

# Fact Sheet



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

Permit Number: **R30-05700003-2007**

Application Received: **June 19, 2007**

Plant Identification Number: **05700003**

Permittee: **Kingsford Manufacturing Co.**

Facility Name: **Beryl Plant**

Permittee Mailing Address: **P.O. Box 464, Parsons, WV 26287**

---

Physical Location: Beryl, Mineral County, West Virginia  
UTM Coordinates: 666.0 km Easting • 4371.0 km Northing • Zone 17  
Directions: The Facility is located adjacent to WV Route 46 in Mineral County near the WV - Maryland border just west of the town of Luke, MD.

---

### Facility Description

The Kingsford Manufacturing Company Beryl Plant produces char from bark and sawdust raw materials. The bark and sawdust is sized, dried in a rotary dryer and then charred in a multi-hearth retort furnace. The dryer and the furnace air emissions are controlled by cyclone collectors which are exhausted to a common after combustion chamber (ACC) for oxidation. Air emissions from the ACC stack are subject to emissions limits in Permit R13-2117D issued pursuant to 45CSR13. The char is quenched and conveyed into covered trucks for transport to the Kingsford Parsons, WV plant for charcoal manufacturing.

Facility SIC Code: 2861 Chemicals and allied products - gum and wood chemicals.

## Emissions Summary

<b>Plantwide Emissions Summary* [Tons per Year]</b>		
<b>Criteria Pollutants</b>	<b>Potential Emissions</b>	<b>Year 2006 Actual Emissions</b>
Carbon Monoxide (CO)	28.82	1.17
Nitrogen Oxides (NO <sub>x</sub> )	182.00	54.31
Particulate Matter (PM <sub>10</sub> )	101.73	58.7
Total Particulate Matter (TSP)	172.35	79.4
Sulfur Dioxide (SO <sub>2</sub> )	42.00	20.13
Volatile Organic Compounds (VOC)**	8.10	0.35

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

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>Year 2001 Actual Emissions</b>
Methanol	4.5	0.35

*Methanol is a component of VOCs.*

\* Includes Facility Fugitive emissions and Natural Gas combustion emissions (see Tables below).

\*\* Including Gasoline tank E-05-01 PTE for VOC (0.12 TPY), Diesel Oil Tank E-05-02 PTE for VOC (0.005 TPY), and Kerosine Tank E-05-03 PTE for VOC (0.005 TPY)

### Title V Program Applicability Basis

This facility has the potential to emit 182 TPY of Nitrogen Oxides and 172.35 TPY of Particulate Matter. Due to this facility's potential to emit over 100 tons per year of these criteria pollutants, Kingsford Manufacturing Co. Beryl Plant 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:	45CSR6	Open burning prohibited.
	45CSR7	Fugitive dust, particulate matter, and visible emissions
	45CSR10	Sulfur dioxide emissions.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for sources
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
State Only:	40CFR. Part 61	Asbestos inspection and removal
	45CSR4	No objectionable odors.

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)
R13-2117D	December 10, 2002	

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**

There were the following changes to the initial Title V Permit:

- 1) Emission Unit 001-03 - Wood Pile Management: bark conveyor transfer to bark pile E-01-03 - was deleted from the Emission Units Table 1.1. because it is now owned and operated by the neighboring paper company NewPage.
- 2) Emission Unit 005-03 - Kerosene tank E-05-03 - was deleted from the Emission Units Table 1.1. because the tank was removed from the plant.
- 3) Primary Dryer Cyclone C-05, (2) Secondary Dryer Cyclones C-06 and (2) Furnace Cyclones C-07 are listed in the Emission Units Table 1.1. as production equipment, not as control devices, because their primary function is to recover products.

**3) 40CFR64 Compliance Assurance Monitoring (CAM) Plans**

In accordance with 40CFR§64.2 the CAM rule was determined to be applicable to the Rotary Wood Dryer (E-03-01) and Multi-Hearth Retort Furnace (E-03-02) controlled by After-Combustion Chamber (ACC) C-08. The Kingsford Manufacturing Company submitted CAM Plans for these units with the Title V renewal application as per 40CFR§64.5.

The ACC controls CO, PM and VOC emissions which are believed to be over 100 TPY for each pollutant before the control device. It has emission limits set forth in the permit Requirement 6.1.1. In order to insure proper combustion the ACC combustion temperature is continuously monitored by thermocouple to keep it above 1,400°F. The temperature is measured every second, every 15-seconds average temperature is calculated, and the average temperature is recorded every hour. An on-screen alarm will be initiated if during normal operations 1-hour average temperature is less then 1,450°F. An exceedance will be defined if 3-hour rolling average temperature is below 1,400°F.

The following initial permit requirements were revised to reflect the CAM applicability: Monitoring 6.2.1. and 6.2.2., and Recordkeeping 6.4.2.; new Reporting requirement 6.5.2. was added.

**Table 1 – Compliance Assurance Monitoring Approach for Rotary Wood Dryer E-03-01 and Multi-Hearth Retort Furnace E-03-02 (Pollutants: CO, PM and VOC)**

		<b>Indicator No.1</b>
I.	Indicator	ACC Combustion Temperature (Permit condition 6.2.2.)
	Measurement Approach	The temperature is measured with a Type K thermocouple. The temperature is measured every second, then averages are calculated every 15 seconds, and used to calculate hourly average temperature.
II.	Indicator Range	The ACC combustion temperature shall be maintained at or above 1,400°F to provide adequate destruction efficiencies of organic material that could otherwise condense in the atmosphere as fine particulate. An on-screen alarm is initiated if 1-hour average temperature during normal operations is less than 1,450°F. An exceedance is defined if 3-hour rolling average temperature is below 1,400°F. (Permit condition 6.2.2.).
III.	Performance Criteria	
A.	Data Representativeness	The thermocouple is located in the ACC combustion chamber (Permit condition 6.2.1.).
B.	Verification of Operational Status	Not applicable to existing non-modified monitoring equipment
C.	QA/QC Practices and Criteria	The thermocouple is to be certified by the manufacturer to be accurate within $\pm$ one (1) percent in degrees Fahrenheit. Monthly thermocouple accuracy checks will be conducted. A second thermocouple will be placed in the ACC combustion chamber and acceptance criterion will be that the two thermocouples are $\pm 50^\circ$ F (Permit condition 6.2.1.).
D.	Monitoring frequency	The temperature is measured every second, and averages are calculated every 15 seconds and data-logged.
	Data Collection Procedure.	Temperature data will be electronically datalogged. One-hour temperature averages records will be maintained on site. (Permit condition 6.4.2.)
	Averaging Period	Temperature will be averaged for every 1-hour period. One-hour temperature averages will be compared with an "excursion level" of 1,450°F. Rolling 3-hour temperature averages will be computed and compared with the exceedance level of 1,400°F

### Non-Applicability Determinations

1) Cyclones C-05, C-06 and C-07 are determined not to be subject to Compliance Assurance Monitoring (CAM) rule requirements because they are defined as inherent process equipment per 40CFR§64.1 and designed primarily to recover product.

2) Beryl Plant is not subject to Regional Haze Rule 40CFR§§51.300- 51.309 because it doesn't have PTE exceeding 250 TPY for any of affected pollutants. This determination was included in the Permit Shield (Condition 3.7.2.) per KMC request.

### **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: September 10, 2007

Ending Date: October 10, 2007

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 57<sup>th</sup> 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 Chertkovsky-Veselova  
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. 1220 • Fax: 304/926-0478

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

None.