

# 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 April 3, 2012.

Permit Number: **R30-07300003-2012**  
Application Received: **March 3, 2015**  
Plant Identification Number: **03-54-07300003**  
Permittee: **CYTEC Industries, Inc.**  
Facility Name: **Willow Island Plant**  
Manufacturing Unit: **Surfactants (Part 1 of 3)**  
Mailing Address: **#1 Heilman Avenue, Willow Island, WV 26134-9801**

Permit Action Number: *MM02*      Revised: *July 6, 2015*

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Physical Location: Willow Island, Pleasants County, West Virginia  
UTM Coordinates: 474.00 km Easting • 4,356.00 km Northing • Zone 17  
Directions: Facility is located on State Route 2, two miles south of Belmont,  
Pleasants County, WV.

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### 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 Surfactants unit (Part 1 of 3) manufactures surfactants for use in products where surface tension is critical. The multi-purpose applications include mining flotation processes, oil dispersions, water treating chemicals, paints, carpet backing, and pharmaceuticals.

The last Title V Permit Renewal (issued 4/3/2012) was divided into the following three manufacturing units and one support services unit: Urethane Chemicals (Part 1 of 4), Surfactants (Part 2 of 4), Site Services (Part 3 of 4), and Polymer Additives (Part 4 of 4). The Urethane Chemicals Manufacturing Unit Part (1 of

4) was sold to Allnex in 2013 and is no longer owned or controlled by CYTEC Industries Inc. As part of the minor modification the designation of Surfactants was changed from "Part 2 of 4" to "Part 1 of 3."

This Title V minor modification permit incorporates changes permitted under R13-2120I.

### Emissions Summary

There is no annual PTE change associated with this minor modification because in the original permit particulate matter (PM) emission rate was based on the theoretical production of the highest PM emitting product, being produced in all equipment, for the entire year (8,760 hours). This rate was calculated to be 0.9 TPY (current facility-wide PTE for PM). The addition of bulk bag unloading systems WH-4BB1 and WH-4BB2 and their integrated dust collection systems WH-4DC1 and WH-4DC2 will not exceed this limit.

### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the 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. Therefore 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:	45CSR7	Particulate matter and opacity limits for manufacturing sources.
	45CSR13	Preconstruction permits for minor sources.
	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

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2120I	April 7, 2015	

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 Title V minor modification includes the following changes:

- 1) Section 1.1 Emission Units Table – Updated in order to add Emission Point 05BE which is for Emission Units WH-4BB1 and WH-4BB2 and their integrated dust collection systems WH-4DC1 and WH-4DC2.
- 2) Section 1.2 Active R13, R14 and R19 Permits – Updated so that R13-2120I is the active R13 permit.
- 3) Section 3.0 Facility Wide Requirements
  - a. In condition 3.1.8 the Risk Management Plan language was changed to the version stating “Should this stationary source, as defined in .....” since the Risk Management Plan does not currently apply to Cytec’s Willow Island Site, but could become applicable again at a future time.
  - b. In condition 3.7.2.j 40 C.F.R. 63, Subpart H was removed from the Permit Shield since Cytec currently follows 40 C.F.R. 63, Subpart H as the elected means of compliance with Leak Detection and Repair (LDAR) provisions of the MON MACT (40 C.F.R. 63, Subpart FFFF).
- 4) Section 4.0 Surfactants -
  - a. Updated title of Section 4.0 to include Emission Point 05BE in the list of Emission Points.
  - b. Added 05BE to the affected emission points in condition 4.1.2.
  - c. Added 05BE to the table containing 45CSR7 maximum allowable particulate emission limits in condition 4.1.3. Compliance with the 45CSR§7-4.1 Emission Limit for 05BE of 22.0 lb/hr was shown by emission calculations using AP-42 factors in a worst case scenario which resulted in maximum emissions of 0.0000021 lb/hr of PM.
  - d. Added 05BE to condition 4.2.1. The permittee will conduct visible emissions checks to demonstrate compliance with the twenty percent opacity limit in Condition 4.1.2 for 05BE.

## 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:

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Division of Air Quality  
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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)**

Not applicable.