West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

Permit Number: **R30-09300004-2014**Application Received: **June 17, 2013**Plant Identification Number: **093-00004**

Permittee: Kingsford Manufacturing Company

Facility Name: Parsons Plant

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

Physical Location: Route 219, Parsons, Tucker County, West Virginia
UTM Coordinates: 613.2 km Easting • 4326.2 km Northing • Zone 17

Directions: The Facility is located on Route 219, about 2 miles South of Parsons

Facility Description

The Kingsford Manufacturing Company Parsons Plant is a charcoal manufacturing facility. It manufactures charcoal briquets from raw materials including wood/sawdust, char produced on-site and received from the Beryl plant, coal, limestone, sodium nitrate, starch, borax, and solvent for briquets.

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

Emissions Summary

Regulated Pollutants	Potential Emissions	2012 Actual Emissions
Carbon Monoxide (CO)	22.60	8.42
Nitrogen Oxides (NO _X)	250.79	128.7
Particulate Matter (PM _{2.5})	113.99	82
Particulate Matter (PM ₁₀)	190.54	133
Total Particulate Matter (TSP)	267.32	135.95
Sulfur Dioxide (SO ₂)	64.94	15.47
Volatile Organic Compounds (VOC)	91.92	113.38 ¹

 PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2012 Actual Emissions	
Methanol	3.7	0.283	
Lead	1.48 E-02	0.51 E-02	
Total HAPs	3.72	0.284	

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

¹The higher actual VOC emissions in 2012 (and in 2011) were due to a programming error of damper operations, related to control of emissions from the Solvent Treated Briquet production process (STB), that first occurred on April 12, 2011. Consent Order CO-R30-E-2013-13 was issued on August 12, 2013 to address this violation. The Consent Order obligated the company to take measures to prevent similar situations in the future, and achieve compliance with the existing permit conditions of R14-0001D and Section 7.0 of this permit. As the result of the Consent Order issuance, two new monitoring and recordkeeping requirements were added to the permit (see item 15 of the Determination and Justification section).

Title V Program Applicability Basis

This facility has the potential to emit 250.79 TPY of Nitrogen Oxides and 190.54 TPY of PM₁₀. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Kingsford Manufacturing Co. Parsons 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: 45CSR2 PM emissions from combustion of fuel in indirect best exchanges.

indirect heat exchanger

45CSR6	Open burning prohibited.
45CSR7	Fugitive dust, particulate matter, and visible
	Emissions from manufacturing processes
45CSR10	Sulfur dioxide emissions.
45CSR11	Standby plans for emergency episodes.
45CSR13	Preconstruction permits for sources
45CSR16	Standards Of Performance For New
	Stationary 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.
45CSR34	Emission Standards For Hazardous Air
	Pollutants
40 C.F.R. Part 60, Subpart Y	Standards of Performance of
	Coal Preparation Plants
40 C.F.R. Part 60, Subpart IIII	Standards of Performance for Stationary
	Spark Ignition Internal Combustion Engines
40 C.F.R. Part 60, Subpart JJJJ	Standards Of Performance for Stationary
	Spark Ignition Internal Combustion Engines
40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous
	Air Pollutants for Stationary Reciprocating
	Internal Combustion Engines (RICE)
40 C.F.R. Part 61	Asbestos inspection and removal
40 C.F.R. Part 64	Compliance Assurance Monitoring
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
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

State Only:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-1608G	August 20, 2012	
R14-0001D	May 18, 2009	
G60-C012A	August 21, 2012	
CO-R30-E-2013-13	August 12, 2013	Closed on 11/22/2013

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

The following modifications were done to the first Title V renewal permit since it was issued on December 23, 2008:

