

Fact Sheet



For Proposed 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 8, 2011**
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: *MM03* Revised: *Proposed*

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.

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 4.5.5 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 15th for the calendar semi-annual time period of January 1st through June 30th, and by February 15th for the calendar semi-annual time period of July 1st through December 31st in which the revision occurred. On August 8, 2011, CYTEC submitted a combined Class II administrative update, R13-2156O, and a Title V minor modification permit, R30-07300003-2010 (Part 4 of 4) (MM03) to incorporate changes which have occurred in the 1st Half of 2011.

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	Preconstruction permits for minor sources. Operating permit requirement.
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>)
R13-2156O	August 12, 2011	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 R13-2156O, issued on August 12, 2011:

Section	Revisions																																																																								
1.0	<p>Added UV4801 and UV4802 to the list of Emission Groups in the HALS Product/Process Area.</p> <p>Revised the Emission Unit Description for Emission Unit ID 07KX in the HALS Product/Process Area from “Industrial hygiene vent for Filter Feed Kettle” to “Industrial hygiene vent for PTS Station.”</p> <p>Added the Mott Filter (3-9F3), Emission Unit ID 09FX, to the HALS Product/Process Area.</p> <p>Deleted Anhydrous HCl Bulk Tube Trailer, Emission Unit ID 0T3X, from the A1846 Product/Process Area.</p> <p>Revised the Emission Point ID for Emission Unit ID 16UX, from “16QE” to “18JE.” This change was made in the following Product/Process Areas: A1790, UV2908, and UV3638.</p> <p>Revised the Emission Point ID for Emission Unit ID 16WX from “16QE” to “18JE.” This change was made in the following Product/Process Areas: A1790, UV2908, and UV3638.</p> <p>Added the following equipment to the UV-3638IA Purification Product/Process Area:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Emission Unit ID</th> <th style="text-align: center;">Emission Point ID</th> <th style="text-align: center;">Emission Unit Description</th> <th style="text-align: center;">Year Installed</th> <th style="text-align: center;">Design Capacity</th> <th style="text-align: center;">Control Device</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">20EX</td> <td style="text-align: center;">20EE</td> <td style="text-align: center;">Condensate Receiver</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">20FX</td> <td style="text-align: center;">20DE</td> <td style="text-align: center;">Vacuum Jet (3-19VJ1)</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">20LX</td> <td style="text-align: center;">20LE</td> <td style="text-align: center;">Splitter Bowl</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">20NX</td> <td style="text-align: center;">21DE</td> <td style="text-align: center;">Industrial hygiene hood over UV-1164 Reactor & Strip Kettle</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td></td> <td style="text-align: center;">20AE</td> <td style="text-align: center;">UV-1164 Reactor with Condenser 3-20CD1</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">20PX</td> <td style="text-align: center;">20PE</td> <td style="text-align: center;">Split Receiver</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">21AX</td> <td style="text-align: center;">21AE</td> <td style="text-align: center;">Centrifuge</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;">21AY</td> <td style="text-align: center;">NA</td> <td style="text-align: center;">Wet Bin</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td></td> <td style="text-align: center;">22QE</td> <td style="text-align: center;">Industrial hygiene hood over Wet Bin</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">22QC</td> </tr> <tr> <td style="text-align: center;">21DX</td> <td style="text-align: center;">21DE</td> <td style="text-align: center;">Industrial hygiene hood over UV-1164 Reactor & Strip Kettle</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> <tr> <td></td> <td style="text-align: center;">24NE</td> <td style="text-align: center;">Strip Kettle with Condenser 3-22CD1</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> <td style="text-align: center;">NA</td> </tr> </tbody> </table> <p>Deleted the following equipment from the Batch Column Product/Process Area: 1) Head Tank, Emission Unit ID 143X, Emission Point ID 143E; 2) Vacuum System with Condenser (S-14CD2), Emission Unit ID 152X, Emission Point ID 11ME.</p> <p>Revised the Emission Unit Description for Emission Unit ID 063X in the Raw Material Storage Tanks Product/Process Area from “TBX Bulk Storage Tank (S-6T3)” to “TBX Bulk Storage Tank (S-4T3).”</p>	Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device	20EX	20EE	Condensate Receiver	--	--	NA	20FX	20DE	Vacuum Jet (3-19VJ1)	--	--	NA	20LX	20LE	Splitter Bowl	--	--	NA	20NX	21DE	Industrial hygiene hood over UV-1164 Reactor & Strip Kettle	--	--	NA		20AE	UV-1164 Reactor with Condenser 3-20CD1	--	--	NA	20PX	20PE	Split Receiver	--	--	NA	21AX	21AE	Centrifuge	--	--	NA	21AY	NA	Wet Bin	--	--	NA		22QE	Industrial hygiene hood over Wet Bin	--	--	22QC	21DX	21DE	Industrial hygiene hood over UV-1164 Reactor & Strip Kettle	--	--	NA		24NE	Strip Kettle with Condenser 3-22CD1	--	--	NA
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Section	Revisions
1.0	Revised the Emission Unit Description for Emission Unit ID 074X in the Intermediates & Products Storage Tanks Product/Process Area from “Intermediate Methanol Storage Tank (S-7T2)” to “Intermediate Methanol Storage Tank (S-4T4).” Added Solvent Storage (2-22K1), Emission Unit ID 22MX, Emission Point ID 22ME to the Intermediates & Products Storage Tanks Product/Process Area.
2.0	No changes.
3.0	Added new boilerplate condition 3.3.1.d.
4.0	In Table 4.1.4, added UV4801 and UV482 to the listing of Product or Process Names for Emission Source IDs 08BX (2-8K8), 06CX (2-6K3), 10CX (2-10K3), 07AX (3-7K4), 07KX (2-7K8), 09CX (2-9K4), and DRUM08. Revised the Emission Point IDs for Sources IDs 16UX (2-16K1) and 16WX (2-16K2) in Table 4.1.4 from “16QE” to “18JE.” Added the Anhydrous HCl Bulk Tube Trailer, Equipment ID 0T3X, to Table 4.1.14.
Appendix A	Added Emission Groups UV4801 and UV4802 to the Emission Groups listing for Control Device IDs 07CC, 075C, 08RC, and 08VC.
Appendix B	No changes.

Non-Applicability Determinations

There were no non-applicability determinations made as a result of this minor modification.

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: NA
 Ending Date: NA

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

Carrie McCumbers
 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

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.