

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 6, 2012.

Permit Number: **R30-10700010-2012**
Application Received: **August 9, 2012**
Plant Identification Number: **03-54-10700010**
Permittee: **SABIC Innovative Plastics US LLC**
Facility Name: **N/A**
Mailing Address: **P.O.Box 68, Washington, WV 26181**

Permit Action Number: *SM01* Revised: February 5, 2013

Physical Location: Washington, Wood County, West Virginia
UTM Coordinates: 441.6 km Easting • 4,345.2 km Northing • Zone 17
Directions: South of Washington, WV on State Route 892, Wood County

Facility Description

Thermoplastics Manufacturing Site. This is a three-stage manufacturing facility producing elastomers and thermoplastic resins used in automotive, electronic, and pipe industries among others.

The facility SIC Code: 2821; NAICS Code: 325211.

Emissions Summary

The emission changes associated with this application are shown in the following table:

Pollutant	Annual Emissions Before this modification (tons/year)	Annual Emissions After this modification (tons/year)	Emissions Change (tons/year)
Volatile Organic Compounds (VOC)	738.6	740.0	1.4
Carbon Monoxide (CO)	163.8	184.82	21.02
Nitrogen Oxides (NOx)	444.0	469.01	25.01
Particulate Matter (PM ₁₀)	119.2	119.68	0.48
Total Particulate Matter (TSP)	119.2	121.14	1.94
Sulfur Dioxide (SO ₂)	52.9	53.03	0.13
Total HAPs*	587	587	0

* HAPs are not speciated because there is negligible HAP emission increase due to addition of Boiler No. 6.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 184.82 TPY of Carbon Monoxide, 469.01 TPY of Nitrogen Oxides, 119.68 TPY of PM₁₀, 740.0 TPY of Volatile Organic Compounds, 407.8 TPY of Styrene, 28.1 TPY of 1,3-Butadiene, 73.7 TPY of Acrylonitrile, 44.3 TPY of Methyl methacrylate, 27.1 TPY of Cumene and 587 tons of total 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, SABIC Innovative Plastics US 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:	45CSR2	Indirect Heat Exchangers
	45CSR10	Emission of Sulfur Oxides
	45CSR13	Construction permit.
	45CSR16	Standards of Performance for New Stationary Sources
	45CSR30	Operating permit requirement.
	45CSR34	Hazardous Air Pollutants
	40 C.F.R. 63 Subpart DDDDD	Boiler MACT
	40 C.F.R. 60 Subpart Dc	Boiler NSPS
State Only:	N/A	

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 (if any)
R13-2572C	December 19, 2012	N/A

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

This is a significant modification (SM01) application received on August 9, 2012. The significant modification incorporates the requirements of Permit R13-2572C for permanent installation of Boiler # 6. There were also a few changes to Boiler #5 conditions in R13-2572C compared to R13-2572B. The following are changes to the permit:

1) Emission Units Table Section 1.1

The table was updated to include the new Boiler # 6.

2) Section 3.0 – R13-2572 citation is added to sections 3.1.12, 3.4.1, 3.4.4 and 3.4.5 of the permit.

3) Section 5.0 – Sections 5.1.1, 5.1.2, 5.1.3, 5.2.1, 5.4.2, 5.5.1 are changed to reflect changes in R13-2572C from R13-2572B. Sections 5.1.10 and 5.2.2 are reserved because the requirements for Boiler # 5 are part of sections 5.1.1.a and 5.2.1. Section 5.2.4 is reserved because this condition for Boiler # 5 was deleted from R13-2572C. Conditions 5.2.5, 5.2.6, 5.3.2, 5.4.7, 5.5.2, 5.5.3 & 5.5.4 are added to incorporate new R13-2572C conditions for Boilers #5 and #6. Section 5.4.3 was deleted because it was used to demonstrate compliance with hourly and annual NO_x emission limits for Boiler # 5 which were not included in R13-2572C. The reference to Boiler # 5 in condition 5.1.11 (Boiler MACT Placeholder language) was removed since the 40CFR63, Subpart DDDDD requirements for Boiler # 5 have been included as separate conditions.