- 1. MM01 (07/17/2009) incorporated changes to Solvent Treated Briquet (STB) VOC Emission Factor Technique (Attachment 1) based on Permit R14-0001D. Also, pressure drop ranges for CAM monitoring plan for Fabric Filters C-01, C-02 and C-03 were included based on the Fabric Filters monitoring data (as per old Requirement 8.2.6).
- 2. SM01 (01/25/2010) incorporated requirements of 45CSR13 Class II General Permit G60-C and General Permit Registration G60-C012 for Diesel Fire Pump FP-2 installed in September of 2008.
- 3. MM02 (10/01/2012) incorporated changes associated with the Permit R13-1608F for the installation of an additional fabric filter to the finishing briquet handling/packing in-feed conveyors. Also, incorporated the changes associated with the conversion of Permit R13-1608E from the old format to the new boilerplate format in R13-1608F.
- 4. MM03 (04/22/2013) incorporated changes associated with the Permit R13-1608G for replacement of the existing primary screen with a new screen, the replacement of the existing secondary screen with the existing primary screen, and for the replacement of an existing baghouse (C-11) with a larger capacity baghouse.
- 5. MM04 (04/22/2013) incorporated changes associated with the General Permit registration G-60-C012A for the installation of emergency generator E-0B-02.
- 6. Emission Units Table added modification year for the following Sources: E-01-02, E-02-09, E-02-0A. Revised unit descriptions for Sources E-03-02, E-03-03N, E-04-01, E-04-02N, and S-26 and S-35 Fuel Storage Tanks. Also, during 2008 permit renewal the wrong burner (Source ID E-07-01) was removed from the Table (original ACC burner installed in 1972 was removed instead of Wood Dryer Burner installed in 1988) this typo was corrected.
- 7. Requirement 3.1.16 was revised in order to reflect revision of 40 C.F.R. 60, Subpart Y on October 8, 2009. Also, compliance demonstration streamlining language was re-phrased for accuracy purposes. Test required per 40 C.F.R. §60.255(a) was conducted at the plant in January 2004, therefore this section was not included.
- 8. Requirement 3.1.21 revised to add Emission Point S-13.
- 9. Requirement 3.2.1 revised to delete word "normal" in relation to "facility operation".
- 10. Requirements 3.3.3 and 3.3.4 were added these testing requirements were removed during MM02 revision, but were included with this permit per company's request. For the purpose of the testing the phrase "STB operations shall not be vented through the ACC" was revised to the "STB operations shall be vented to the ACC". Also, "10% for the ACC" deviation option was added per company's request (they stated that rainy weather could cause rate variation greater than 5%).
- 11. Requirement 3.7.2 revised to reflect changes in rule applicability.
- 12. Requirement 4.1.4 re-phrased to reference requirement 3.1.21.
- 13. Requirement 5.4.1 corrected a typo ("condition 3" was changed to "condition 3.4.2").
- 14. Requirement 5.5.2 added citation for "45CSR§30-5.1.c".
- 15. Requirement 7.2.3 corrected a typo ("requirement 5.2.5" was changed to "requirement 5.2.4").
- 16. Requirements 7.2.6 and 7.2.7 added based on the Consent Order CO-R30-E-2013-13 conditions 2.B and 2.C, related to monitoring of visual indicators installed on STB fume dampers. It was discovered lately that the damper on the vent line from the STB process to the ACC had been closed thus preventing VOC emissions

from the STB process from being burned in the ACC and causing violation of VOC limits from the STB process. The cause of the problem was a mistake made during reprogramming of the system control logic leading to the situation when the control screen showed the damper located on the vent line from the STB process to the ACC open when it wasn't. There is a second dumper on the ACC Bypass Stack, and it should be closed when the first dumper is open. This damper is actuated inversely to the first damper. Per the Consent Order the company installed visual indicators that allow seeing from the ground whether dampers are open or closed. The indicators will be checked weekly, and records of the results of these checks will be kept on site (requirement 7.2.6). The company also installed an air flow sensor that will indicate (on the control system and with the alarm) the presence or absence of air flow in the ductwork from the STB process to the ACC (requirement 7.2.7). The company should keep records of every occasion when air flow was absent, and of measures taken to restore it.

