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Nota di contenuto	Cover; Contents; Preface; Acknowledgments; 1. Perspective, Perspective, Perspective; Introduction; The Media Rarely Focuses on the Benefits of the Chemical Industry; A Glance at the History of Chemical Manufacturing before the Industrial Revolution; The Modern Industrial Chemical Industry Modifies Our Way of Living; Risks Are Not Necessarily How They Are Perceived; Plant Employee Safety versus Life-style Choices; The Chemical Industry's Excellent Safety Record; Who Has the Most Dangerous Jobs?; Just How Dangerous Is It to Work in a U.S. Chemical Plant? Just How Dangerous Is It to Work in a Chemical Plant in the United Kingdom?Fatal Risks Data for Various Activities in the United Kingdom; How Are the Chemical and Refinery Industries Doing when It Comes to Major Losses?; 2. Good Intentions; Modifications Made with Good Intentions; A Tank Truck Catastrophically Fails; Siphoning Destroys a Tender Tank; Tank Roof Splits from Overfilling; A Well-Intended Change Yields a Storage Tank Collapse; A Water Drain Line Is Altered and a Reactor Explodes; An Air System Is Improved and a Vessel Blows Up A New Air System Improved Economics, but Jeopardized SafetyAnother

Incident with Nitrogen Backup for a Compressed Air Supply; The Hazards of Nitrogen Asphyxiation; Concerns for Safety on a Refrigerated Ethylene Tank; Beware of Impurities, Stabilizers, or Substitute Chemicals; Good Intentions on Certain New Protection Systems Lead to Troubles; A Gas Compressor Is Protected from Dirt, But the Plant Catches Fire; The Lighter Side; Another Good Intentions Project: New Tank Are Destroyed and the Neighborhood is Disrupted Another Tragic Incident Involving Hydrogen Sulfide Takes the Lives of Two WorkersClosing Thoughts on Sewers; A Review of Good Intentions; 3. Focusing on Water and Steam: The Ever-Present and Sometimes Evil Twins; A Hydrotest Goes Awry; A Flooded Column Collapses as Water Is Being Drained from the System; Water Reacting with Strong Chemicals; Easy-to-Use Steam Heat Can Push Equipment beyond Safe Design Limits; Heating Water in a Confined System; Steam Condenses and a Mega-Vessel Is Destroyed During Commissioning; A Tragedy Develops When Hot Oil Is Pumped upon a Layer of Water
4. Preparation for MaintenanceSome Problems When Preparing for Maintenance; A Tank Vent Is Routed to a Water-Filled Drum to "Avoid" Problems; Preparing to Paint Large Tanks; Preparing a Brine Sludge Dissolving System for Maintenance; What Happened in the Brine System?; A Violent Eruption from a Tank Being Prepared for Maintenance; An Explosion While Preparing to Replace a Valve in an Ice Cream Plant; A Chemical Cleaning Operation Kills Sparrows, But Improves Procedures; Other Cleaning, Washing, Steaming, and Purging Operations; A Tragedy When Preparing for Valve Maintenance
A Review of Changes Made to Prepare for Maintenance

Sommario/riassunto

Gives insight into eliminating specific classes of hazards, while providing real case histories with valuable messages. There are practical sections on mechanical integrity, management of change, and incident investigation programs, along with a long list of helpful resources. New chapter in this edition covers accidents involving compressors, hoses and pumps.* Stay up to date on all the latest OSHA requirements, including the OSHA required Management of Change, Mechanical Integrity and Incident Investigation regulations.* Learn how to eliminate hazards in the design, oper