



# Revalidating Process Hazard Analyses

**Walter L. Frank and David K. Whittle**

*EQE International, Inc.*



An **AIChE** Industry  
Technology Alliance

**CENTER FOR CHEMICAL PROCESS SAFETY**  
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It is sincerely hoped that the information presented in this volume will lead to an even more impressive safety record for the entire industry; however, the American Institute of Chemical Engineers, its consultants, CCPS Subcommittee members, their employers, their employers' officers and directors, Walter L. Frank, David K. Whittle, and EQE International, Inc. disclaim making or giving any warranties or representations, express or implied, including with respect to fitness, intended purpose, use or merchantability and/or correctness or accuracy of the content of the information presented in this document. As between (1) American Institute of Chemical Engineers, its consultants, CCPS Subcommittee members, their employers, their employers' officers and directors, Walter L. Frank, David K. Whittle, and EQE International, Inc. and (2) the user of this document and accompanying software, the user accepts any legal liability or responsibility whatsoever for the consequences of its use or misuse.

This book is available at a special discount when ordered in bulk quantities. For information, contact the Center for Chemical Process Safety at the address shown above.

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# Preface

The American Institute of Chemical Engineers (AIChE) has a 30-year history of involvement with process safety for chemical processing plants. Through its strong ties with process designers, builders, operators, safety professionals and academia the AIChE has enhanced communication and fostered improvement in the high safety standards of the industry. AIChE publications and symposia have become an information resource for the chemical engineering profession on the causes of accidents and means of prevention.

The Center for Chemical Process Safety (CCPS), a directorate of AIChE, was established in 1985 to develop and disseminate technical information for use in the prevention of major chemical accidents. The CCPS is supported by a diverse group of industrial sponsors in the chemical process industry and related industries who provide the necessary funding and professional guidance for its projects. The CCPS Technical Steering Committee selects the projects to be developed, with approval of the Advisory Board, and oversees the individual projects selected.

In 1992, CCPS published *Guidelines for Hazard Evaluation Procedures, Second Edition, with Worked Examples* to provide information to organizations for conducting hazard evaluations of processes handling potentially hazardous materials. While many companies had previously adopted the practice of reviewing process hazard analyses on periodic basis, there are now regulatory requirements mandating such revalidations for certain processes.

The goal of this guideline is to provide plant management, operating personnel, engineering groups, and safety professionals with supplemental information and methods to achieve well-executed revalidations, recognizing that there are many alternate routes to achieving a high level of quality in process hazard reviews.

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