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AMOG is a leading global solutions provider to the energy, resources, defence, rail, and maritime construction industries.

Is the industry rushing towards a safety fallout?

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24th August 2022

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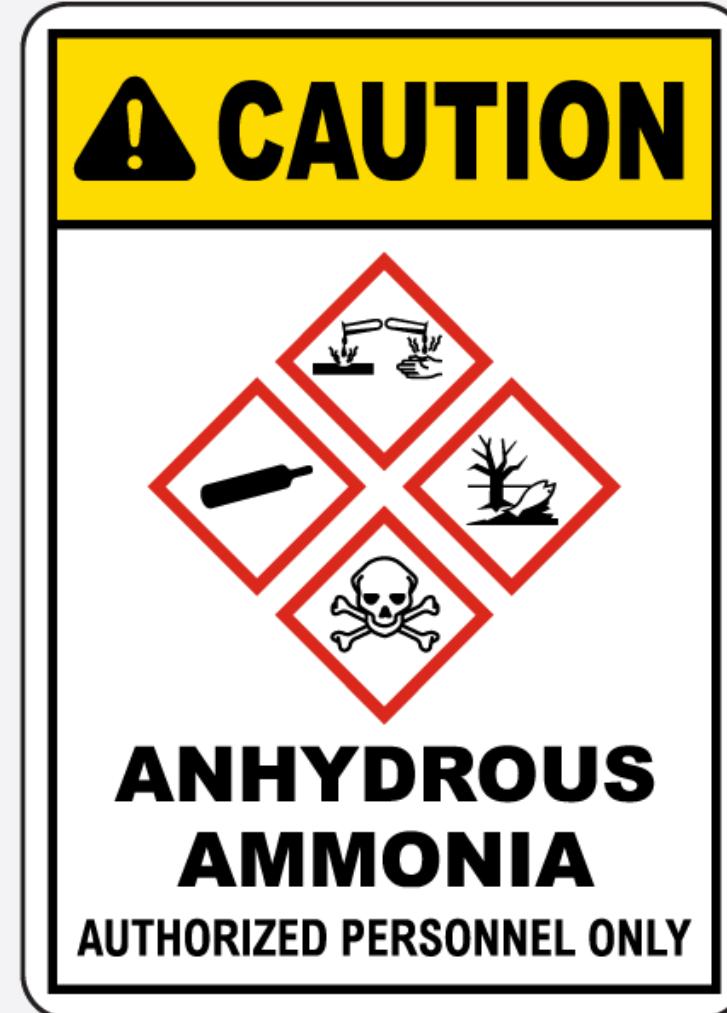
**We solve complex, challenging engineering problems...
anywhere in the world**

- > Marine & Offshore Engineering
 - Concept development
 - Mooring design
 - Export systems & pipelines, etc.
- > Technical Safety
 - Formal safety assessments
 - Safety Cases for Major Hazard Facilities
 - Quantitative risk analysis (QRA), etc.
- > Structural Engineering
 - Condition monitoring
 - Failure analysis & investigation, etc.
- > Unique mix of skills, experience & industry sectors
 - Offshore & Marine
 - Onshore processing facilities
 - Ports

