

FOREWORD

In early 1998, on-going correspondence between the then Department of Environment and various foundry operators sought to clarify how waste sand should be considered under the schedule of regulated wastes. Many foundry operators were exploring potential beneficial re-use options such as composting and concrete manufacture, but the uncertainty of how the Department might consider the re-use options often caused negotiations to break down.

To deal with these barriers, a working group was formed consisting of representatives from a number of foundries as members of the Australian Industry Group, and staff of the Environmental Protection Agency (EPA). This group successfully produced a guideline entitled "Environmental Guideline - Beneficial re-use of ferrous foundry by-products - draft guideline". This guideline set out an extensive range of beneficial re-use options for each of the primary foundry by-products and set those conditions under which the EPA would be satisfied that no environmental harm would ensue. This successfully waylaid any fears of third party users who might seek EPA endorsement.

With the encouraging partnership that had already been formed with the Australian Industry Group and its members, it was considered appropriate for the working group to continue collaboration in the preparation of this Cleaner Production Manual for the Casting Industry. This was a logical next step from the end-of-pipe focus of the guideline to addressing process and waste reduction within the industry.

At the time, the EPA had just been formed. Further, within the EPA, the Sustainable Industries Division seeks to inform industry that businesses have the potential to improve environmental performance AND to increase profits. Eco-efficiency and Cleaner Production offer the means by which even minor changes in a business can realise substantial financial rewards, reduced wastes and promote effective marketing and competitive advantages.

The Sustainable Industries Division is a solutions-driven EPA initiative assisting Queensland industry achieve higher levels of environmental performance while boosting profitability and competitiveness. It has been realised by the new Division that the Australian Industry Group and other industry associations also seek to boost business profitability and competitiveness. It is the desire of the Sustainable Industries Division to develop partnerships to work more closely with these important industry assistance bodies.

The EPA, in partnership can assist business identify mutually beneficial solutions. This Cleaner Production Manual is an example of the benefits of working in partnership with industry and promises to realise considerable profits for industry in the adoption of cleaner production options. Through partnership arrangements, business assistance programs and information facilities, the Sustainable Industries Division will help industry better integrate business and environmental decision making in the achievement of eco-efficiency, innovation and business growth.

This manual forms a part of the program to accelerate the achievement of sustainable development across the State.

This manual provides information about Cleaner Production opportunities within the foundry industry, to point the way towards greater profitability and improved environmental performance. It focuses on those aspects which are most achievable in the short and medium term, and which require limited or no capital expenditure. It has been developed with small business in mind, as it is recognised that small business is unable to self-fund research and develop training programs.

The development of Cleaner Production requires an open-minded approach by industry and government to explore improvement options and overcome the inevitable barriers that must be faced. We encourage the industry to consider the ideas presented in this manual and actively evaluate relevant options that will make the Queensland foundry industry more competitive and sustainable.

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