

# 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 June 26, 2007.

Permit Number: **R30-07300003-2007**  
Application Received: **November 9, 2010**  
Plant Identification Number: **03-54-073-00003**  
Permittee: **CYTEC Industries, Inc.**  
Facility Name: **Willow Island Plant**  
Manufacturing Unit: **Surfactants (Part 2 of 4)**  
Mailing Address: **#1 Heilman Avenue, Willow Island, WV 26134-9801**

Permit Action Number: *MM02*    Revised: *January 24, 2011*

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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 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 Surfactants unit (Part 2 of 4) 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 Surfactants production unit has a Standard Industrial Classification (SIC) code of 2869 and a North American Industry Classification System (NAICS) of 32511.

This Title V minor modification permit incorporates changes permitted under R13-2120G. R13-2120G is a Class 1 Administrative Update that allows CYTEC to update the Section 1.0 equipment list. R13-2120G was issued on November 30, 2010 to replace an existing mechanical vacuum pump / condenser (3-4VP1 / 3-4CD2) with a three stage vacuum jet system (3-4VJ1, 3-4VJ2, 3-4VJ3) plus the addition of a new hot well (1-4T3) to capture the system condensate from the vacuum jets. The new vacuum jet system and the new hot well are vented to the existing seal pot (3-4T2) control device. There were no increases in allowable emissions from this revision.

### Emissions Summary

There is no emission change associated with this minor modification.

### 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:           45CSR13           Construction Permit administrative amendment.  
  45CSR30           Operating permit requirement.

State Only:                   None

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)
R13-2120G	November 30, 2010	

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 Title V minor modification includes the following changes to the Emission Unit Table Section 1.1:

1. An existing mechanical vacuum pump / condenser (3-4VP1 / 3-4CD2) were replaced with a three stage vacuum jet system (3-4VJ1, 3-4VJ2, 3-4VJ3). The "Emission Unit Description" was revised by changing condensers to condenser for (3-4VP1 / 3-4CD1) since one of the two was removed.
2. The addition of a new hot well (1-4T3) to capture the system condensate from the vacuum jets.
3. The new vacuum jet system and the new hot well are vented to the existing seal pot (3-4T2) control device.

### **Non-Applicability Determinations**

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

No additional non-applicability determinations were made.

### **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

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

Wayne Green  
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**

Wayne Green  
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. 1258 • Fax: 304/926-0478

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

Not applicable.