

Fact Sheet



For 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 December 8, 2004.

Permit Number: **R30-07300006-2004**
Application Received: **September 1, 2006; April 6, 2007**
Plant Identification Number: **07300006**
Permittee: **Cabot Corporation**
Facility Name: **Ohio River Plant**
Mailing Address: **1 Cabot Drive, Waverly, WV 26184**

Permit Action Number: MM03 Revised: June 28, 2007

Physical Location: Waverly, Pleasants County, West Virginia
UTM Coordinates: 4,693.59 km Easting • 4,351.10 km Northing • Zone 17
Directions: Plant is located on the west side of Route 2, north of Waverly, WV.

Facility Description

Cabot's Ohio River Plant is a carbon black production facility. SIC code for this plant is 2895. Cabot operates three (3) carbon black production units at the facility that utilizes a total of four (4) reactors. Cabot uses the Oil Furnace Process to manufacture various grades of carbon black.

The changes to the operating permit involve two separate minor modification requests:

Modification Request on September 1, 2006:

Section 1.0 (new Section 1.1.) Emission Units Table A.1(b) - Installation of a new design flare, which is to replace the existing CB-02 flare, in order to meet the visual emission standard under the MACT regulations for Carbon Black. With this installation, the back end switch identified in the PSD permit R14-0021 will not be able to be completed in the future without moving the new flare to a different location. Therefore, the equipment orientation for the plant requires revisions. The table changes will match up the correct front end and back end equipment parts. [Section 1.1., Table A.1.(b)]

Section 1.0 (new Section 1.1.) Emission Units Table A.4(a) - The description of the water treatment tanks is being modified to remove the product specific name associated with the tank, in order to

maintain an accurate account of the tanks. This particular product has been removed from the plant and replaced with a similar product from a different vendor. The De-aeration Tank was replaced with a larger tank, increasing the volume from 200 to 900 gallons to support the inline waste heat boiler that was installed to meet the MACT requirements for hydrogen content in the tail gas.

Section 3.2.3. - With the addition of the two smaller 9.9 MMBTU boilers (HB-01, HB-02) installed under the previous permit change, the removal of reference to monitoring requirements for LNB and FGR as it applies to HB-01 and HB-02 is being requested.

Appendix A – This section shows the reallocation of SO₂ emissions from CB-02 and CB-03. With the addition of the new designed flare discussed above, the permittee will no longer be able to switch the back-ends of the units as planned in the previous PSD (R14) permit. In order to maintain some of the production capacities initially permitted in permit R14-0021, it is necessary to realign the allowable SO₂ emissions from the flare stacks.

Appendix B – The flare diameter for CB-02 was corrected to 9.17 to match the new designed flare for Unit 1. In addition, the correct equipment was lined up with the correct stack numbers.

Monitoring Plan for 45CSR10 – Updated to move to the real time sulfur in the feedstock measurement and to add the monitoring on the purge filters for the sulfur species.

The above mentioned changes were made in accordance with Permit No. R14-0021D.

Modification Request on April 6, 2007:

Request to increase the hours of operation for the reactor cyclones: QC-27 (029), QC-28 (030), and QC-32 (032) from 96 to 144 hours per year for each of the sources. The hourly emissions will remain the same, and only a slight increase in annual emissions is expected. This change is being made in accordance with Permit No. R14-0021E.

Emissions Summary

For Modification Request on September 1, 2006:

Appendix A

Emission Point Unit (EP ID)	Source Unit	Previous SO ₂ emissions (pph)	Requested SO ₂ emissions (pph)	Change (pph)
CB-02 Flare (004)	Unit 1	756	892	+ 136
CB-03 Flare (005)	Unit 3	993	857	- 136
HD-2A, B (014)	Unit 1	300	300	Unchanged
Dryers HD-3A, B (016)	Unit 3	300	300	Unchanged

Additionally, in order to maintain some flexibility in the way in which the permittee beneficially uses tail gas in the dryers, the permittee requested a reallocation of some HAP emissions from the flares to the dryers.

Emission Point Unit ID (EP ID)	Source Unit	Previous COS emissions (pph)	Requested COS emissions (pph)	Change (pph)
CB-02 Flare (004)	Unit 1, Stack 004	1.62	1.42	- 0.2
HD-3A, B (016)	Unit 3 Dryer, Stack 010	0.38	0.58	0.2

Emission Point Unit ID (EP ID)	Source Unit	Previous CS ₂ emissions (pph)	Requested CS ₂ emissions (pph)	Change (pph)
CB-02 Flare (004)	Unit 1, Stack 004	5.72	5.3	- 0.42
HD-3A, B (016)	Unit 3 Dryer, Stack 010	1.32	1.74	0.42

Emission Point Unit ID (EP ID)	Source Unit	Previous H2S emissions (pph)	Requested H2S emissions (pph)	Change (pph)
CB-02 Flare (004)	Unit 1, Stack 004	5.71	5.27	- 0.44
CB-03 Flare (005)	Unit 3, Stack 005	4.08	3.81	- 0.27
HD-2A, B (014)	Unit 1, Stack 008	1.49	1.76	0.27
Dryers HD-3A, B (016)	Unit 3, Stack 010	1.32	1.76	0.44

Modification Request on April 6, 2007:

Emission Unit: DC-1A Control Device: QC-27 Emission Point: 029

Pollutant	Existing Limitations (96 hours/yr)	Proposed Limitations (144 hours/yr)	Change (TPY)
	TPY	TPY	
CO	0.07	0.10	0.03
NOx	0.08	0.12	0.04
PM10	0.19	0.29	0.10
SO2	0.00	0.00	0.00
TSP	0.19	0.29	0.10
VOC	0.00	0.00	0.00

Emission Unit: DC-1B Control Device: QC-28 Emission Point: 030

Pollutant	Existing Limitations (96 hours/yr)	Proposed Limitations (144 hours/yr)	Change (TPY)
	TPY	TPY	
CO	0.07	0.10	0.03
NOx	0.08	0.12	0.04
PM10	0.06	0.09	0.03
SO2	0.00	0.00	0.00
TSP	0.06	0.09	0.03
VOC	0.00	0.00	0.00

Emission Unit: DC-3B Control Device: QC-32 Emission Point: 032

Pollutant	Existing Limitations (96 hours/yr)	Proposed Limitations (144 hours/yr)	Change (TPY)
	TPY	TPY	
CO	0.10	0.15	0.05
NOx	0.12	0.19	0.06
PM10	0.04	0.05	0.02
SO2	0.00	0.00	0.00
TSP	0.04	0.05	0.02
VOC	0.01	0.01	0.00

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 CO, NO_x, PM, SO₂, and VOCs, over 10 tons per year of a single HAP (carbonyl sulfide & carbon disulfide), and over 25 tons per year of aggregated 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, Cabot Corporation 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: 45CSR14 Permit requirements for major stationary sources.
 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 (<i>if any</i>)
R14-0021E	May 8, 2007	

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

N/A

Non-Applicability Determinations

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

N/A

Request for Variances or Alternatives

N/A

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:

Toby Scholl
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

Toby Scholl
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1213 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.