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Nota di contenuto	Recognizing Catastrophic Incident Warning Signs in the Process Industries; CONTENTS; List of Tables; List of Figures; Files on the Web Accompanying This Book; Acknowledgments; Foreword; Preface; 1 INTRODUCTION; 1.1 Process safety management; 1.1.1 Identifying process safety management system deficiencies; 1.2 Normalization of deviance; 1.3 A strategy for response; 1.4 Maintaining organizational memory and a healthy sense of vulnerability; 1.5 Risk Based Process Safety; 1.6 Our target audience; 1.7 How to use this book; 1.8 Case study - Toxic gas release in India; 2 INCIDENT MECHANICS 2.1 Incidents do not just happen2.2 Incident models; 2.2.1 The difference between incidents and catastrophic incidents; 2.2.2 The

Swiss cheese incident model; 2.2.3 The bonfire incident analogy; 2.2.4 The dam incident analogy; 2.2.5 The iceberg incident analogy; 2.2.6 Incident trends and statistics; 2.2.7 Root cause analysis; 2.2.8 Multiple root cause theory; 2.3 Case study - Benzene plant explosion in China; 3 LEADERSHIP AND CULTURE; 3.1 How does leadership affect culture?; 3.1.1 Communication; 3.1.2 Operational discipline; 3.1.3 Process safety culture
3.1.4 Process safety versus occupational safety3.2 The leadership and culture related warning signs; 3.2.1 Operating outside the safe operating envelope is accepted; 3.2.2 Job roles and responsibilities not well defined, confusing, or unclear; 3.2.3 Negative external complaints; 3.2.4 Signs of worker fatigue; 3.2.5 Widespread confusion between occupational safety and process safety; 3.2.6 Frequent organizational changes; 3.2.7 Conflict between production goals and safety goals; 3.2.8 Process safety budget reduced; 3.2.9 Strained communications between management and workers
3.2.10 Overdue process safety action items3.2.11 Slow management response to process safety concerns; 3.2.12 A perception that management does not listen; 3.2.13 A lack of trust in field supervision; 3.2.14 Employee opinion surveys give negative feedback; 3.2.15 Leadership behavior implies that public reputation is more important than process safety; 3.2.16 Conflicting job priorities; 3.2.17 Everyone is too busy; 3.2.18 Frequent changes in priorities; 3.2.19 Conflict between workers and management concerning working conditions
3.2.20 Leaders obviously value activity-based behavior over outcome-based behavior3.2.21 Inappropriate supervisory behavior; 3.2.22 Supervisors and leaders not formally prepared for management roles; 3.2.23 A poorly defined chain of command; 3.2.24 Workers not aware of or not committed to standards; 3.2.25 Favoritism exists in the organization; 3.2.26 A high absenteeism rate; 3.2.27 An employee turnover issue exists; 3.2.28 Varying shift team operating practices and protocols; 3.2.29 Frequent changes in ownership; 3.3 Case study - Challenger space shuttle explosion in the United States

4 TRAINING AND COMPETENCY

Sommario/riassunto

"This book provides guidance on characterizing, recognizing, and responding to warning signs to help avoid process incidents and injuries before they occur. The guidance can be used by both process safety management (PSM) professionals in evaluating their processes and PSM systems as well as for operators who are often the frontline defense against process incidents. Warning signs may consist of process deviations or upsets, instrumentation warnings or alarms, past operating history and incidents, observable problems such as corrosion or unusual odors, audit results indicating procedures are not being followed, or a number of other indicators. Filled with photos and practical tips, this book will turn anyone in a process plant into a hazard lookout and will help prevent potential incidents before they turn into catastrophic events"--
