been removed from the authority of Conditions 11.5.1. and 11.5.2.
- B. Condition 11.5.3. has been removed from the renewal permit and marked as “Reserved”. 40 C.F.R. §§63.6640(f)(2)(ii) and (iii) have been vacated, and 40 C.F.R. §63.6650 has been updated to only apply to emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in §63.6640(f)(4)(ii). As (f)(4) is only applicable to area sources and the facility is a major source for HAPs, this condition is no longer applicable to the emission units P-2139 and E-915.
- C. The requirements of Conditions 11.5.4. and 11.5.5. have been removed from the permit and replaced with “Reserved.” Conditions 11.5.4. and 11.5.5. were for a “Notification of Compliance Status” for Boiler #5 and Boiler #6, respectively, to be submitted to the Director after the completion of the initial compliance demonstration.

- 1. The notification for Boiler #5 was sent on January 26, 2016.
- 2. The notification for Boiler #6 was sent on October 24, 2014.

Thus the requirements of each of these conditions have been met.

- D. Condition 11.5.6. has been updated to account for changes in 40 C.F.R. §63.7550. These changes include the following:
  - 1. The requirement found in paragraph d. of the current operating permit states that the 5 Year Compliance Reports must contain the total operating time during the reporting period for each unit [found in 40 C.F.R. §63.7550(c)(5)(iv)]. This requirement has been removed from the renewal permit as 40 C.F.R. §63.7550(c)(1) has been updated since the initial inclusion of this condition in the permit. Paragraph (c)(5)(iv) is now only applicable to limited-use boilers and process heaters. Boilers #5 and #6 are stated in the engineering evaluation for R13-2806A to be Units Designed to Burn Gas 1 Fuels.
  - 2. Paragraph 11.5.6.d. of the renewal permit now contains the requirement found in 40 C.F.R. §63.7550(c)(5)(xvii) which was added to the information that must be reported for a facility that is subject to the requirements of a tune-up.
  - 3. The information for electronically submitting the report using CEDRI has also been updated with changes that have been made in 40 C.F.R. §63.7550(h)(3).
- E. Condition 11.5.7. has been added to the permit. This condition contains the provisions of 40 C.F.R. §60.4214(d), which is a conditional NSPS Subpart III reporting requirement that the facility is subject to if the emergency stationary CI internal combustion engines P-1375 or P-6 (2021) are operated in the manner described in 40 C.F.R. §60.4211(f)(3)(i) as is permitted in Condition 11.1.21. of this operating permit.

**Non-Applicability Determinations**

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

- a. **40 C.F.R. §§60.40b-60.49b (NSPS Subpart Db)** – *Standards of Performance for Industrial - Commercial - Institutional Steam Generating Units* – Boilers #5 and #6 have a heat input rate below 100 MMBtu/hr.

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- b. **40 C.F.R. §§60.110-60.113 (NSPS Subpart K)** – *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978* – The petroleum liquid storage vessels at the facility have capacities less than 40,000 gallons.
- c. **40 C.F.R. §§60.110a-60.115a (NSPS Subpart Ka)** – *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984* – The petroleum liquid storage vessels at the facility have capacities less than 40,000 gallons.
- d. **40 C.F.R. §§60.110b-60.117b (NSPS 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* – All tanks were found not to be subject to NSPS Subpart Kb since all:
1. Were built before July 23, 1984 and no physical modifications or reconstructions were performed since July 23, 1984;
  2. Are of a capacity less than 19,813 gallons;
  3. Are of a capacity greater than 39,890 gallons and have a maximum true vapor pressure of 0.51 psia or less; and/or
  4. Are of a capacity between 19,818 gallons and 39,890 gallons and have a maximum true vapor pressure of 2.2 psia or less.
- e. **40 C.F.R. §§60.150-60.156 (NSPS Subpart O)** – *Standards of Performance for Sewage Treatment Plants* – The permittee does not operate a municipal treatment plant.
- f. **40 C.F.R. §§60.610-60.618 (NSPS Subpart III)** – *Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Process* – The facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
- g. **40 C.F.R. §§60.700-60.708 (NSPS Subpart RRR)** – *Standards of Performance for Volatile Organic Compound Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes* – This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
- h. **40 C.F.R. §§60.480-60.489 (NSPS Subpart VV)** – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* – This facility does not produce final or intermediate products as defined in §60.489.
- i. **40 C.F.R. §§63.100-63.107 (NESHAP Subpart F)** – *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry* – The facility does not produce any of the listed chemicals as a primary product.
- j. **40 C.F.R. §§63.110-63.153 (NESHAP Subpart G)** – *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Tanks, Transfer Operations, and Wastewater* – The facility does not produce any of the listed chemicals as a primary product.
- k. **40 C.F.R. §§63.160-63.183 (NESHAP Subpart H)** – *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Equipment Leaks* – The facility does not produce any of the listed chemicals as a primary product.

