

19th Annual International Conference

Emergency Planning Preparedness, Prevention & Response

June 29, 30 and July 1, 2004 Orlando, Florida

Conference Supporters

Center for Chemical Process Safety of the American Institute of Chemical Engineers American Chemistry Council Canadian Chemical Producers' Association European Process Safety Centre Health and Safety Executive of the U.K. Occupational Safety and Health Administration Synthetic Organic Chemical Manufactures Association, Inc. U.S. Chemical Safety & Hazard Investigation Board U.S. Environmental Protection Agency Office for Emergency Planning, Preparedness, and Response This page intentionally left blank

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Publications Available from the

CENTER FOR CHEMICAL PROCESS SAFETY of the AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

3 Park Avenue, New York, NY 10016-5991 212-591-7319 ccps@aiche.org

CCPS Guidelines Series

Guidelines for Maintenance and Mechanical Integrity Guidelines for Safe Handling of Powders and Bulk Solids Guidelines for Investigating Chemical Process Incidents, second edition Guidelines for Facility Siting and Layout Guidelines for Fire Protection in Chemical, Petrochemical, and Hydrocarbon Processing Facilities Guidelines for Process Safety in Outsourced Manufacturing Operations Guidelines for Process Safety in Batch Reaction Systems Guidelines for Chemical Process Quantitative Risk Analysis, 2nd Edition Guidelines for Consequence Analysis of Chemical Releases Guidelines for Pres sure Relief and Effluent Handling Systems Guidelines for Design Solutions for Process Equipment Failures Guidelines for Safe Warehousing of Chemicals Guidelines for Postrelease Mitigation in the Chemical Process Industry Guidelines for Integrating Process Safety Management, Environment, Safety, Health, and Quality Guidelines for Use of Vapor Cloud Dispersion Models, Second Edition Guidelines for Evaluating Process Plant Buildings for External Explosions and Fires Guidelines for Writing Effective Operations and Maintenance Procedures Guidelines for Chemical Transportation Risk Analysis Guidelines for Safe Storage and Handling of Reactive Materials Guidelines for Technical Planning for On-Site Emergencies Guidelines for Process Safety Documentation Guidelines for Safe Process Operations and Maintenance Guidelines for Process Safety Fundamentals in General Plant Operations Guidelines for Chemical Reactivity Evaluation and Application to Process Design Tools for Making Acute Risk Decisions with Chemical Process Safety Applications Guidelines for Preventing Human Error in Process Safety Guidelines for Evaluating the Characteristics of Vapor Cloud Explosions, Flash Fires, and BLEVEs Guidelines for Implementing Process Safety Management Systems Guidelines for Safe Automation of Chemical Processes Guidelines for Engineering Design for Process Safety Guidelines for Auditing Process Safety Management Systems Guidelines for Investigating Chemical Process Incidents Guidelines for Hazard Evaluation Procedures, Second Edition with Worked Examples Plant Guidelines for Technical Management of Chemical Process Safety, Revised Edition Guidelines for Technical Management of Chemical Process Safety Guidelines for Process Equipment Reliability Data with Data Tables Guidelines for Safe Storage and Handling of High Toxic Hazard Materials Guidelines for Vapor Release Mitigation

CCPS Concept Series

Safe Use of Glassed Equipment Understanding Explosions Essential Practices for Managing Chemical Reactivity Hazards Deflagration and Detonation Flame Arresters Making EHS an Integral Part of Process Design Revalidating Process Hazard Analyses Electrostatic Ignitions of Fires and Explosions Evaluating Process Safety in the Chemical Industry Avoiding Static Ignition Hazards in Chemical Operations Estimating the Flammable Mass of a Vapor Cloud RELEASE: A Model with Data to Predict Aerosol Rainout in Accidental Releases Practical Compliance with the EPA Risk Management Program Local Emergency Planning Committee Guidebook: Understanding the EPA Risk Management Program Rule Inherently Safer Chemical Processes: A Life-Cycle Approach Contractor and Client Relations to Assure Process Safety Understanding Atmospheric Dispersion of Accidental Releases Expert Systems in Process Safety Concentration Fluctuations and Averaging Time in Vapor Clouds

