

## An LDI Training Course

# SAFETY AND RISK MANAGEMENT IN OIL & GAS

by

Ir. In Jumanda Kasdadi, MT

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## INTRODUCTION

This training provides knowledge and understanding of safety and risk management in oil & gas operations.

For the topic of safety management, Mr. Jumanda Kasdadi will discuss layers of protection, safety management systems, safety instrumented systems (SIS), and so on.

Meanwhile, for risk management, course participants will learn methods for determining risk values such as Event Tree Analysis (ETA), Fault Tree Analysis (FTA), Risk-Based Inspection (RBI), and so on.

In this course participants will also learn about safety and risk management in oil and gas facilities in technical drawing documents such as process flow diagrams (PFD) and piping & instrument diagrams (P&ID).

By attending this training participants will understand the concepts and practices of safety and risk management in oil and gas facilities.

## COURSE CONTENT

- **Course Introduction**
- **Safety & Risk Management Terminology** - Safety terminology, hazard, risk, incident, accident, safety work
- **Overview of Oil & Gas Processing & Facilities** - Wellhead, separator, pressure vessel, piping, pipeline, conditioning
- **Protection Concepts and Layer of Protection** – Basic Process Control System (BPCS), alarm system, safety instrumented system
- **Safety & Risk Management in Design Process** - Project phase, project

safety analysis

- **Hazard and Operability Study / HAZOPS** - Methodology, Team Coordination, HAZOPs guide word, HAZOPs Worksheets
- **Hazards Related to Oil and Gas Industry** - Fire, explosions, slips, trips, falls, motor vehicle accidents, confined space
- **Safety Instrumented System (SIS) and Risk Reduction** - Probability failure on demand, safety integrity level
- **Safety Management/Administration System** - Safety policy, safety standard, procedure, PTW System
- **Methods for Risk Identification & Risk Assessment** - What if, checklist, Event Tree Analysis / ETA, Fault Tree Analysis / FTA, Risk-Based Inspection
- **Reading Safety and Risk Management System at Documents of Technical Drawing** - Process flow diagram (PFD), symbols & labels, piping & instrument diagram / P&ID
- **Case Study, Discussion, and Film**

## WHO SHOULD ATTEND

- HSE professionals
- Process, piping and rotating equipment professionals
- Operations and maintenance professionals
- Instrumentation and electrical professionals
- Project engineers, site managers, and field superintendents
- Production, oil and gas processing, and drilling supervisors and engineers.

## ABOUT THE INSTRUCTOR

Ir. In Jumanda Kasdadi is an experienced instructor and he has been conducting training for oil and gas companies since 1997. He has BS and MS in chemical engineering degrees from the Institute Technology Bandung.

Companies that have received Mr. Kasdadi's inhouse training include Chevron, Pertamina Hulu Energi–ONWJ, ConocoPhillips, Total, Medco, Petrochina, Pertamina, Star Energy, and many others.

Ir. In Jumanda Kasdadi was involved in several Front-End Engineering Design (FEED) and Risk-Based Inspection projects.

IJK has also taken courses for 9 topics in The Oil & Gas fields at PETEX (Petroleum Extension), University of Texas at Austin, in Houston, Texas, USA (2018).



## **COURSE DELIVERY**

- This offline (face to face) course is conducted in Bahasa Indonesia.
- Training hours are from 08:00 to 16:00 WIB
- Participants will receive course material prior to training.
- Participants will receive a certificate after completing the training.

## **TRAINING CONFIRMATION**

LDI Training will provide a Confirmation Letter after we receive registration according to the required quota.

**For more information please contact**

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