

Attachment 6

Protocol for Establishing Emission Limits for Electric Arc Furnaces and Heat Furnaces

As required by this Consent Decree, Nucor will be implementing process modifications and/or installing selective noncatalytic reduction (SNCR) on its electric arc furnaces (EAFs) to reduce Nitrogen Oxide (NOx) emissions. Nucor will also be installing selective catalytic reduction (SCR) or exhaust gas recirculation with reduced NOx burners (EGR/RNB) on its reheat furnaces to reduce NOx emissions. It is anticipated that these technologies will result in lower NOx emission limits for these sources. This protocol presents the approach for determining those emission limits after implementation of the applicable technologies. Any provisions of this protocol, including schedule, may be modified by written agreement of the United States and Nucor at any time.

A. Establishing Emission Limits for Electric Arc Furnaces

Following implementation of the process modifications and/or installation of Selective Noncatalytic Reduction (SNCR) at the facility, Nucor will establish an appropriate NOx emission limit for the EAFs. Nucor will monitor NOx emissions with a continuous emission monitor for a period of at least 90 days after the evaluation testing programs (see Attachments 1 and 2) have been completed. At the end of this 90 day period, Nucor may petition EPA to extend the monitoring period if the facility does not believe it has collected sufficient data to establish an emission limit that is representative of the facility's operations.

Following the completion of the monitoring period, Nucor will submit a proposed NOx emission limit to EPA for review. Nucor will also submit supporting data and calculations, including a copy of all electronic data. Following EPA and Nucor agreement on the emission limit, Nucor will submit a permit application to the appropriate agency with the proposed emission limit.

B. Establishing Emission Limits for Reheat Furnaces

Following installation of SCR or EGR/RNB on a reheat furnace, Nucor will establish an appropriate emission limit for that furnace. Nucor will monitor NOx emissions with a

continuous emissions monitor for a period of at least 10 days after the evaluation test programs (see Attachments 4 and 5) have been completed. At the end of this 10 day period, Nucor may petition EPA to extend the monitoring period if the facility does not believe they have collected sufficient data to establish an emission limit that is representative of the facility's operations.

During this monitoring period, Nucor will also monitor all furnace and control technology parameters to identify those parameters that may be used in a parametric monitoring program for compliance demonstration purposes.

Following the completion of the monitoring period, Nucor will submit a proposed NOx emission limit to EPA for review. Nucor will also submit supporting data, including a copy of all electronic data, and calculations. Nucor will also include a parametric monitoring proposal based on the information collected during the monitoring period. Following EPA and Nucor agreement upon the emission limit, Nucor will submit a permit application to the appropriate agency with the proposed emission limit.