CCPS Conference Proceedings

CCPS 2004 International Conference on Emergency Planning: Preparedness, Prevention and Response
CCPS 2003 International Conference on Managing Chemical Reactivity Hazards in High Energy Release Events
Proceedings of Loss Prevention Symposia and CCPS International Conferences, 2nd ed.
Center for Chemical Process Safety International Conference and Workshop: Risk, Reliability, and Security, 2002
Center for Chemical Process Safety International Conference and Workshop: Making Process Safety Pay—The Business Case, 2001
Center for Chemical Process Safety International Conference and Workshop: Process Industry Incidents—Investigation Protocols, Case Histories, Lessons Learned, 2000
Proceedings of the International Conference and Workshop on Modeling the Consequences of Accidental Releases of Hazardous Materials, 1999
Proceedings of the International Conference and Workshop on Reliability and Risk Management, 1998

Proceedings of the International Conference and Workshop on Risk Analysis in Process Safety, 1997

- Proceedings of the International Conference and Workshop on Process Safety Management and Inherently Safer Processes, 1996
- Proceedings of the Inter national Conference and Workshop on Modeling and Mitigating the Consequences of Accidental Releases of Hazardous Materials, 1995

Proceedings of the International Symposium and Workshop on Safe Chemical Process Automation, 1994

Proceedings of the International Process Safety Management Conference and Workshop, 1993

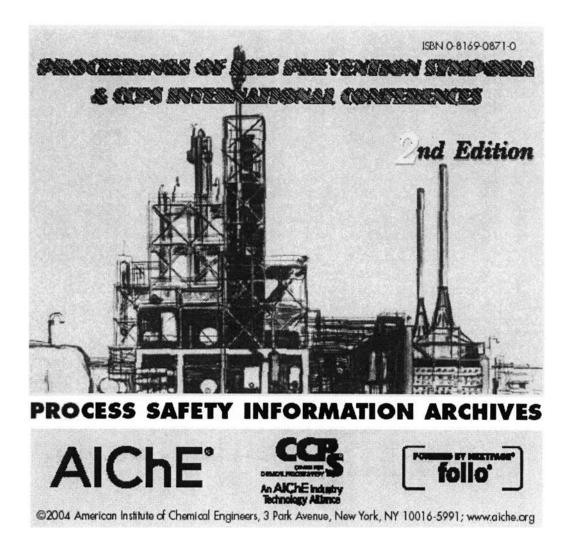
Proceedings of the International Conference on Hazard Identification and Risk Analysis, Human Factors, and Human Reliability in Process Safety, 1992

Proceedings of the International Conference and Workshop on Modeling and Mitigating the Consequences of Accidental Releases of Hazardous Materials, 1991

Other CCPS Publications and Products

Safety Alert: A Checklist for Inherently Safer Chemical Reaction Process Design and Operation, March 1, 2004 Safety Alert: Interface Management: Effective Communication to Improve Process Safety, March 1, 2004 ProSmart: Process Safety Measurement Software The Business Case for Process Safety (Booklet and presentation) Reactive Chemicals – What You Need to Know The Process Safety Beacon – Monthly lessons for plant operators Process Safety Incident Database Process Equipment Reliability Database

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It is sincerely hoped that the information presented in this document will lead to an even more impressive safety record for the entire industry; how ever, neither the American Institute of Chemical Engineers, its consultants, CCPS Technical Steering Committee and Sub committee members, their employers, their employers' officers and directors warrant or represent, expressly or by implication, the correctness or accuracy of the content of the information presented in this document. As between (1) American Institute of Chemical Engineers, its consultants, CCPS Technical Steering Committee and Sub committee members, their employers, their employers' officers and directors and (2) the user of this document, the user accepts any legal liability or responsibility what so ever for the consequence of its use or misuse.

