

# Fact Sheet



## 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 March 23, 2021.

Permit Number: **R30-07300003-2021 (Part 2 of 3)**

Application Received: **February 19, 2021**

Plant Identification Number: **03-054-073-00003**

Permittee: **CYTEC Industries, Inc.**

Facility Name: **Willow Island Plant**

Manufacturing Unit: **Polymer Additives (Part 2 of 3)**

Mailing Address: **1 Heilman Avenue, Willow Island, West Virginia 26134-9801**

Permit Action Number: *MM01*      Revised: *July 28, 2021*

---

Physical Location: Willow Island, Pleasants County, West Virginia  
UTM Coordinates: 474.00 km Easting • 4,356.00 km Northing • Zone 17  
Directions: From Interstate 77, Exit 179, take State Route 2, north approximately 10 miles. Plant site on left (river side) of State Route 2, two miles south of Belmont, WV.

---

### Facility Description

CYTEC Industries is a global, research-based specialty chemical company. The company operates a multi-product, multi-process chemical plant at Willow Island, WV. Plant operations are divided into the following two manufacturing units and one support services unit: Surfactants (Part 1 of 3), Polymer Additives (Part 2 of 3), and Site Services (Part 3 of 3).

The Polymer Additives Manufacturing Unit (Part 2 of 3) manufactures ultraviolet light absorbers, antioxidants and anti-static agents. The light absorbers are used in all types of plastics (bottles, telephones, lawn furniture, auto parts), in coatings, and in sunscreens. Antioxidants are used in man-made fibers, rubber products, plastics, and in medical applications. Anti-static agents are used in the electronics industry, in copy machine toner, and in textile applications.

### Emissions Summary

This modification results in no emission changes.

### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit of 209.8 tons per year of VOC, 23.03 tons per year of methanol, 40.62 tons per year of methyl isobutyl ketone, 65.01 tons per year of Toluene, and 143.0 tons per year 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, Cytec Industries, Inc. 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:	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation.
	45CSR30	Operating permit requirement.

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 Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2156AI	March 29, 2021	None

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 changes made under R13-2156AI approved on March 29, 2021. The changes made to the Title V permit are as follows:

Control device 06VC was erroneously omitted in the permit even though it was listed in the application. It has been added to the Title V Emission Units Table under Product/Process Area – A1846.

Control Device ID	Emission Units Controlled	Emission Point	Control Device Description	Next Control Device in Series
<a href="#">06VC</a>	<a href="#">06NX</a>	<a href="#">05LE</a>	<a href="#">Vapor Return</a>	<a href="#">05KC</a>

Section 4.1.18 was changed to allow for a lead/lag method of changing out carbon beds as follows:

- b. ~~The permittee shall replace the carbon beds in the system after a maximum of 12 batches and maintain records of all replacements; and~~ [The permittee shall replace the lead carbon bed in the system after a maximum inlet loading of 400.1 kilograms of Chloroform and maintain records of all replacements; and](#)
- c. [Permittee will place carbon beds in a series lead/lag scenario. The first carbon bed in series \(lead\) will be in service up to a total inlet loading of 400.1 kilograms of Chloroform. At this time, operations are suspended and the lead carbon bed will be taken out of service and all of the carbon will be replaced. Then, the second carbon bed in series \(lag\) will be moved to the lead position, and a new carbon bed will be placed in the lag position. This lead/lag scenario will repeat as described the next time the lead carbon bed reaches the maximum inlet loading of 400.1 kilograms of Chloroform](#)

Appendix A (Parametric Monitoring) table was changed as follows to account for the changes in 4.1.18.

Control Device ID	Description	Applicable Regulations	Emission Group(s)*	Monitoring Parameter	Parameter Value	Data Collection Frequency	Data Averaging Period	Inspection/Preventative Maintenance Frequency
S70020	Carbon Beds	40 C.F.R. 63, Subpart FFFF – HAP	R10100, R20000, R20050, R20100, R20200, K30000, K30100, R30600, K31000, E31040, S31050, R72000	<del>Number of Batches</del> <a href="#">Inlet loading of lead bed</a>	<del>12</del> <a href="#">400.1 kg of Chloroform</a>	NA	NA	<del>Per 12 Batches</del> <a href="#">Total Inlet loading of 400.1 kg of Chloroform</a>

### **Non-Applicability Determinations**

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

None

### **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 for minor modifications.  
Ending Date: N/A

### **Point of Contact**

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

Jonathan Carney  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41247  
Jonathan.W.Carney@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.