

ABOUT US

PNA is an independent consultancy focused on providing safety, risk and reliability services and solutions covering the various phases of a project including feasibility and concept development, design, construction, installation, hook-up and commissioning, operation and decommissioning.

OUR SERVICES COVER THE FOLLOWING AREAS :

Hazardous Area Classification

Process Hazard Analysis

Asset Selection & Utilisation

Formal Safety Assessment

Quantitative Risk Assessment

Regulatory Compliance

Consequence Analysis

Hazard Identification

Business Continuity Plan

Health Risk Assessment

Process Safety Management

INTRODUCTION

Hazardous Area classification identifies areas in a plant where flammable atmospheres can be found and additionally provides an estimate of how often they may be found there.

Hazardous Area Classification is determined by site audit work. It requires a study of the flammable materials used on site and examination of plant and equipment. The basic idea is to establish where flammable atmospheres occur as part of routine operations and also as a result of failure of whatever type, excluding catastrophic failure of plant. The study requires flammability data on materials which are sometimes available on record, and or determined by measurement in a specialist process safety laboratory.

- Design & Engineering
- Design Safety Review
- Developing process safety information, including
 - Process flow diagrams (PFDs)
 - Process chemistry
 - Maximum Intended Inventories
 - Safe upper and lower operating limits and consequences of deviations
 - Materials of construction
 - Piping and instrumentation diagrams (P&IDs)
 - Electrical classification drawings and interpretation of codes and standards regarding area electrical classification
 - Relief system design and design basis, including determining relief valve sizing bases and evaluating flare header capacity, liquid knockout requirements, and flare stack design for adequacy
 - Ventilation system design information such as compressor building ventilation systems, including interpretation of applicable codes and standards for determining ventilation requirements
 - Identifying design codes and standards employed in the design of a process
 - Material and energy balances
 - Safety systems documentation, including safety system plot plans and written descriptions of safety systems (e.g., interlocks, detection, or suppression systems)
 - Identifying recognized and generally accepted good engineering practices (RAGAGEP) used in the design of a process
 - Emergency Relief & Venting
 - Flare Systems
 - Safety Interlocks
 - Fire Protection
 - Critical Equipment Identification
 - HAZID / HAZOP
 - Safety Philosophy

CONTACT DETAILS

Email : info@pnarisk.com

Website : www.pnarisk.com

Kuala Lumpur, MALAYSIA

PNA Risk Management Sdn Bhd (665518-W)
D3-1-2, Block D3
Dana-1 Commercial Centre
Jalan PJU 1A/46, 47301 Petaling Jaya
Selangor, Malaysia
Tel : +60 3 7842 6521
Fax : +60 3 7842 6499