Table of Contents

Emergency Response Plenary Session	page
Three Incidents: Tank Truck Explosion, Television Interview Railcar Fire, and Intentional Destruction of Acrylic Acid Railcar Using "Vent and Burn" Bob Rosen	5
World Wide Electronic Specialty Gas Emergency Response Program	9
Eugene Y. Ngai Unplanned Shutdown Plus Lack of Knowledge Equals Incidents Albert Ness	21
Community Involvement Plenary Session	page
Community Involvement Requirements for the Albertan Upstream Petroleum Industry Gary L. Neilson, P. Phys	31
Existing Side-By-Side: A Look at Community Alert & Emergency Response Issues in the Petro-Chemical Industry	53
Johnnie A. Banks Joint Leveraging of Industrial and Community Assets: A Partnership Between Industry and the Community to Improve Emergency Response Capabilities Max E. Middleton Trash to Treasures Ted Low, Kris Smith	67
Liquefied Natural Gas Issues Plenary Session	page
Safety and Fire Protection Consideration for LNG Terminals John A. Alderman	79
Blast Wave Damage to Process Equipment as a Trigger of Domino Effects E. Salzano, V. Cozzani	101
LNG Terminal Operations Hazard Zones Robin Pitblado	115
International Issues Plenary Session	page
Emergency Response of Toxic Substances in Taiwan: The System and Case Studies Jeng-Renn Chen, Chung-Hsun Hung, K. S. Fan, Ta-Cheng Ho, Fan-Lun Chen, J. J. Horng, Wen-Der Chen, Shun-Chin Ho	119
Improved Safety at Reduced Operating Costs in a German Chemical Plant W. Steinert, M. Begg, R. von Dincklage	131
Active Shooter Table Top Exercise Process for Schools Larry G. Holloway	145

Consequence Assessment Plenary Session	page
Applying Inherent Safety to Mitigate Offsite Impact of a Toxic Liquid Release Douglas J. Ferguson	167
Extended Indoor Explosion Model with Vertical Concentration Profiles and Variable Ventilation Rates	171
John Woodward, J. Kelly Thomas Accounting for Dynamic Processes in Process Emergency Response Using Event Tree Modeling	197
Raghu Raman Fuzzy Logic Methodology for Accident Frequency Assessment in Hazardous Materials Transportation	215
Yuanhua Qiao, Michela Gentile, M. Sam Mannan	
Case Histories I Plenary Session	page
Development of Detailed Action Plans in the Event of a Sodium Hydride Spill/Fire Claire Fluegeman, Timothy Hilton, Kenneth P. Moder, Robert Stankovich	227
System Improvements Utilizing FMEA and Fault Tree Analysis Tracy Whipple, Michelle Roberson	235
Lessons from Grangemouth: A Case History Michael Broadribb, William Ralph, Neil Macnaughton	243
Transportation and Value Chain Plenary Sessions	page
A Graphical Method for Planning Security Vulnerability Analyses of Transportation and Value-Chain Activities	263
Michael Hazzan, Irene Jones Emergency Preplanning in Pipeline Construction	277
Chuck Goode, Tim Brabazon Reducing Value Chain Vulnerability to Terrorist Attacks A. M. (Tony) Downes	285
Case Histories II Plenary Session	page
Lessons Learned from a Major Accident Involving Uncontrolled Molten Sodium Release A. Wilson, R. De Cort, W. Crumpton	301
Emergency Response to a Non-Collision HAZMAT Release from a Railcar R. A. Ogle, D. R. Morrison, M. J. Viz	311
CSB Incident Investigation John B. Vorderbrueggen	317
Layer of Protection Analysis Plenary Session	page
Managing the Financial Risks of Major Accidents Luke Chippindall, Dennis Butts	321
Initiating Event Frequency Case Study: Electrolytic Cell Process Stanley Urbanik	337
Use of Layer of Protection Analysis (LOPA) within The Dow Chemical Company Fim Overton, Tim Wagner	347

