

Fact Sheet



***For Draft/Proposed Renewal Permitting Action Under 45CSR30 and
Title V of the Clean Air Act***

Permit Number: **R30-00300042-2022**

Application Received: **July 20, 2021**

Plant Identification Number: **003-00042**

Permittee: **Quad/Graphics, Inc.**

Facility Name: **Martinsburg Plant**

Mailing Address: **855 Caperton Boulevard; Martinsburg, WV 25401**

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 (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 10 rotogravure presses, 13 carbon adsorbers, 4 natural gas/propane fueled boilers, 3 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

| Plantwide Emissions Summary [Tons per Year] | | |
|--|----------------------------|------------------------------|
| Regulated Pollutants | Potential Emissions | 2021 Actual Emissions |
| Carbon Monoxide (CO) | 88.0 | 8.54 |
| Nitrogen Oxides (NO _x) | 103.84 | 8.48 |
| Particulate Matter (PM _{2.5}) | 10.48 | 3.60 |
| Particulate Matter (PM ₁₀) | 10.48 | 3.66 |
| Total Particulate Matter (TSP) | 10.48 | 3.66 |
| Sulfur Dioxide (SO ₂) | 2.76 | 0.26 |
| Volatile Organic Compounds (VOC) | 1,360.6 | 64.40 |

PM₁₀ is a component of TSP.

| Hazardous Air Pollutants | Potential Emissions | 2021 Actual Emissions |
|---------------------------------|----------------------------|------------------------------|
| Toluene | 1,118.53 | 24.58 |
| Chromium | Trace | 0 |
| Cumene | 0.04 | < 0.04 |
| Methanol | 0.2 | 0 |
| Xylene | 5.37 | 0.08 |
| Ethylbenzene | 1.57 | 0 |
| Glycol Ethers | 0.62 | 0.46* |
| Naphthalene | 0.08 | 0 |
| Total HAPs | 1,126.41 | < 25.16 |

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

* Actual emissions for Glycol Ethers reported in SLEIS for 2021 (6.52 TPY) were not correct. According to the company, they mostly consisted of the component “Ethylene glycol monobutyl ether (EGBE) (2-Butoxyethanol)”, CAS No. 111-76-2, that was removed from the list of hazardous air pollutants (glycol ethers category) in November 2004, but in SLEIS it was mistakenly counted toward the Glycol Ethers actuals. According to the company, the correct actual 2021 Glycol Ethers emissions were 0.46 TPY.

Title V Program Applicability Basis

This facility has the potential to emit 103.84 TPY of NO_x, 1,360.6 TPY of VOC, 1,118.53 TPY of Toluene and 1,126.41 TPY of aggregate HAPs. 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 45CSR6 45CSR10 45CSR11 45CSR14 45CSR16 WV Code § 22-5-4 (a) (14) 45CSR30 45CSR34 40 C.F.R. 60, Subpart Dc 40 C.F.R. 61 40 C.F.R. 63, Subpart N 40 C.F.R. 63, Subpart KK 40 C.F.R. 63, Subpart DDDDD 40 C.F.R. 82, Subpart F | Particulate matter. Open burning prohibited. Sulfur dioxide limits. Standby plans for emergency episodes. PSD. Standards of Performance for New Stationary Sources pursuant to 40 C.F.R. Part 60. The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units Asbestos inspection and removal Chromium Electroplating MACT Printing and Publishing MACT Process Heaters and Boilers MACT 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> |
|--------------------------------|-------------------|--|
| R14-0012H | February 14, 2017 | |

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

Since the previous permit renewal was approved on February 2, 2017, the only revisions to the permit were the result of a minor modification (MM01) issued on April 18, 2017. It covered a change of the size and model of one (1) previously permitted (but not constructed as of this permit renewal) heatset offset lithographic printing press (OP-09).

Also, during this permit renewal the following changes took place (in addition to several corrections to typos throughout the permit):

1. Emission Units Table 1.1 - Chrome Plating Tank CP-08 installation year was changed from “Not Installed” to “2022” (based on the information contained in the Quad/Graphics, Inc. letter dated March 3, 2022 that “the tank expected to begin operations March 31, 2022 or soon thereafter”). Also, installation year “2017” for the Emission Unit OP-09 (Emission Point S-28) was changed to “Not Installed”.
2. Condition 7.2.1.b – performance testing info was added for the 3rd electroplating Tank CP-08 (CMP Scrubber #3). According to the company, the test is planned to be conducted within 180 days of startup as allowed by the permit condition 7.3.1.
3. Condition 9.5.1 – the physical address for the notifications was changed to an electronic address.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following (Permit Shield, condition 3.7.2.a):

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_x 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: June 3, 2022

Ending Date: July 5, 2022

Point of Contact

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

Natalya V. Chertkovsky-Veselova
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41250
natalya.v.chertkovsky@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)

(Choose) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.