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**EPA Perspective on
Lessons Learned from the Joint Accident Investigations by
OSHA and EPA**

**R. Craig Matthiessen
U.S. Environmental Protection Agency
401 M Street, SW MC-5104
Washington, D.C. 20460**

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Abstract

In 1995, the Administration asked EPA and OSHA, under their own statutory authorities, to undertake investigations to determine the root causes of chemical accidents and to issue public reports containing

recommendations on what government, industry, and other stakeholders could do to prevent similar accidents from occurring in the future. These functions are similar to some of the responsibilities of the Chemical Safety and Hazard Investigation Board created by the Clean Air Act Amendments of 1990. Since that time, OSHA and EPA have conducted several joint and separate investigations. This paper will describe the joint program, some of the lessons learned from the accidents and the investigations, and actions EPA has taken as a result, and provide an update on the next steps for this program in conjunction with the newly funded Chemical Safety and Hazard Investigation Board.

Introduction

Most process safety professionals agree that a key component of successful chemical accident prevention is an understanding of the underlying technical reasons why accidents occur. Industry has a fundamental responsibility to apply the lessons learned from past accidents to prevent future events. A critical mission, and a responsibility imposed by the Clean Air Act Amendments of 1990, for EPA is protection of public health and the environment from the harm associated with accidental chemical releases. Consequently, EPA believes it is essential to understand why accidents occur and to take appropriate action to share and apply the lessons learned. Indeed, the public demands the accountability of industry and government after accidents occur. Since EPA has been, and will be, held accountable for accident prevention, what action has EPA taken, and what role should it play in the future in understanding the causes of chemical accidents and preventing their occurrence?

(Presentation Points)

Agenda:

- Background
- EPA's Chemical Accident Investigation Team
- Joint Investigations with OSHA
- Investigation Process and Findings
- Future Steps

Background:

- Chemical Safety Audit Program (CSA)
- Accidental Release Information Program (ARIP)

- Risk Management Program Development
- Participation in Accident Investigations

EPA's Chemical Accident Investigation Team (CAIT):

- Key Investigations Begun in 1995
- Official Team Developed
- Investigators and Support Personnel (HQ and Regions)
- Acquiring Technical Expertise
- Training

Joint Investigations with OSHA:

- Established MOU
- Development of Protocol
- Information and Expertise Sharing
- Positive Working Relationship

Investigation Process:

- Rapid Deployment
- Information and Evidence Collection
- Analysis
- Report Preparation
- Confidential Information Clearance
- Issue Report or Alerts
- Expert Review

Investigations:

- Two Reports Complete (Terra and Napp)

- Underway:

Pennzoil, Powell-Duffryn Terminals Inc.,
Tosco, Chief Supply, Surpass Chemical, BPS
Inc., Shell Chemical, Accra Pac, Georgia
Pacific

- Alerts:

Vessel Failure, Lightning Protection, Carbon
Adsorption, Ammonium Nitrate, Shaft
Blowouts

Some Interesting Findings:

- For EPA: The Investigation Process

- For Industry:

- Full Understanding of Hazards

- Reliance on Incomplete Information

- Integration of Pollution Control

Future Steps:

- More to Learn

- Room for Improvement

- Role in Accident Prevention, Outreach, Information Sharing

- Regulatory and Non-Regulatory

- Work Closely with the Chemical Safety Board

- Develop MOU

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