Legal and Regulatory Issues Plenary Session	pag
Implementing Personnel and Organizational Management of Change (P&O MOC) Processes Frank Broussard, Heather Harriss	35
Major Hazard Control in Canada: A Change in the Regulatory Landscape Graham D. Creedy, John S. Shrives, Gerry Phillips	37:
Defending OSHA Facility Siting Citations Mark S. Dreux	38:
The ATEX Directives: Explosion Safety and Regulation – The European Approach N. H. A. Versloot, A. J. J. Kelin, M. De Maaijer	389
Poster Session	pag
Thermal Stability of Materials During Storage and Transport Bob Venugopal	40
Theory of Incident and its Prediction in the Process Industry Jeng-Renn Chen	41

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20th Annual CCPS International Conference

April 12 – 14, 2005 at the Hyatt Regency, Atlanta, Georgia

Call for Papers

Risk Management: The Path Forward

The Center for Chemical Process Safety was formally chartered by AIChE on March 25, 1985, following preliminary discussion on February 26 with seventeen senior executives from thirteen major chemical and petroleum companies. While the immediate driving force was the Bhopal incident of December 1984, CCPS in concert with industry envisioned a broad and far reaching mission to advance the state-of-the-art process safety technology and management practices.

Looking backward over the intervening three decades much has transpired.

- Mergers, acquisitions, and globalization have transformed the industry.
- Security has become a watchword and a major government agency has been created to address its issues.
- Regulatory oversight has increased by an order of magnitude.
- Process monitoring capability (i.e. data acquisition and storage) has increased exponentially according to Moore's Law.
- CCPS has become a vibrant organization with broad industry and government support.

From the perspective of April 2005, what has been accomplished?

- Have process safety incidents been reduced?
- Do regulations address the right issues and are they cost effective?
- Is security sufficient to prevent successful terrorist acts, and have the right scenarios been addressed?
- Has enhanced process monitoring led to superior process control?
- Are we better and can we prove it?

Looking forward and recognizing that resources both financial and human are limited where should industry and government focus?

Proposed session titles and topics include:

- Practical measurement of performance. What is the slope?
- Managing for better results with 21st century tools and resources.
- Case histories and lessons learned.
- LNG: Issues on LNG transportation and modeling.
- Risk analysis: How risk is quantified considering estimates of consequences and frequencies.
- Risk assessment: The process by which the results of risk analysis are used to make decisions.
- Risk management: The systematic application of management practices to the task of controlling risk to protect employees, the public, the environment and company assets.
- Building process safety culture.
- Human factors.
- Inherently safer technology.
- Process/equipment integrity.
- Enhanced process measurement and control.

For more information:

Call Karen Person at (212) 591-7319 or e-mail <u>karep@aiche.org</u> ABSTRACTS MUST BE RECEIVED NO LATER THAN OCTOBER 1, 2004 To submit your abstract, please e-mail <u>ccpsicw@aiche.org</u>. Visit <u>http://www.aiche.org/ccps/icw</u> In preparing for battle I have always found that plans are useless, but planning is indispensable.

Dwight D. Eisenhower

Emergency n. a situation requiring immediate action. Plan n. a strategy worked out in advance of an action.

We all know emergencies can wreak havoc on communities, industry, and governments; none of us has a crystal ball that can predict when the next accident or emergency will occur. We have tools, however, to help us understand the risks we face and we can undoubtedly define strategies to anticipate the actions needed when such an event occurs. As a result, the negative impact can be reduced or eliminated.

There are two goals for those responsible for emergency planning. The first goal, of course, is to prevent emergencies from happening. The second goal is to be prepared for them when they do occur. A timely response reduces the impact of an emergency, which is why planning, training, and practice drills are necessary. We all know of events that could have been lessened by preplanning, or that were minimized because of the capable actions of the first responders. We are also obligated to communicate with the communities and government agencies that grant us permission to operate our facilities.

The theme for the 19th Annual CCPS International Conference is Emergency Planning, Preparedness, Prevention, and Response. Included are sessions on emergency planning and response, community involvement, consequence assessment, transportation, layers of protection analysis, and several case histories. Different perspectives and experiences from industry, government, and academia are offered in the spirit of learning and sharing knowledge. Hopefully, these ideas will help us in our continuing efforts to make our facilities and communities safer, cleaner, and more secure.

> Karen Tancredi DuPont Wilmington, Delaware

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