45CSR2 - Indirect Heat Exchangers – New Boiler # 6 is gas fired and less than 100 mmBtu/hr capacity. According to 45CSR§2-8.4.b, Boiler # 6 is exempt from 45CSR§§2-8.1.a (Testing) and 8.2 (Monitoring) requirements. According to 45CSR§2A-3.1.a, Boiler # 6 is exempt from 45CSR§§2A-5 (Testing) and 6 (Monitoring) requirements. 45CSR2 only requires recording of the amount of natural gas consumed each month for natural gas fired boilers according to condition 5.2.5 of the permit.

45CSR10 – Emission of Sulfur Oxides - New Boiler # 6 is gas fired and less than 100 mmBtu/hr capacity. According to 45CSR§10-10.3, Boiler # 6 is exempt from 45CSR§10-8 (Testing, Monitoring, Recordkeeping and Reporting) requirements.

40CFR64 – Compliance Assurance Monitoring (CAM) – New Boiler No. 6 does not have any control device – hence CAM is not applicable.

40CFR60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Subpart Dc generally applies to boilers with a maximum design heat input (MDHI) between 10 and 100 mmBtu/hr that meet the definition of a “steam generating unit.” Boiler # 6 is subject to 40 C.F.R. 60 Subpart Dc under the applicability requirements of 40 C.F.R. §60.40c(a). Subpart Dc does not have any emission standards for boilers that combust natural gas. However, SABIC is required to meet the record-keeping requirements under 40 C.F.R. §60.48c for Boiler # 6 as detailed in Section 5.2.5 of the permit.

40CFR63, Subpart DDDDD:

This facility is a major source of HAPs. According to 40 C.F.R. § 63.7485, Boilers # 5 and 6 are subject to this subpart. Boilers #5 and 6 are classified as new large gaseous fuel boilers. The following are the requirements:

CO Emission Limits - 40 C.F.R. § 63.7500(a)(1) and Table 1 of 40CFR63 Subpart DDDDD – Section 5.1.2.a of the permit for Boiler # 6 and Section 5.1.1.a.iii for Boiler # 5.

General Requirements - 40 C.F.R. § 63.7505(a) – Section 5.1.2.a of the permit for Boiler # 6 and Section 5.1.1.a.iii for Boiler # 5.

Initial Compliance - 40 C.F.R. § 63.7510(g) – Section 5.3.2 of the permit for Boiler # 6 initial CO compliance testing.

Subsequent performance tests - 40 C.F.R. § 63.7515(e) – Section 5.3.2 of the permit for Boiler # 6 annual CO compliance testing.

Performance test - 40 C.F.R. § 63.7520 – Section 5.3.2 of the permit for Boiler # 6.

Monitoring, Installation, Operation, and Maintenance requirements - 40 C.F.R. § 63.7525(a) – Section 5.2.6 of the permit for Boiler # 5 which requires a continuous emission monitoring system for measuring CO and O₂.

Notification - 40 C.F.R. § 63.7545(c) – Section 5.5.2 of the permit for Boiler # 6.

Notification - 40 C.F.R. § 63.7545(e) – Sections 5.5.3 of the permit for Boilers # 5 & 6.

Reporting - 40 C.F.R. § 63.7550(a) to (c) – Section 5.5.4 of the permit for Boilers # 5 & 6.

Recordkeeping - 40 C.F.R. § 63.7555 – Section 5.4.7 of the permit for Boilers # 5 & 6.

Non-Applicability Determinations

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

Greenhouse Gas Permitting – This significant modification has not triggered a PSD permit. Therefore, there are no applicable GHG requirements.

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: December 20, 2012

Ending Date: January 22, 2013

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 57th 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 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.