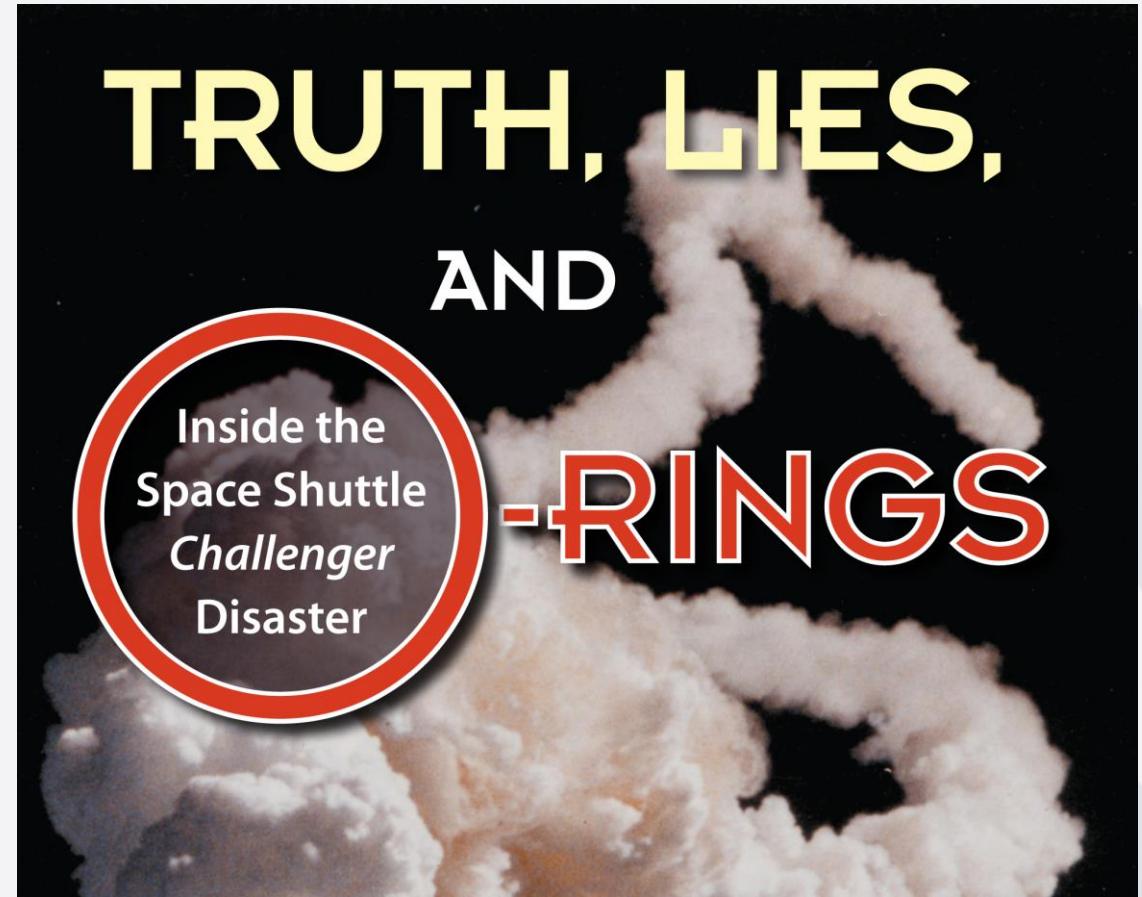


Heightened interest in Ammonia as a clean fuel / Hydrogen carrier

- > H331 - Toxic if inhaled
- > H400 - Very toxic to aquatic life
- > H221 - Flammable gas
- > H280 - Contains gas under pressure;
may explode if heated
- > H314 - Causes severe skin burns and
eye damage
- > EUH071 - Corrosive to the respiratory
tract



