Safety Topic – The Safety Culture

March 23, 2005:

- BP refinery in Texas City, TX was starting isomerization unit
- Sequence of events
  - The Raffinate Splitter tower was over-filled completely with liquid
  - Liquid in the overhead flowed through PSVs to the nearby blowdown drum
  - Blowdown drum overflowed
  - Liquid hydrocarbon sprayed throughout the area

- The hydrocarbon cloud was ignited by exhaust from an idling truck - the resulting vapor cloud explosion killed 15 and injured 170
Safety Topic – The Safety Culture

- Investigated by BP, the US Chemical Safety Board, & an independent panel headed by James A. Baker III
- The US Chemical Safety Board concluded that the primary cause of the accident was a total breakdown in the safety culture at BP:
  - In the previous 30 years, the facility had experienced 23 fatalities – three fatalities in 2004 alone
  - Management objective was to maintain production with minimum cost expenditure; critical maintenance was never performed
  - Operators routinely ignored written operating procedures during startup
  - Instruments were repeatedly reported as malfunctioning, and the resulting work orders were cleared without repairing the instruments
  - Temporary trailers were erected near the Isomerization unit without any safety review

1 Former White House Chief of Staff, U.S. Secretary of State, U.S. Secretary of Treasury
Safety Topic – The Safety Culture

• Legal actions
  - September 2005: In a settlement agreement, OSHA fines BP record $21.3 million & charges it with 300 health and safety violations
  - October 2007: BP agrees to resolve criminal investigation by pleading guilty to a felony violation of the Clean Air Act – $50 million fine, serve three years' probation, & comply with terms of OSHA settlement
    - Blast victims challenge fine as inadequate
  - October 2009: OSHA proposes to fine BP $87 million for the alleged settlement violations
    - July 2010: settled 270 allegations & paid $50.6 million & continued to contest $30.7 million of this fine
  - July 2012: $13 million fine to settle 409 allegations
    - Was to resolve final $30 by end of 2012
  - Ultimately refinery sold to Marathon Petroleum