## **FOREWORD**

The Heavy Gas Dispersion Trials were carried out at Thorney Island, U.K. between June 1982 and June 1984. The Proceedings of a Symposium on the trials, held at the University of Sheffield in April 1984, appeared as Volume 11 of the Journal of Hazardous Materials. At that time, the analysis of the results of the trials, by many of the organisations which cooperated to sponsor them, was in its early stages. In the Foreword to the Proceedings, the late Dr. A.G. Johnston expressed the hope that the Symposium would "build on the cooperative spirit. This will continue to be a necessary and valuable stimulus in the considerable task of data analysis which will be necessary if the full benefits are to be achieved." A second Symposium was organised, again at the University of Sheffield, in September 1986. The Proceedings of the Symposium are reported in this volume and represent the fulfilment of that hope. In the intervening period, the full results of the trials have been published and a considerable amount of work has been done on data analysis, comparison with mathematical models and the conduct of wind and water tunnel simulations of the trials. The availability of the trials' data and of the results of investigations now being reported consolidate the achievements of the Heavy Gas Dispersion Trials project. The effort has been considerable. Our understanding of phenomena and our ability to predict the dispersion of heavy gases have improved tremendously as a result of that effort. Further work is still required, most notably on the effects of obstructions on dispersion. It is hoped that the record presented in this volume will encourage a continuation of the endeavour.

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