

# Fact Sheet



## For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00300042-2017**  
Application Received: **October 3, 2016**  
Plant Identification Number: **003-00042**  
Permittee: **Quad/Graphics, Inc.**  
Facility Name: **Martinsburg Plant**  
Mailing Address: **855 Caperton Boulevard; Martinsburg, WV 25401**

*Revised: N/A*

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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.

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### Facility Description

Quad/Graphics (Quad) 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, 5 offset lithographic presses (4 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. Quad/Graphics' Standard Industrial Classification (SIC) Codes are 2752, 2754, and 2893 and the corresponding North American Industry Classification System (NAICS) codes are 323111 and 325910.

## Emissions Summary

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2015 Actual Emissions</b>
Carbon Monoxide (CO)	89.9	7.99
Nitrogen Oxides (NO <sub>x</sub> )	106.52	7.75
Particulate Matter (PM <sub>2.5</sub> )	10.66	1.04
Particulate Matter (PM <sub>10</sub> )	10.66	1.10
Total Particulate Matter (TSP)	10.66	1.10
Sulfur Dioxide (SO <sub>2</sub> )	2.79	0.22
Volatile Organic Compounds (VOC)	1,364.79	89.04

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2015 Actual Emissions</b>
Toluene	1,118.53	51.89
Chromium	Trace	0
Methanol	0.2	0
Xylene	5.37	0.01
Ethylbenzene	1.57	0.003
Glycol Ethers	0.62	1.95
Total HAPs	1126.29	53.85

*Some of the above HAPs may be counted as PM or VOCs.*

### Title V Program Applicability Basis

This facility has the potential to emit 106.52 TPY of NO<sub>x</sub>, 1,364.79 TPY of VOC, and 1,118.53 TPY of Toluene. Due to this facility's 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, Quad/Graphics, 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate matter.
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur dioxide limits.
	45CSR11	Standby plans for emergency episodes.

45CSR14	PSD.
45CSR16	Standards of Performance for New Stationary Sources pursuant to 40 C.F.R. Part 60.
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30	Operating permit requirement.
45CSR34	Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63
40 C.F.R. 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 C.F.R. 61	Asbestos inspection and removal
40 C.F.R. 63, Subpart N	Chromium Electroplating MACT
40 C.F.R. 63, Subpart KK	Printing and Publishing MACT
40 C.F.R. 63, Subpart DDDDD	Process Heaters and Boilers MACT
40 C.F.R. 82, Subpart F	Ozone depleting substances
State Only: 45CSR4	No objectionable odors.

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> )
R14-0012G	April 14, 2016	

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," which may be downloaded from DAQ's website.

**Determinations and Justifications**

**40CFR63, Subpart DDDDD: Boiler MACT**

Old permit condition 8.1.9 was removed. This condition addressed compliance with the Boiler MACT. With this renewal, applicable portions of the Boiler MACT are specified in the permit. Therefore, this condition is no longer necessary.

These boilers only burn pipeline quality natural gas and propane and have continuous oxygen trim systems; they do not have the ability to burn any other fuel, therefore, they are only required to conduct a tune-up every 5 years and a one-time energy assessment. The one-time energy assessment has been completed, and a notice of compliance has been submitted.

The following portions of the Boiler MACT are now included in this permit:

Condition	Description	Regulatory Citation
8.1.9.	Boiler tune-up to demonstrate continuous compliance and tune-up schedule for boilers with a continuous oxygen trim system <sup>1</sup>	45CSR34, 40 CFR §63.7500(a)(1) and Table 3, Item #1, 40 CFR §63.7515(d), and 40 CFR §§63.7540(a)(10) and (a)(12)
8.1.10.	Tune-up schedule for units not in operation	45CSR34, 40 CFR §63.7540(a)(13)
8.4.6.	Permittee must keep a copy of each notification and report submitted to comply with this subpart	45CSR34, 40 CFR §63.7555(a)(1)
8.4.7.	Form and duration of recordkeeping	45CSR34, 40 CFR §63.7560
8.5.2.	Submission of notifications	45CSR34, 40 CFR §63.7545(a)
8.5.3.	Reports required by Boiler MACT	45CSR34, 40 CFR §63.7550(a) and Table 9
8.5.4.	Reporting schedule	45CSR34, 40 CFR §63.7550(b)
8.5.5.	Compliance report contents	45CSR34, 40 CFR §§63.7550(c)(1), (c)(5)(i) through (iii), (c)(5)(xiv), and (c)(5)(xvii)
8.5.6.	Report submission procedures	45CSR34, 40 CFR §63.7550(h)(3)

<sup>1</sup>These boilers use a continuous oxygen trim system, therefore tune-ups are required every five years, not annually. The regulation references emission limits and work practice standards in Tables 1 through 3 and 11 through 13 of 40CFR63, Subpart DDDDD. However, Table 3 is the table which has applicable requirements for gas 1 boilers with continuous oxygen trim systems.

Apart from formatting and boilerplate changes, no additional changes were made with this permit renewal.

### Non-Applicability Determinations

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

40 C.F.R. 64 – “Compliance Assurance Monitoring.” Per 40 C.F.R. §64.2(a)(3), Boilers B-01, B-02, B-03, B-04, B-05, and B-09 and chrome plating tanks S-06, S-07, and S-08 are not subject to the CAM Rule because pre-control device emissions from these sources are less than 100 tons per year of a criteria pollutant (NO<sub>x</sub> for the boilers) and 10 tons per year of a HAP (chromic acid for the chrome plating tanks). Per 40 C.F.R. §64.2(b)(1)(i), the emission sources controlled by the solvent recovery system (CA-01 through CA-21) are not subject to the CAM Rule because they are subject to emission limitations and standards from 40 C.F.R. 63, Subpart KK. Although pre-control device VOC emissions from heatset web offset lithographic presses (OP-01, OP-02, OP-03, OP-04, OP-05, OP-06, OP-07, OP-08, OP-09, OP-10, OP-11, and OP-12), are greater than 100 tons per year, 40 C.F.R. §64.2(b)(1)(vi) exempts these sources from the CAM Rule because a continuous compliance determination method was already specified in the initial Title V permit.

### 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: Wednesday, December 28, 2016  
Ending Date: Friday, January 27, 2017

### **Point of Contact**

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

Rex Compston, P.E.  
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. 1209 • Fax: 304/926-0478  
[Rex.E.Compston@wv.gov](mailto:Rex.E.Compston@wv.gov)

### **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.

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

Not applicable.