- l. **40 C.F.R. §§63.40-63.44 (NESHAP Subpart B)** – *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections* – Sections 112(g) and 112(j) are currently not applicable to the facility.
- m. **40 C.F.R. §§63.7880-63.7957 (NESHAP Subpart GGGGG)** – *National Emission Standards for Site Remediation* – This subpart is not currently applicable to any remediation activities being conducted at the facility. There are no existing sources at the facility subject to this MACT.
- n. **40 C.F.R. Part 64** – *Compliance Assurance Monitoring* – CAM does not apply to this facility as follows:
  1. Potential pre-control device emissions are less than Title V major source levels per 40 C.F.R. §64.2(a)(3) for the following control devices: M-319, S-203, S-157, C-426, E-1442, S-192, E-1281, C-196, C-448, C-80, C-589, E-1537, S-75, and S-169.
  2. Continuous compliance determination methods are in place per 40 C.F.R. §64.2(b)(1)(vi) for the following control devices: S-174, S-171, S-137, S-196, S-224, E-2322, S-223, S-270, S-257, S-260, S-132, S-272, E-2229, S-248, S-10001, S-10003, S-10005, S-162, S-163, M-320, and S-164.
  3. The following control devices are subject to the MON MACT (40 C.F.R. Part 63 Subpart FFFF): C-49, C-405, C-370, and C-65. These control devices are not subject to CAM because they are subject to 40 C.F.R. Part 63 Subpart FFFF that was proposed after November 11, 1990. 40 C.F.R. §64.2(b)(1)(i) exempts emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act; and 40 C.F.R. §64.2(b)(1)(vi) exempts emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance determination method.
  4. The following control devices are subject to no emission standard or limitation: S-240, C-363, EDA Scrubber, S-247, S-241, S-210, and S-209.
  5. The Esters HCl Absorption System does not meet the definition of a control device (40 C.F.R. §64.1), as this inherent process equipment.
- o. **45CSR§7-4.2.** – *To Prevent and Control Air Pollution from Manufacturing Processes and Associated Operations* – Emission Points 2001, 2005, 2020, 4001, 4002, and 4006 are exempt from the mineral acid (sulfuric acid) requirements as a result of 45CSR§7-10.6.
- p. **45CSR10A** – *Testing, Monitoring, Recordkeeping, and Reporting Requirements Under 45CSR10* – The testing, monitoring, recordkeeping, and reporting requirements under 45CSR10 Section 8 are not applicable to the facility since its fuel burning units only combust natural gas. This exemption is provided within 45CSR§10-10.3.
- q. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* – This regulation applies to sources located in Putnam County, Kanawha County, Cabell County, Wayne County, and Wood County.
- r. **40 C.F.R. §§82.30-82.42 (Subpart B)** – *Protection of Stratospheric Ozone - Servicing of Motor Vehicle Air Conditioners* – This facility does not conduct on-site motor vehicle maintenance involving the refrigerant (Chlorofluorocarbons, CFCs) of the motor vehicle air conditioner.
- s. **40 C.F.R. §§63.680-63.698 (NESHAP Subpart DD)** – *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations* – This subpart applies to waste management operations that receive off-site waste, used oil, or used solvent (as defined in 40 C.F.R. §63.681) for storage, treatment, recovery, or disposal. While the facility does store, treat, and dispose of used solvents, these materials are generated on-site. Thus, Part 63 Subpart DD is not applicable to the facility.

- t. **40 C.F.R. §§63.1310-63.1336 (NESHAP Subpart JJJ)** – *National Emission Standards for Hazardous Air Pollutant Emissions Group IV Polymers and Resins* – The facility does not produce a thermoplastic product, as defined in 40 C.F.R. §63.1312. Thus, Part 63 Subpart JJJ is not applicable to the facility.
- u. **45CSR17** – *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter* – This facility is not subject to this rule via 45CSR§17-6.1. Where applicable, the facility is subject to fugitive particulate matter emission requirements for 45CSR7.

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

None.

### **Insignificant Activities**

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

### **Comment Period**

Beginning Date: January 11, 2023

Ending Date: February 10, 2023

### **Point of Contact**

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

Sarah Barron  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41915  
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### **Procedure for Requesting Public Hearing**

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

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

None.