

# 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 August 31, 2010.

Permit Number: **R30-07300003-2010**  
Application Received: **August 15, 2012**  
Plant Identification Number: **03-54-07300003**  
Permittee: **CYTEC Industries Inc.**  
Facility Name: **Willow Island Plant**  
Manufacturing Unit: **Polymer Additives (Part 4 of 4)**  
Mailing Address: **1 Heilman Avenue, Willow Island, WV 26134-9801**

Permit Action Number: *MM05*      Revised: *February 26, 2013*

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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: From Interstate 77, Exit 179, take State Route 2 north for approximately 10 miles. Plant site is on the left (river side) of State Route 2, two miles south of Belmont, 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. The Polymer Additives Manufacturing Unit 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.

CYTEC is required by condition 4.5.4 to submit written notification of any revisions of the Building 82 (Polymer Additives) Manufacturing Unit equipment/emission units, control devices or emission points by August 15<sup>th</sup> for the calendar semi-annual time period of January 1<sup>st</sup> through June 30<sup>th</sup>, and by February 15<sup>th</sup> for the calendar semi-annual time period of July 1<sup>st</sup> through December 31<sup>st</sup> in which the revision occurred. On August 15, 2012, CYTEC submitted a combined Class II administrative update, R13-2156Q, and a Title V minor modification permit, R30-07300003-2010 (Part 4 of 4) (MM05) to incorporate changes which have occurred in the 1st Half of 2012.

**Emissions Summary**

There are no emission rate changes associated with the proposed 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 pollutants, over 10 tons per year of a single hazardous air pollutant (HAP), and over 25 tons per year of aggregate hazardous air pollutants (HAPs). Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single hazardous air pollutant (HAP), and over 25 tons per year of aggregate hazardous air pollutants (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 45CSR30 45CSR7  45CSR34  40 C.F.R. 63, Subpart FFFF	Preconstruction permits for minor sources. Operating permit requirement. Particulate matter and opacity limits for manufacturing sources. Emission Standards for Hazardous Air Pollutants. Miscellaneous Organic Chemical Manufacturing (MON) MACT.
State Only:	NA	

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 ( <i>if any</i> )
R13-2156Q	October 29, 2012	NA

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 approved under R13-2156Q, issued on October 29, 2012:

Permit Section	Revisions
1.0	Additions, deletions, and edits due to minor equipment changes within the existing Product/Process Area emission groups. Added a new Product/Process Area emission group, Aero 8860GL.
2.0	No changes.
3.0	No changes.
4.0	Section 4.1.4 – Revised vents with Rule 7 applicability due to minor equipment and process changes. Removed storage tank 076E as it no longer stores a 45CSR7 applicable material. Added process vents for the new emission group, Aero 8860GL.  Emission Unit ID, 23LX has been removed from Table 4.1.14 and was added in Section 1.0. Emission Unit ID, 23LX is being used in the new Process Area- Aero 8860GL.
Appendix A	Re-designated a portion of the existing vapor return line 11VC to become vapor return line 15 VC, which continues to be used for VOC control in the Batch Column, Methanol Column, and Raw Material Storage Tanks Product/Process Areas. Vapor return line 15VC was added to this table.
Appendix B	Added a new HAP species: Acrylamide. New HAP is emitted in very low hourly and annual quantities (see permit application R13-2156Q, Attachment N for estimated emissions).

- 40CFR63 Subpart FFFF- National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON) is applicable to the new Aero 8860GL product family.

The Aero 8860GL production unit is designated as MCPU 24. MCPU 24 [Aero 8860GL product Family] has been determined by Cytec to be a Group 2 Batch Process Vent unit.

MCPU 24 has been determined by Cytec to contain equipment components in OHAP service (>5% OHAP). The facility will comply with MON requirements for Equipment Leaks through its existing Subpart H monitoring program as required.

Other Changes:

- Conditions 3.1.9 and 3.5.10(45CSR42 GHG requirements); and 3.4.4 and 3.5.12(Federal GHG requirements) – According to Director’s directive these requirements are deleted.

## **Non-Applicability Determinations**

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

45CSR§10-4.1.- The new Aero 8860 GL product does emit from vent 23LE a small quantity of sulfur dioxide (SO<sub>2</sub>) at the rate of 0.5 lb/hr, with maximum annual potential emissions of 100 lb/yr. However, this manufacturing process source operation is exempt from 45CSR§10-4.1, per 45CSR§10-4.1.e; which exempts manufacturing process source operations with the potential to emit less than 500lb/yr of sulfur oxides.

## **Request for Variances or Alternatives**

None

## **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

## **Comment Period**

Public comment period is not applicable for minor modifications.

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

Beena Modi  
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**

Beena Modi  
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. 1228 • Fax: 304/926-0478

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

None