



1996 **Title:** **Optimization of Combustion Air Delivery at Mead, Escanaba**

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ABSTRACT:

The load on a 1970 vintage recovery boiler caused accelerated fouling in the upper furnace, unstable combustion in the lower furnace, and TRS emissions that were difficult to control. Jansen Combustion and Boiler Technologies, Inc. worked with the mill to determine the best way to increase combustion air delivered at or above the liquor guns. Evaluation of several configurations by computer modeling led to the use of air nozzles on both the front and rear walls at the liquor gun level. The primary benefits of the modifications were reduced carryover, less plugging of flue gas passages, reduced TRS emissions, and more stable combustion in the lower furnace.