



Project Summary

Emission Factors for Iron and Steel Sources: Criteria and Toxic Pollutants

William R. Barnard

This study provides a comprehensive set of emission factors for sources of both criteria and toxic air pollutants in integrated iron and steel plants and specialty electric arc shops (mini-mills). Emission factors are identified for process sources and process and open source fugitive emissions. The emission factors are not specific to any one facility. Emission factors for the gray iron foundries and the ferroalloy industry are not included.

This Project Summary was developed by EPA's Air and Energy Engineering Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

Introduction

The study consisted of a literature search to determine emissions and emission factors available in the literature. In addition to identifying the literature source for each emission factor, the range of values found, and the recommended best value with its rating are presented.

Recommendations

The recommendations of this study are to use AP-42* emission factors wherever possible and to use the emission factors developed for the 1985 NAPAP

emissions inventory when AP-42 emission factors are unavailable. Other work uncovered in the literature search represented older studies conducted primarily on uncontrolled sources.

Little information existed on toxic air pollutant emission factors. The toxic air pollutant emission factors reported in EPA/450/2-88/006a** should be used despite the limitations of that study. Additional work would help quantify the emissions of toxic air pollutants from the iron and steel industry.

*Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources, AP-42 (GPO 055-000-00251-7), Fourth Edition (including Supplements A and B), U.S. EPA, Research Triangle Park, NC, September 1985.

**Toxic Air Pollutant Emission Factors--A Compilation for Selected Air Toxic Compounds and Sources, EPA/450/2-88/006a (NTIS PB 89-135 644), U.S. EPA, Research Triangle Park, NC, October 1988.

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The complete report, entitled "Emission Factors for Iron and Steel Sources: Criteria and Toxic Pollutants" (Order No. PB 90-242 314/AS; Cost: \$23.00, subject to change) will be available only from:

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