

Andrew Irvine

Consulting Engineer

Associate, Risk & Reliability Associates (R2A Pty Ltd)

Personal Data

BE, Chemical Engineering, University of Canterbury, Christchurch NZ, 1972

Dip Mgt Studies, N E London Polytechnic, 1979

Member, Engineers Australia

Chartered Professional Engineer

Profile

Andrew specialises in risk and reliability analysis and hazard and operability (HazOp) study leadership for onshore and offshore oil, gas, petrochemical and aviation systems. He has over 25 years technical experience in process engineering and consultant roles internationally as well as 10 years practical oil refinery experience, including supervisory and management positions. Andrew's early basic training was with BP (Aust) and Shell (UK).

Experience

Andrew has been involved in various safety case projects in Victoria for major hazard facilities including PPG Industries, Orica, Qenos and BOC. Representative past studies include:

- Safety case preparation for Cleeton and Ravenspurn offshore platforms and pipeline systems, BP Exploration – Operating Co, UK.
- Riser failure mode appraisal and consequences analysis, 5 Bass Strait platforms, Esso Australia.
- Risk Analysis, zinc smelter complex, Pasminco, Tasmania.
- Engineering and safety appraisal of Sydney Water chlorination facility at water and sewage treatment plants.
- Safety cases for onshore drilling and workover rigs, Shell/NAM, Holland.
- Safety audit and risk assessment studies at 7 locations for the Petroleum Authority of Thailand (PTT). Facilities included oil and liquefied gas storage and distribution, gas transmission, gas separation plants, onshore and offshore pipelines.
- Hazop Study Leader for various projects including Moonfish monopod conceptual design, Esso Australia, Challis FPSO upgrades (including crude storage, transfer and gas compression systems) and Challis 14 flowline installation, Metropolitan railway system tunnel cutting through a disused landfill site, MTRC Hong Kong and Chlor-alkali complex at Kwinana, WA for Nufarm, WA.
- Technical assessment and valuation of methanol production facilities, including gas production platforms, undersea pipelines, gas distribution grid, methanol plant and export jetty. Petrons/Arab-Malaysian Merchant Bank. Facilities in Sabah, Malaysia.

Previously

Senior Chemical Engineer, Veritas Technical Services - Det Norske Veritas, Australia. (1986-1988)

Various position, New Zealand Refining Company (1980-1986)

Various positions, Shell UK Oil, Shellhaven Oil Refinery (1976-1980)

Chemical Engineer, BP Australia, Kwinana Refinery WA (1974-1976)