west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345
Phone: 304 926 0475 • Fax: 304 926 0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

MEMORANDUM

To: Beverly McKeone, P.E. – NSR Program Manager

From: Edward Andrews, P.E. - Engineer

Date: September 20, 2017

Subject: PD17-056 for Mountain State Carbon, LLC (009-00002)

On September 14, 2017, Mountain State Carbon, LLC (Mt. State) filed a determination request for the use of a portable screening unit to size foundry coke produce at the Follansbee Coke Plant.

Mt. State estimated the potential emissions from the proposed handing & screening operations to be 2.15 pounds of PM per hour while processing 100 tons per hour of coke without the use of any controls. Annualizing this hourly PM emission rate on the maximum operating schedule possible yields an annual PM rate of 9.42 tons per year. Mt. State based annual emissions on one battery of 73 ovens producing 8.72 tons of foundry coke per oven per day, which equates to an annualized production rate of 232,344 tons of foundry coke per year. Mt State's estimated production rate is based on a coking schedule of 48 hours for each oven.

PM_{10} and $PM_{2.5}$ emission rates were estimated in a similar manner as the PM with adjustment to the particle size multiplier (k) in the equation used to determine the emission factor for the emission from material drop points and individual screening decks. PM_{10} emissions were estimated to be 1.02 pounds per hour and 4.47 tons per year. $PM_{2.5}$ emissions are 0.15 pounds per hour and 0.66 tons per year.

The potential emissions from the proposed screening of foundry coke are less than the modification trigger threshold values of 6 pounds per hour and 10 tons per year under 45 CSR 13. There are no applicable rules or regulations that cover the sizing of coke. This writer has concluded that the proposed sizing of foundry coke at the does not require a permit under 45 CSR 13. Therefore, a no permit required letter is here by recommended by this writer for the proposed portable screening unit to Mountain State Carbon, LLC at their Follansbee Coke Plant.