

# Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on June 26, 2012.

Permit Number: **R30-09500001-2012**  
Application Received: **October 31, 2013**  
Plant Identification Number: **03-54-09500001**  
Permittee: **MPM Silicones, LLC**  
Facility Name: **Sistersville**  
Mailing Address: **3500 South State Route 2, Friendly, WV 26146-9720**

Permit Action Number: *SM01*      Revised: March 25, 2014

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Physical Location:                      Friendly, Tyler County, West Virginia  
UTM Coordinates:                      492 km Easting • 4370.5 km Northing • Zone 17  
Directions:                                WV State Route 2 approximately six miles south of Sistersville.

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### Facility Description

MPM Silicones, LLC, is located approximately six miles south of Sistersville, WV on State Route 2. The Sistersville Plant is located in a rural setting and is situated on approximately 1300 acres of land. The operating areas are situated centrally and encompass approximately 50 acres. The Sistersville Plant is engaged in specialty chemical manufacturing (SIC 2869) and manufactures a broad range of silicone and silane products, plus organic chemical intermediates related to the silanes and silicones products. The site operates 24 hours a day and consists of a number of continuous and batch processes.

This modification is to update permit conditions for emission units 1339-F, 60-L, P-6, P-2620, E-429, P-5, P-1375, P-2139, E-676 and E-915 due to changes in regulations (40 C.F.R. 60 Subpart JJJJ and 40 C.F.R. 63 Subpart ZZZZ) and updated facility information for fire pump engines P-6 and P-2620.

**Emissions Summary**

There are no changes in emissions associated with the proposed change.

**Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 146.1 TPY of NO<sub>x</sub>, 633.2 TPY of VOC, 69.8 TPY of ethyl chloride, 31.5 TPY of hydrogen chloride, 55.5 TPY of methanol, 48.3 TPY of propionaldehyde, 168.1 TPY of toluene, and 391.82 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:	45CSR16  45CSR30 45CSR34  40 C.F.R. 60 Subpart JJJJ 40 C.F.R. 63 Subpart ZZZZ	Standards of Performance for New Stationary Sources pursuant to 40 C.F.R. Part 60. Operating permit requirement. Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63 Standards of performance for SI engines National Emission Standard for Reciprocating Internal combustion Engines (RICE)
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-16	8/16/1973	
R13-50	4/18/1974	
R13-657	4/15/1982	
R13-952C	6/30/2005	
R13-1649B	10/31/2006	

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-1746B	12/15/2006	
R13-1748A	1/05/2006	
R13-2030A	10/12/1999	
R13-2180D	1/08/2013	
R13-2338I	12/15/2011	
R13-2806	10/05/2009	
G60-C030	1/18/2011	

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 B," which may be downloaded from DAQ's website.

**Determinations and Justifications**

For Emission Unit IDs 1339-F and 60-L – section 11.1.17.f has been modified to update regulatory changes to 40 C.F.R. 60 Subpart JJJJ amended on January 30, 2013. For Emission Unit IDs E-429, P-5, P-1375, P-2139, E-676 and E-915 – Sections 11.1.19.e and 11.1.20 have been modified and section 11.5.3 was added to update regulatory changes to 40 C.F.R. 63 Subpart ZZZZ amended on January 30, 2013.

**Non-Applicability Determinations**

The following requirements have been determined not to be applicable to P-6 and P-2620 due to the following:

- 40 C.F.R. 60 Subpart IIII – The manufacture date for P-6 was 5-16-2006 and the installation date was 9-18-2006. P-6 is a certified fire pump engine with displacement of 8.1 liters per cylinder. The manufacture date for P-2620 was 3-14-2006 and the installation date was 9-18-2006. P-2620 is a certified fire pump engine with displacement of 8.1 liters per cylinder. Because they are certified fire pump engines and their manufacture dates are May 16 and March 4, 2006, per 40 C.F.R. §60.4200, P-6 and P-2620 are subject to only one requirement of Subpart IIII. (Applicability notes are added at each paragraph below in [ ]'s):

40 C.F.R. §60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines; **[no- MPM not the manufacturer]**

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines. **[No: MPM not the manufacturer]**

- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
  - (i) Manufactured after April 1, 2006, and are not fire pump engines, [**no – these are Fire pump engines**] or
  - (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006. [**no – manufactured before this date**]
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005. [**no – not modified or reconstructed**]
- (4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005. [**yes**]

40 C.F.R. §60.4208 pertains to “the deadline for importing or installing stationary CI ICE produced in previous model years?”; MPM Silicones installed P-6 and P-2026 in the year in which they were manufactured, so this is not relevant.

Based on the discussion above, there are no provisions of 40 C.F.R. 60 Subpart IIII that are applicable to P-6 and P-2026. Hence, the following sections of the permit are struck out: 11.1.18, 11.2.4, 11.3.5 and 11.4.4.

These changes are made for P-6 and P-2620 because the exact manufacturing dates were not available or considered during development of the existing Title V language.

- 40 C.F.R. 63 Subpart ZZZZ – The continuous program of construction for P-6 and P-2620 began with the shipping date of the pumps, September 18, 2006. MPM Silicones installed them in early October. The engines were first started up on October 23, 2006. Hence these are new engines under the RICE MACT, per 40 C.F.R. §63.6590(a)(2)(ii) because they commenced construction after June 12, 2006. According to 40 C.F.R. §63.6590(c)(7), P-6 and P-2620 only need to comply with the requirements of NSPS Subpart IIII.

### **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: February 5, 2014  
Ending Date: March 7, 2014

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

U.K.Bachhawat  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **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.

### **Point of Contact**

U.K.Bachhawat  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

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

No comments were received.