- 17. Requirement 7.3.1 was revised in order to remove phrase "with the exception that STB operations shall be vented through ACC" because this condition is included in the requirement 3.3.3 (see item 10 above).
- 18. Requirement 7.4.2 revised to reflect the 45CSR30 requirement for records to be maintained on site for 5 years instead of 2 years.
- 19. Requirement 8.1.2 added reference to the Emission Points subject to this requirement and not covered by condition 3.1.21 (S-10, S-11, S-12, S-14, S-17, S-19).
- 20. Requirement 8.2.2 the following information on accuracy of pressure gauges was added: "Minimum acceptable accuracy of pressure gauges is $\pm 2\%$ of the full range".
- 21. Requirement 8.4.2 corrected typos in referenced requirements ("8.2.2 and 8.2.3" was changed to "8.2.3 and 8.2.4").
- 22. Requirement 8.5.2 added citation for "45CSR§30-5.1.c".
- 23. Requirement 9.2.1 was revised to delete phrase "for a minimum of 4 consecutive months" as it is not necessary for the required monitoring since there is no additional decrease in frequency specified after 4 months.
- 24. Requirement 9.4.2 corrected a typo ("Requirement 9.1.4" was changed to "Requirement 9.1.2").
- 25. Requirement 10.2.1 was revised to clarify monitoring approach for Waste Heat Boiler 45CSR§2-3.1 opacity limit.
- 26. Requirement 10.2.2 was deleted; information on opacity observation duration was included with requirement 10.2.1.
- 27. 40 C.F.R. 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" is applicable to the following equipment:

Engine	Design Capacity	Ignition	Use/Type	Year installed	Source of HAP emissions
E-0B-01	86 HP	Compression (CI)	(4) Emergency Flood Pumps	1998 (existing)	Area source
FP-2	420 HP	Compression (CI)	Emergency Fire Pump	2008 (new)	Area source
E-0B-02	228 HP	Spark Ignition (SI)	Emergency Generator	2013 (new)	Area source

Because of type and size of the Emergency Flood Pumps (E-0B-01), only work and management practices are applicable from Table 2d (requirement 11.1.5). Compliance should be demonstrated by recordkeeping (requirement 11.4.4) and reporting (requirement 11.5.1).

Requirement 11.1.4 was added to include 40 C.F.R. 63 Subpart ZZZZ provision applicable to the Emergency Fire Pump (FP-2). Per §63.6590(a)(2)(iii), this CI engine is considered a new unit (area source units constructed on or after June 12, 2006). Therefore, per §63.6590(c)(1), it is only subject to 40 C.F.R. 60 Subpart IIII requirements.

28. Attachment 1 was replaced with the latest version included with the revised permit R14-0001D.

Non-Applicability Determinations

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

1) From the Permit Shield (requirement 3.7.2):

Requirement	Regulatory Citation	Basis for Non-Applicability
PM mass emission limits for Waste Heat Boiler (Stack S-01-02)	45CSR§\$2 - 4, 5, 6, 8 and 9	Per 45CSR§2-11.1 if any fuel burning unit(s) has a heat input under ten (10) million B.T.U.'s per hour it will be exempt from 45CSR§§2-4, 5, 6, 8 and 9 (PM mass emission limits).
Coal Preparation and Handling Plants	45CSR5	Coal handling operations at Parsons facility (including screening, conveying, storing, and stockpiling operations) are subject to 45CSR7, therefore per 45CSR§5-2.4.b they are exempt from requirements of 45CSR5.
PM emissions from an incinerator	45CSR§6-4.1	The PM emission standard from 45CSR7 (45CSR§7-4.1) also applies to the ACC and is more stringent. Because of the "inconsistency between rules" provision in 45CSR§§6-12.1 and 7-12.1, the more stringent rule will apply and therefore the PM standard from 45CSR6 is moot and the Permit Shield applies.
Opacity limits for an incinerator	45CSR§§6-4.3and 4.4	Per 45CSR§6-12 more stringent opacity standards 45CSR§§7-3.1 and 3.2 are used.
PM emissions for wood charring and drying operations	45CSR§§7-2.39.b, c and d	Per Director's determination charring and drying operations are defined as type "a" for Beryl source, therefore they are not defined as type "b", "c" or "d" source operations for Parsons source also.
Testing, Monitoring, Recordkeeping and Reporting of Sulfur Oxides emissions		Facility's annual PTE for SO ₂ is 129,200 lbs (>500 lbs), but per 45CSR§10-10.3 partial wood combustion during the manufacture of charcoal shall be exempt from this requirement.
NESHAP standards	40CFR61	There are no affected sources at Parsons facility, therefore it is not subject to these standards with the exception of the potential applicability of 40CFR61 Subpart M in the event the plant performs any demolition or renovation projects which could disturb asbestos containing materials.
Standards of Performance for Industrial-Commercial-Institutional	40CFR60 Subpart Dc	
Steam Generating Units		Dc due to its rated heat input and installation date.

