## **PROCESS SAFETY EXPERTISE**



Rimmer Engineering has a unique blend of capabilities that set us apart from our competitors.

Our unique blend of high-caliber professionals in Design, Safety, Operations and Maintenance combine their wealth of knowledge and personal experience within the disciplined framework of Process Safety to provide expert advice and support to clients.

The engagement between disciplines is the keystone to ensuring an optimal and safe solution. Working alongside Rimmer Engineering, clients benefit from our multi-disciplinary team of consultants who have global expertise across a wide range of industries, combined with local experience in both regulatory and operational environments.

Rimmer Engineering has capability in the following areas:

- HAZOP and HAZID leadership
- Safety Case Development
- Bowtie Reviews
- Consequence Modelling (PHAST/Flaresim)
- LOPA Studies
- Gap Analysis
- Risk Assessments (RA)
- OBRA (Occupied Building RA)
- SIL Classification
- ALARP/SFAIRP Demonstration
- Overpressure Protection
- Hazardous Area Classification
- Hazardous Substances Compliance
- Regulatory Management (Worksafe NZ)
- Emergency Response Procedures
- Fire Protection
- Flare and Combustion Safety
- Dust Hazard Analysis (DHA)

Rimmer Engineering provides commercially pragmatic solutions that are commensurate with world class best practice and legislative and/or regulatory requirements. We work closely alongside clients to provide cost-effective advice that fits the needs of their organisation, as illustrated by the following selection of recent projects:

## **Project Illustrations**

**Client 1 - Safety Reviews:** For a new refrigeration unit we assisted our client in the concept select stage by applying "minimisation of inherent risk" techniques and led the HAZID review. In detailed engineering we completed the HAZOP, risk assessment & SFAIRP demonstration and the consequence modelling of BLEVE and asphyxiation hazards.

**Client 2 - Regulatory Compliance:** Rimmer Engineering was engaged by a Major Hazard Facility (MHF) to manage the renewal of over 40 tank certificates and assess regulatory compliance with the Health and Safety at Work Act Hazardous Substances 2017. By leading a collaborative, multi-party approach to Worksafe, Rimmer Engineering successfully negotiated a new compliance plan on behalf of the client which ensured continual operation and a staged capital spend. We were subsequently awarded a year-long programme of works to update emergency response procedures, assess tank emergency venting and upgrade firefighting.

**Client 3 - Technical Study and Modelling:** For another of our MHF clients we completed a capacity study of a flare system and a combustion safety assessment of the flare tip. This included the consequence analysis for the flameout from the flare column, radiation and dispersion modelling to assess impact on personnel and equipment resulting from radiated heat, flash fire and toxicity.

## For further information on our Process Safety capabilities please contact:



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