1. Record Nr. UNINA9910876974003321

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Titolo	Evaluating process safety in the chemical industry : a user's guide to quantitative risk analysis / / J.S. Arendt, D.K. Lorenzo
Pubbl/distr/stampa	Arlington, Va., : American Chemistry Council New York, : Center for Chemical Process Safety, c2000
ISBN	1-282-78334-3 9786612783340 0-470-93546-4 1-59124-574-5 0-470-93545-6
Descrizione fisica	1 online resource (108 p.)
Collana	CCPS concept book
Altri autori (Persone)	LorenzoD. K <1955-> (Donald K.)
Disciplina	660/.2804
Soggetti	Chemical plants - Risk assessment
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Evaluating Process Safety in the Chemical Industry: A User's Guide to Quantitative Risk Analysis; CONTENTS; List of Figures; List of Tables; Preface; Acknowledgments; Executive Summary; Advice for the Reader; Acronyms; Glossary; 1 INTRODUCTION; 1.1. BACKGROUND; 1.2. THE PROCESS OF RISK ANALYSIS; 1.3. DEFINITION OF QRA; 1.4. MISCONCEPTIONS ABOUT QRA; 2 DECIDING WHETHER TO USE QRA; 2.1. SOME REASONS FOR CONSIDERING QRA; 2.2. TYPES OF INFORMATION AVAILABLE FROM RISK STUDIES; 2.3. CRITERIA FOR ELECTING TO USE QRA; 3 MANAGEMENT USE OF QRA; 3.1. CHARTERING THE ANALYSIS; 3.1.1. Study Objective 3.1.2. Scope3.1.3. Technical Approach; 3.1.4. Resources; 3.2. SELECTING QRATECHNIQUES; 3.2.1. Hazard Identification; 3.2.2. Consequence Analysis; 3.2.3. Frequency Analysis; 3.2.4. Risk Evaluation and Presentation; 3.3. UNDERSTANDING THE ASSUMPTIONS AND LIMITATIONS; 3.3.1. Completeness; 3.3.2. Model Validity; 3.3.3. Accuracy/Uncertainty; 3.3.4. Reproducibility; 3.3.5. Inscrutability; 4 USING QRA RESULTS; 4.1. COMPARATIVE METHODS FOR ESTABLISHING PERSPECTIVE; 4.2. FACTORS INFLUENCING RISK PERCEPTION; 4.2.1.

Type of Hazard; 4.2.2. Voluntary versus lnvoluntary; 4.2.3. Societal versus Individual
4.2.4. Public versus Employee4.2.5. High Consequence/Low Frequency versus Low Consequence/High Frequency; 4.2.6. Acute versus Latent Effects; 4.2.7. Familiarity; 4.2.8. Controllability; 4.2.9. Age of Exposed Population; 4.2.10. Distribution of Risk and Benefit; 4.3. COMMUNICATING RISK; 4.3.1. Accept and lnvolve the Public as a Legitimate Partner; 4.3.2. Plan Carefully and Evaluate Your Efforts; 4.3.3. Listen to People's Specific Concerns; 4.3.4. Be Honest, Frank, and Open; 4.3.5. Coordinate and Collaborate with Other Credible Sources; 4.3.6. Meet the Needs of the Media
4.3.7. Speak Clearly and with Compassion4.4. PITFALLS IN USING QRA RESULTS; 5 CONCLUSIONS; References; Suggested Additional Reading

Sommario/riassunto

Quantitative Risk Analysis is a powerful tool used to help manage risk and improve safety. When used appropriately, it provides a rational basis for evaluating process safety and comparing alternative safety improvements. This guide, an update of an earlier American Chemistry Council (ACC) publication utilizing the ""hands-on"" experience of CPI risk assessment practitioners and safety professionals involved with the CCPS and ACC, explains how managers and users can make better-informed decisions about QRA, and how plant engineers and process designers can better understand, interpret and use