

## **OPTIMAL AIR POLLUTION CONTROL**

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### **ABSTRACT**

In order to control emissions due to various sources, there are different types of control technologies that can be used. In this paper, a mathematical programming model that determines the best selection strategy is presented. The model is a mixed integer program that has as objective the minimization of the total control cost consisting of operating costs and investment costs. Various constraints are imposed on the model including a prescribed pollution reduction level and maximum budget available for investment. The model gives the optimum set of control options along with their optimum set-up times. A solution strategy that optimally solves the presented model is discussed and illustrated on two case studies.