

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 original Fact Sheet corresponding with the issuance of the Title V operating permit issued on October 27, 2009.

Permit Number: **R30-07300003-2009**
Application Received: **December 27, 2010**
Plant Identification Number: **07300003**
Permittee: **CYTEC Industries Inc.**
Facility Name: **Willow Island Plant**
Manufacturing Unit: **Site Services (Part 3 of 4)**
Mailing Address: **#1 Heilman Avenue, Willow Island, WV 26134-9801**

Permit Action Number: *MM01*

Revised: *April 12, 2011*

Physical Location: Willow Island, Pleasants County, West Virginia
UTM Coordinates: 473.42 km Easting • 4,356.22 km Northing • Zone 17
Directions: Facility is located on State Route 2, two miles south of Belmont, WV.

Facility Description

Site Services (Part 3 of 4) supports the manufacturing processes at the CYTEC facility. Site Services is comprised of steam-generating boilers, the on-site Wastewater Treatment Plant (WWTP), the Equalization/Neutralization (E/N) wastewater unit operation, the analytical operations conducted in on-site laboratories, miscellaneous non-process equipment and storage tanks, emergency diesel engines, plantwide maintenance activities, fuels storage (gasoline and diesel), and equipment that uses chlorofluorocarbons (CFC)/ozone-depleting substances (ODS).

This minor modification was requested for the following changes in the permit:

- 1) to replace old 220 hp Emergency Diesel Engine E01E with the new 175 hp Emergency Diesel Engine E04E;
- 2) to include requirements of 40 CFR 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, applicable to the new engine E04E;

- 3) to include requirements of 40 CFR 63 Subpart ZZZZ, *National Emission Standards For Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*, applicable to all engines (65BL, E02E, E03E and E04E);
- 4) to revise promulgation date for the 40 CFR 63 Subpart DDDDD, *National Emission Standards For Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*.

Emissions Summary

As the result of this modification facility PTE will not change.

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 (VOCs), 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 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 modifications to this facility have been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Preconstruction permits for minor sources.
	45CSR30	Operating permit requirement.
	40 C.F.R. 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
	40 C.F.R. 63, Subpart DDDDD	National Emission Standards For Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
	40 C.F.R. 63, Subpart ZZZZ	National Emission Standards For Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

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, 45CSR15, 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>)
		PD10-024 issued 03/30/2010

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

- 1) This permit modification is related to the Permit Applicability Determination PD10-024 issued on March 30, 2010. It was determined that a 45CSR13 permit will not be required for the "proposed construction of a fire pump engine". Therefore, the Emission Units Table 1.1 was revised to add the new engine E04E, and to remove the old engine E01E.
- 2) New Section 7.0 was added to the permit to include specific requirements for engines.
- 3) Requirement 7.1.1 was added to include the 40 CFR 63 Subpart ZZZZ applicable conditions:

According to the §63.6590(c) (requirement 7.1.1.1), the only applicable requirements for the new engine E04E is to be in compliance with the Part 63 Subpart IIII requirements for compression ignition engines (see item (4) below).

According to the §63.6595(a)(1) (requirement 7.1.1.2), "an existing stationary CI (compression ignition) RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions " (engines 65BL, 355 hp; E02E, 220 hp and E03E, 220 hp) needs to be in compliance with the requirements of Part 60 Subpart ZZZZ no later than May 3, 2013. Therefore, the language was added for the company to apply for the permit modification within 180 days prior to the compliance date in order to include all applicable requirements of the subpart.
- 4) Requirements 7.1.2, 7.2.1 and 7.4.1 were added to include the 40 CFR 60 Subpart IIII applicable conditions for the engine E04E.

Compliance with the engine emission limits in §60.4205(c) (requirement 7.1.2) will be demonstrated "by purchasing an engine certified to the emission standards in §60.4204(b)" and by the engine installation and configuration "according to the manufacturer's specifications" (§60.4211(c), requirement 7.1.2.3).
- 5) Recordkeeping requirement 7.4.2 was added for engine E04E compliance demonstration with the 40 CFR 60 Subpart IIII §60.4211(e) (requirement 7.1.2.5).
- 6) Requirement 6.1.8 was modified to replace 40 CFR 63 Subpart DDDDD an old promulgation date (December 16, 2010) with the current one (February 21, 2011).
- 7) Description added to the Emission Units Table 1.1 for the existing engine 65BL: "Emergency (Stationary Generator)" for clarification purposes.

Non-Applicability Determinations

None

Request for Variances or Alternatives

None

Insignificant Activities

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

Comment Period

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

Natalya V. Chertkovsky-Veselova
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

Natalya V. Chertkovsky-Veselova
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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Response to Comments (Statement of Basis)

None.