Requirement	Regulatory Citation	Basis for Non-Applicability
Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification commenced after July 23, 1984	40CFR60 Subpart Kb	Storage tanks are not subject to NSPS Subpart Kb due to size and construction date (see 40CFR60 Subpart Kb Applicability Table in the Fact Sheet for initial permit).
Fugitive emissions from material handling	45CSR17	Per 45CSR§17-6.1 if sources are subject to 45CSR7 they are exempt from the requirements of this Rule
NSR permitting for non-attainment areas	45CSR19	Parsons facility is not in affected areas
VOC emissions regulations	45CSR21	Parsons facility is not in affected areas
Emissions of toxic air pollutants	45CSR27	Parsons facility does not operate any "chemical processing units" and does not emit listed chemicals
Federal Acid Rain provisions	45CSR33 Title IV of CAAA	No affected sources at Parsons facility
Federal NESHAP Standards	40CFR63	The Parsons facility discharges less than 10/25 tpy of any single/combination of HAPs and is classified as an area source, therefore it is not subject to any NESHAP that are applicable to major HAP sources.
Boiler NESHAP	40CFR63 Subpart JJJJJJ	The Parsons plant operates a Waste Heat boiler that uses waste heat (gases from ACC) as a primary heat source, and per §63.11195(e) it is not subject to the requirements of this Subpart, because it fits the definition of a "gas fired boiler" in §63.11237. The Parsons plant ACC and auxiliary burners are also natural gas-fired and are not classified as boilers in Subpart JJJJJJ.

- 2) Compliance Assurance Monitoring (CAM) Plan there were no PSEUs added during all the modifications since the previous renewal permit was issued (December 23, 2008) that satisfied the CAM applicability criteria under 40CFR§64.2(a), therefore CAM is not applicable.
- 3) Condition 3.7.2 the following information was removed from the permit shield because 40 C.F.R. 63 Subpart ZZZZ is applicable to the Emergency Generator E-0B-02, Fire Pump FP-2, and Emergency Flood Pumps E-0B-01:

Federal MACT standards	The Parsons facility discharges less than 10 tpy of a single HAP and less than 25 tpy of aggregated HAPs,
	therefore it is not subject to these standards.

- 4) Requirement 8.2.6 was deleted as obsolete, because data collection for fabric filters C-01, C-02 and C-03 to establish the fabric filters pressure drop range for CAM plan was performed and submitted, the ranges were included in requirement 8.2.2 during permit modification MM01, and CAM monitoring already started as per 8.2.2. As the result, requirement 8.2.7 was re-numbered to 8.2.6.
- 5) Permit R13-1695 on November 8, 2013 this permit became inactive because all the equipment it covered was removed from the facility, therefore the permit was eliminated from the list of Active R13, R14 and R19 Permits (Section 1.2), and from citations in the requirements 3.1.9, 3.1.11, 3.1.14 and 9.1.2.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are revised since 2008 permit and identified in the Title V application.

Comment Period

Beginning Date: December 25, 2013 Ending Date: January 24, 2014

Point of Contact

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

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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)

On January 14, 2014 we received the following comments from Kingsford Manufacturing Co.:

- 1. <u>Title V Permit Section 1.1, Page 6</u>. The Emissions Units table lists equipment installation and modification dates. KMC requests that the "Year Installed/Modified" date for E-08-03H Packaging Scale Bin In Feed be revised from 1977 to "1977/2011". KMC installed a new fabric filter dust collector (Emission Point ID S-35) in 2011 that controls emissions from this emissions unit and therefore requests that the date be revised to reflect this modification.
- 2. Fact Sheet, page 2. The Plantwide Emissions Summary provides annual emission rates for 2012 ("2012 Actual Emissions") and states that PM10 and PM2.5 emissions were "unreported". KMC did in fact report PM10 and PM2.5 emissions for 2012 through the WV DEP SLEIS emissions inventory system. KMC reported emission rates of: PM10 133 tpy; PM2.5 82 tpy. KMC requests that the Fact Sheet emissions table be revised to reflect that PM10 and PM2.5 emissions were reported in 2012.

As the result, the following changes were made:

- 1) <u>Permit, Emission Units Table 1.1</u> added modification year "2011" for the Packaging Scale Bin In Feed (Source ID E-08-03H);
- 2) Fact Sheet, Plantwide Emissions Summary Table added 2012 Actual Emissions for PM_{2.5} and PM₁₀.