

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 initial Title V operating permit issued on July 24, 2007.

Permit Number: **R30-00300042-2007**
Application Received: **November 2, 2007**
Plant Identification Number: **00300042**
Permittee: **Quad/Graphics, Inc.**
Facility Name: **Martinsburg Plant**
Mailing Address: **855 Caperton Boulevard, Martinsburg, WV 25401**

Permit Action Number: MM01 Revised: June 4, 2008

Physical Location:	Martinsburg, Berkeley County, West Virginia
UTM Coordinates:	247.0 km Easting • 4,377.0 km Northing • Zone 18
Directions:	I-81 to Exit 16 (Route 9 West) to County Route 1. Turn right into Cumbo Yard Industrial Park.

Facility Description

Quad/Graphics is a commercial printing business permitted for 18 rotogravure presses, 21 carbon adsorbers, 6 natural gas/propane fueled boilers, 3 hard chromium electroplating tanks and scrubbers, 15 solvent/ink storage tanks, 12 offset lithographic presses with catalytic oxidizers or regenerative thermal oxidizers, 1 cylinder cleaning unit, finishing/inkjet production, and an ink blend operation involving 11 storage tanks, 7 mixing tanks, and 3 totes. Not all of the permitted equipment has been installed. Quad/Graphics has installed 11 rotogravure presses, 13 carbon adsorbers, 4 natural gas/propane fueled boilers, 2 hard chromium electroplating tanks, 14 solvent/ink storage tanks, 3 offset lithographic presses (2 with thermal oxidizers and 1 with a catalytic oxidizer), 1 cylinder cleaning unit, finishing/inkjet production, and an ink blend operation consisting of 11 storage tanks, 7 mixing tanks, and 3 totes.

This Title V minor modification permit incorporates changes permitted under R14-12C. R14-12C was issued on April 7, 2008 for the addition of the CR/T Ink Manufacturing Process. The CR/T Ink Manufacturing Process will produce ink concentrate products to be blended into finished inks and will

eliminate the need for ink concentrate to be purchased by Quad/Graphics. In addition to the installation of the CR/T Ink Manufacturing Process, Quad/Graphics also requested in permit application R14-12C, a number of changes to their existing permit conditions. The changes which were approved under R14-12C were also incorporated into this Title V minor modification permit.

Emissions Summary

This modification results in the following emission rates changes:

Pollutant	lbs/hr ¹	TPY ¹
VOCs	-6.14	-11.79
Toluene	-5.82	-11.21
Cumene	-8.48 x 10 ⁻³	-1.63 x 10 ⁻²
Ethyl Benzene	-1.13 x 10 ⁻³	-2.18 x 10 ⁻³
Xylene	-1.53 x 10 ⁻²	-2.94 x 10 ⁻²
Total HAPs	-5.84	-11.21

¹The installation of the CR/T Ink Manufacturing Process resulted in a slight increase in hourly and annual VOC, Total HAP, Toluene, and Xylene emission rates, but the removal of Proof Press #1 (P-01), Proof Press #2 (P-02), and Proof Press #3 (P-03) resulted in an overall emissions decrease.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons of criteria pollutants (VOC and NO_x), over 10 tons of a single HAP (Toluene) and over 25 tons of aggregate 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, Quad/Graphics 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:	45CSR14	Permits for construction and major modification of major stationary sources of air pollution for the Prevention of Significant Deterioration.
	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, 45CSR15, 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)
R14-12C	April 7, 2008	N/A

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:

- 1) **Installation of the CR/T Ink Manufacturing Process approved under R14-12C.** The CR/T Ink Manufacturing Process will produce ink concentrate products to be blended into finished inks and will eliminate the need for ink concentrate to be purchased by Quad/Graphics. It will consist of 5 individual lines containing 3 tanks per line to produce ink concentrates and will also have four tanks for the production and storage of resin. The proposed equipment is as follows: Black Dispersion Tank (BL-01), Black Buffer Tank (BL-02), Black Letdown Tank (BL-03), Clay Dispersion Tank (CL-01), Clay Buffer Tank (CL-02), Clay Letdown Tank (CL-03), Blue Dispersion Tank (CYL-01), Blue Buffer Tank (CYL-02), Blue Letdown Tank (CYL-03), Resinate Holding Tank 1 (RES-01), Resinate Holding Tank 2 (RES-02), Resinate Dispersion Tank 1 (RESL-01), Resinate Dispersion Tank 2 (RESL-02), Red Dispersion Tank (RL-01), Red Buffer Tank (RL-02), Red Letdown Tank (RL-03), Yellow Dispersion Tank (YL-01), Yellow Buffer Tank (YL-02), and Yellow Letdown Tank (YL-03). The ink manufacturing process is scheduled to be installed in 2008.

Emissions from the CR/T Ink Manufacturing Process will be vented to the existing Solvent Recovery System, emission points S-25, S-26, and S-27. The addition of the new equipment will result in emission rate increases after controls of 0.070 lb/hr and 0.308 tpy of toluene, and 0.00041 lb/hr and 0.0018 tpy of xylene. Since the new ink manufacturing facility does not trigger any new rules or regulations and emissions are routed to the existing solvent recovery system which is already subject to monitoring, testing, recordkeeping, and reporting requirements, no additional monitoring, testing, recordkeeping, or reporting was required.

- 2) **Changes to existing R14-12C permit conditions.** Quad/Graphics requested several changes to existing permit conditions in their application for R14-12C. A discussion of these changes and the subsequent action taken by DAQ is discussed in detail in Appendix A of the Engineering Evaluation for R14-12C. The changes which were approved as part of R14-12C were incorporated into this Title V minor modification permit.
- 3) **Removal of the 40 C.F.R. 63, Subpart DDDDD Boiler MACT placeholder language for Boilers B-01, B-02, B-03, B-04, B-05, and B-09 in the Title V Permit, Conditions 8.1.9 and 8.1.10.** Condition 8.1.9 applied to existing Boilers B-01, B-02, B-03, and B-04 and Condition 8.1.10 applied to new Boilers B-05 and B-09 upon startup. On July 30, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the Boiler MACT. As a result of the court's decision, a MACT for this source category will have to be implemented via a 112(j) case-by-case MACT determination or a subsequent 40 C.F.R. 63 proposal. Per DAQ's "Interim Guidance for Existing Sources – Boiler and Process Heater MACT Vacature," dated September 7, 2007, the DAQ does not intend to implement the provisions of the Boiler and Process Heater MACT for existing sources at this time. US EPA will be issuing guidance regarding the 112(j) case-by-case MACT determination of equivalent emission limitation in the future. Due to these facts, the 40 C.F.R. 63, Subpart DDDDD placeholder language was removed for existing Boilers B-01, B-02, B-03, and B-04.

For new Boilers B-05 and B-09, the placeholder language is also no longer applicable since this rule was vacated and remanded. However, if Quad/Graphics should choose to install these boilers, they would be required to submit a 112(j) case-by-case MACT determination and have approval prior to startup, or comply with a subsequent final MACT for this source category.

- 4) **Removal of Proof Press #1 (P-01), Proof Press #2 (P-02), and Proof Press #3 (P-03).** Proof Press #1 (P-01) and Proof Press #2 (P-02) have been permanently removed and Proof Press #3 (P-03) was never installed at the facility. These presses were removed from the Section 1.0 Emission Units Table and all applicable requirements for these presses were removed from Section 9.0.

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

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)

No comments were received.