West Virginia Department of Environmental Protection Division of Air Quality





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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on February 28, 2023.

Permit Number: **R30-09500001-2023** Application Received: **February 01, 2023** Plant Identification Number: **03-54-095-00001** Permittee: **MPM Silicones, LLC** Facility Name: **Sistersville Facility** Mailing Address: **10851 Energy Highway, Friendly, WV 26146-9720**

Permit Action Number: MM01 Revised: June 16, 2023

Physical Location: UTM Coordinates: Directions: Friendly, Tyler County, West Virginia
492 km Easting • 4,370.5 km Northing • Zone 17
The facility is located along West Virginia State Route 2 at Long Reach, 6 miles south of Sistersville.

Facility Description

MPM Silicones, LLC's Sistersville Facility is in a rural setting and is situated on approximately 1,300 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

The emission limits of the Silanes Manufacturing Unit permitted under R13-2338 have not changed due to this revision. Therefore, no change in the facility-wide potential emissions is expected with the addition of Emission Group 136: SR-1000 Unit #2.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 496.22 tpy of 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 HAPs. Due to this facility's potential to emit over 100 tons per year of 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.

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

Federal and State:	45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.
	45CSR13	NSR Permit Requirements.
	45CSR30	Operating Permit Requirements.
	45CSR34	Emission Standards for Hazardous Air
		Pollutants.
	40 C.F.R. Part 63 Subpart FFFF	National Emission Standards for Hazardous
		Air Pollutants: Miscellaneous Organic
		Chemical Manufacturing.

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

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

Active Permits/Consent Orders

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

Permit or	Date of
Consent Order Number	Issuance
R13-2338O	April 07, 2023

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

Determinations and Justifications

This minor modification incorporates the revisions made with the Class II Administrative Update R13-2338O to include the installation of equipment for a new production process to manufacture a silicate-based product (SR-1000). Emission Group 136: SR-1000 Unit #2 consists of the equipment used in this process.

- 1. Section 1.0. Emission Units and Active R13, R14, and R19 Permits
 - a. The following equipment associated with Emission Group 136: SR-1000 Unit #2 has been added to the Emission Units Table.

Emission Unit ID	Emission Point ID	Description
E2423-S	N/A	Chiller
F-1003-S	1364	Filter
H-1651	1364	Heater
H-1652	1364	Dryer
H-1654	1364	Condenser
H-1655	1364	Cooler
T-2137	1364	Tank
2-S	1365	Drumming Station
T-2147	1363	Tank

- b. The table of active R13, R14, and R19 permits has been updated with R13-23380 which was issued on April 07, 2023.
- 2. Section 2.0. General Conditions
 - a. In 45CSR30, the definition of "Secretary" was relocated to 45CSR§30-2.39. Therefore, in Condition 2.1.3., the reference to 45CSR§30-2.12. has been replaced with 45CSR§30-2.39.
 - b. The emergency and affirmative defense requirements of Section 2.17. have been removed from the operating permit, and Section 2.17. has been marked as "Reserved." The authority for these conditions, 45CSR§30-5.7., has been removed from 45CSR30.
- 3. Section 3.0. Facility-Wide Requirements
 - a. 45CSR§30-8 has been revised and no longer requires the submission of certified emissions statements. Condition 3.5.4. has been updated accordingly.
 - b. The requirements of Conditions 3.5.7. and 3.5.8.a.1. have been removed from the operating permit, and the conditions have been marked as "Reserved." due to the removal of the sections of 45CSR30 that related to emergencies and affirmative defense.
 - c. Due to revisions in 45CSR\$30-5.1.c.3.C.2., "telefax" has been updated to "email" in Condition 3.5.8.a.2.
- 4. Section 4.0. Silanes Production
 - a. The drum filling operations of Emission Group 136: SR-1000 Unit #2 are subject to 45CSR7.

- i. In accordance with 45CSR§7-3.1. and R13-2338O, the bin filter (F-1003-S) has been added with an opacity limit to Table 4.1.8. 45CSR7 Sources Emission Limits in Condition 4.1.8. of the operating permit.
- Compliance with the opacity limit is demonstrated through the monitoring requirements of Condition 4.2.2. and the recordkeeping requirements of Condition 4.4.6. which are included in the current operating permit. Emission Point 1364 has been added to the citation in the authority of Condition 4.4.6.
 - 1. The units F-995-S and F-996-S vent through emission points 1360 and 1362, respectively, and are both subject to the requirements of 4.1.8. and 4.2.2. At the request of the permittee in an email dated April 26, 2023, the emission points 1360 and 1362 have also been added to Condition 4.4.6.
- iii. The drum filling operations have the potential to emit less than 0.01 lbs/hr and 88 lbs/yr. Therefore, per 45CSR§7-10.5., F-1003-S is exempt from the particulate matter emission limit of 45CSR§7-4.1.
- b. Emission Group 136: SR-1000 Unit #2 produces toluene as a byproduct and is subject to any applicable requirements of 40 C.F.R. Part 63 Subpart FFFF. Emission Group 136: SR-1000 Unit #2 contains Group 2 continuous process vents under Subpart FFFF. The requirements for continuous process vents and for leak detection and repair are included by reference in the current operating permit as Conditions 4.1.20. and 4.1.24.
- c. The authorities of Conditions 4.3.5. and 4.3.6. have been updated in accordance with R13-23380. Conditions 4.3.5. and 4.3.6. of R13-2338N were inadvertently removed with the update. Therefore, the authority of Condition 4.3.5. in the operating permit has been updated to 45CSR16 and 40 C.F.R. §60.664(g), and the authority of Condition 4.3.6. in the operating permit has been updated to 45CSR16 and 40 C.F.R. §60.8.

Non-Applicability Determinations

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

Not Applicable.

Request for Variances or Alternatives

None.

Insignificant Activities

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

Comment Period

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

Point of Contact

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

Sarah Barron West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304 304/926-0499 ext. 41915 sarah.k.barron@wv.gov

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)

Not applicable.