

2016 ICR test data (from the SunCoke Middletown facility) that was collected using the Zinc Acetate method.³⁷ EPA acknowledges in its *Summary of Coke Ovens Risk and Technology Review: Data Summary* that “EPA abandoned the zinc acetate approach in mid-2017 due to its limited dynamic range of measurement, i.e., poor and inconsistent sample recovery.”³⁸ Proposing limits using data collected from a test method that EPA has abandoned due to poor and inconsistent performance is arbitrary.

D. EPA’s Methodology for Establishing the Proposed MACT Floor Limits for HNR HRSG Main Stacks was Flawed³⁹

1. EPA Arbitrarily Limited Its Analysis to a Small Subset of Available Test Data, and Failed to Control for Differing Oxygen Levels in the Data it Sampled

EPA incorrectly established the proposed HNR HRSG main stack emission limits using only a limited subset of the available data, thus the data set is incomplete and not representative of SunCoke’s HNR operating conditions. EPA included test data from the 2016 ICR and the 2022 ICR in its MACT floor calculations. The 2016 ICR and 2022 ICR data are very limited data set. A much larger dataset that more accurately represents trial-to-trial and plant-to-plant variations is available from compliance tests conducted on these sources in prior years. EPA provides no explanation for why it excluded this larger body of stack test data from its MACT floor calculations.

EPA used a statistical tool known as the UPL to seek to account for expected variability and uncertainty in emissions data to establish MACT floor standards.⁴⁰ *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 598 (D.C. Cir.), *on reh’g en banc*, 671 F. App’x 822 (D.C. Cir. 2016), *and on reh’g en banc in part*, 671 F. App’x 824 (D.C. Cir. 2016). EPA’s use of the limited data set and its UPL approach did not reasonably account for variability. There are too few data points for a statistically valid analysis and limit. The UPL calculation relies upon estimating the true average and true variance. While the estimation of the average can be confidently done with a small number of samples, the estimation of the variance requires a substantially larger number of samples and in particular samples that cover the range of varying factors.

EPA’s decision to base the Proposed Rule requirements on limited data is arbitrary and capricious. EPA gave no explanation for its decision to ignore relevant information provided by

³⁷ TEST REPORT FOR ICR TESTING AT SUNCOKE ENERGY, INC. FACILITIES REV. 1, Nov. 2017, AECOM Technical Services, Inc. The 2016 ICR test data that EPA used included data from SunCoke MTO. SunCoke’s test plan and test report for the 2016 ICR testing shows that it used the Zinc Acetate method for HCN.

³⁸ EPA-HQ-OAR-2003-0051-0778, EPA, Memorandum, *Coke Ovens Risk and Technology Review: Data Summary*, at 30, Table 13 (May 1, 2023).

³⁹ Although EPA defines “HNR” to include “heat and nonrecovery, or only nonrecovery, no heat,” and identifies Jewell as an HNR facility, SunCoke reminds the Agency that Jewell does not have a main stack or a HRSG, and therefore Jewell would not be subject to the proposed HRSG main stack limits. 88 Fed. Reg. at 55860, 55864, 55877. *Contra* EPA-HQ-OAR-2003-0051, EPA, Memorandum, *Coke NESHA Redline Version of Proposed Rule Changes for 40 CFR part 63, subpart CCCCC* (Jul. 1, 2023) (proposing amendments to 40 C.F.R. § 63.7297).

⁴⁰ EPA-HQ-OAR-2003-0051-0664, EPA, Memorandum, *Approach for Applying the Upper Prediction Limit to Limited Datasets* (May 1, 2023).