An industry in a rush

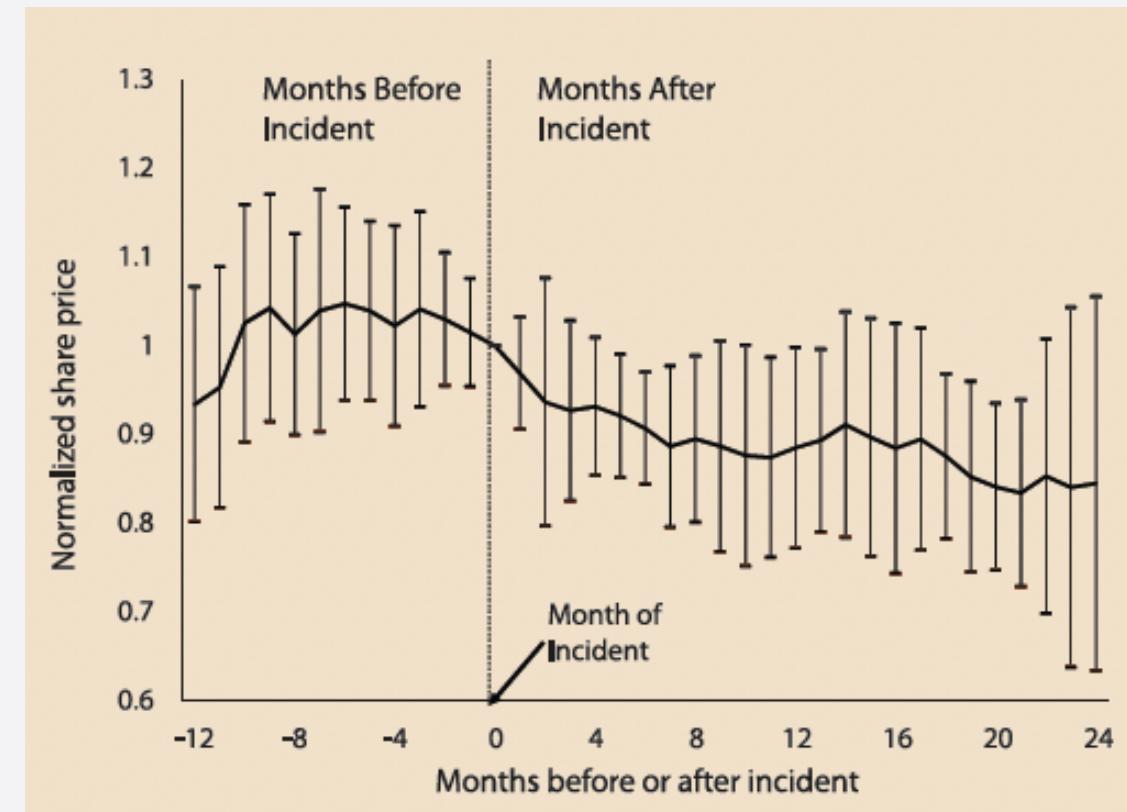


Bottom dollar price



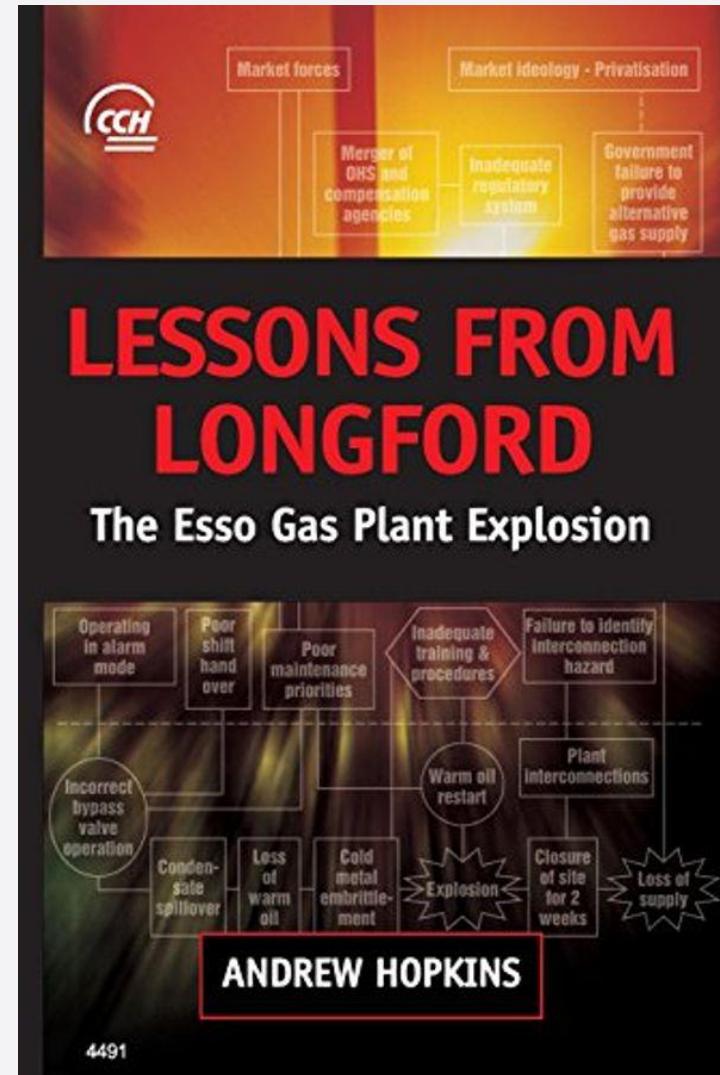
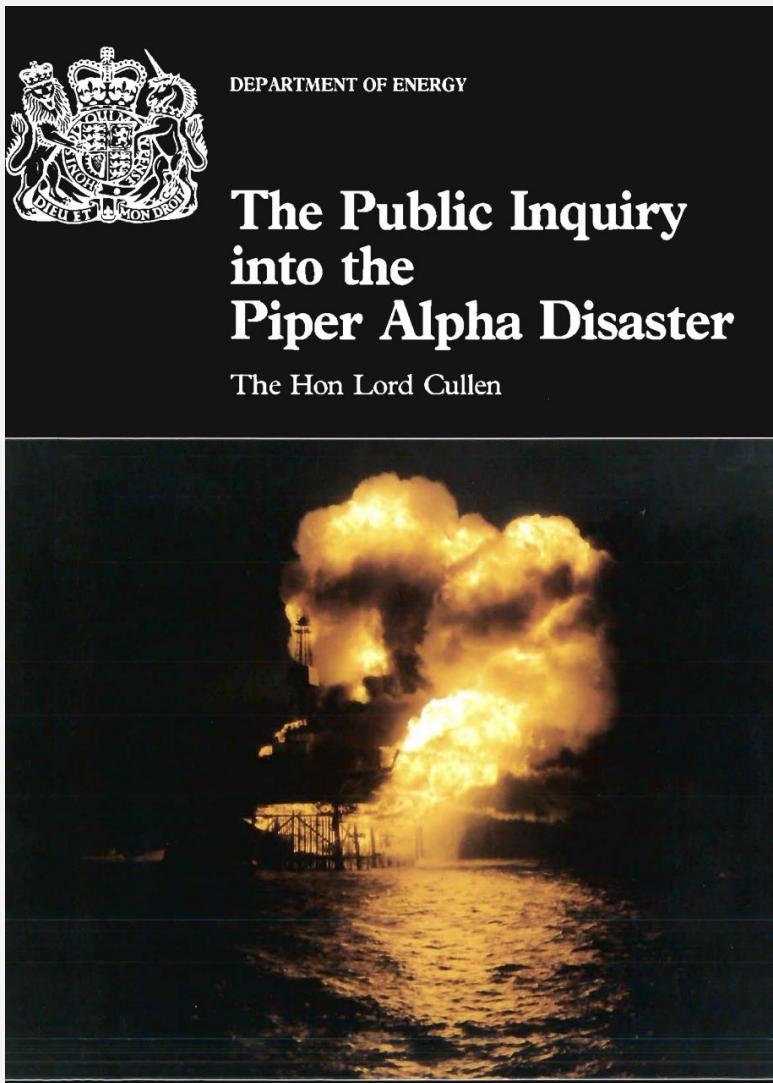
Incidents significantly affect companies
(when they survive it)

UNION CARBIDE

OXY Occidental Petroleum

Share price compared to month-end before incident
(data from Germany, India, Japan and USA), (CCPS, 2018)

Incidents affect the entire industry



Incidents affect the entire industry (contd.)



Words for the wise

- > You're a champion for the hopes of future generations
- > Plan before you act
- > Check, verify and validate
- > Be bold, but conservative
- > When uncertain, analyse and risk assess
- > When in doubt, be cautious
- > When in a rush (time or money), step back and review your values
- > Prove it's safe, not unsafe

Engineering solutions



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