



1993 **Title:** **Upgraded Recovery Boiler Meets Low Air Emissions Standards**

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ABSTRACT:

In the fall of 1990, the Boise Cascade mill in International Falls, Minnesota, carried out a mill-wide modernization project. One critical element of the project was the upgrade of their recovery boiler. As a result of the recovery boiler upgrade, the mill was required to obtain a prevention of significant deterioration (PSD) air permit. A best available control technology (BACT) assessment was performed as a requirement of the PSD regulations. Ultimately, a number of more stringent air pollution emission limits were established for the boiler, and a continuous emissions monitoring system (CEMS) was purchased and installed to report daily results to the Minnesota Pollution Control Agency. This paper describes our efforts to achieve increased firing capacity in the mill's recovery boiler while meeting more severe air emissions regulations. We will show that each of the emission limits, including CO, SO₂, NO_x, TRS, and opacity, are met by the upgraded boiler, while achieving an increase in firing capacity over pre-upgrade levels of up to 40%.