



Mr. Troy O'Connor
27 September - 1 October 2020
Virtual Training

Hazard And Operability Study (HAZOP) – Leadership (lec 61882)



NEBOSH HSE Certificate in Process Safety Management

COURSE DESCRIPTION:

This program has been developed for all employers and employees interested in conducting qualitative workplace risk assessments. It provides an in depth understanding the implementation of the HAZOP process at the workplace within the context of operational risk management.

The workshop is designed to provide a practical approach (using various case studies) to the process of introducing and conducting a workplace risk assessment program into an organization and conducting HAZOP studies. The course incorporates the leadership component of the HAZOP process which allows course graduates to take charge of an internal HAZOP session.

It is structured around recognized international risk management standards (IEC 61882), guidelines and complies with Aramco Qualitative Risk Assessment Guidelines relating to the implementation of the Safety Management Systems

COURSE PREREQUISITE (S):

None

RATIONALE:

This course is intended to provide a solid foundation for all individuals wanting to acquire the necessary HAZOP Leadership skills for application in the oil and gas and mining industries. Emphasis will be placed on the topics covered in the IEC 61882 standard requirements.

TEXTBOOK (S) and/or MATERIALS:

Title, Edition, Author, Publisher	
Course Materials	HAZOP Course Workbook HAZOP Case Study Workbook IEC 61882 reference
Reference Material	IEC 61882 - Hazard and operability studies (HAZOP studies) - Application guide https://www.youtube.com/watch?v=6AqtX8oCpKI https://www.youtube.com/watch?v=N29Bw_hbXfY
Useful websites	https://training.gov.au/Training/Details/PMASUP445A

COURSE OBJECTIVES:

- Discuss and apply Risk Management principles/models including the techniques for hazard identification, risk assessment and HAZOP in the workplace.
- Introduce international Risk Management Models and standards – ISO 31000, IEC 61882.
- Introduce Qualitative Risk Assessment and HAZOP Practices in the workplace
- Describe the workplace HAZOP process in accordance with international standards
- Discuss and apply qualitative techniques for hazard identification and risk assessment in the workplace
- Discuss and apply the HAZOP technique in the workplace
- Understand the components of HAZOP leadership
- Utilize recording formats that can be used in the risk assessment process (risk register) and HAZOP sheets

TOPICAL UNIT OUTLINE:

DAY 1

- Title: Course Registration - Description – Register for HAZOP course
- Title: Course Introduction - Description – Introduction to the HAZOP course content, process hazard analysis (PHA) and flow sheets
- Title: Generic Risk Discussion - Description – process hazard analysis (PHA) and flow sheets
- Title: Introduction & Process Hazard Analysis - Description – process hazard analysis (PHA) and flow sheets

DAY 2

- Title: Introduction to Flowsheets - Description – Introduction to the HAZOP process, international standards, and local guidelines
- Title: Introduction to HAZOP - Description – Introduction to the HAZOP process, international standards, and local guidelines
- Title: HAZOP Study Methodology - Description – Step for step HAZOP process methodology
- HAZOP Study Methodology Cont.... - Description – Step for step HAZOP process methodology

DAY 3

- Title: HAZOP Tools - Description – HAZOP software
- Title: HAZOP Reporting and Follow up - Description – How to develop a report for a HAZOP study (Report content and example)
- Title: Role of the HAZOP Leader - Description - What does the HAZOP Leader do in this process and how to use qualitative risk assessment in the HAZOP process
- Title: Role of the HAZOP Leader Cont.... - Description – What does the HAZOP Leader do in this process and how to use qualitative risk assessment in the HAZOP process

DAY 4

- HAZOP Case Study –Oil Vaporiser - Description – Set up teams and conduct a limited scope HAZOP study using a reactor as a case study
- Title: HAZOP Case Study –Oil Vaporiser Cont.... - Description – Teams and conduct a limited scope HAZOP study using a reactor as a case study
- Title: HAZOP Case Study – Oil Vaporiser Cont.... - Description – Teams provide feedback
- Title HAZOP Case Study – Reactor - Description – Assessment: Teams conduct HAZOP study for assessment

DAY 5

- Title HAZOP Case Study – Reactor Cont.... - Description – Teams conduct HAZOP for assessment purposes
- Prepare PPT and HAZOP report
- Title HAZOP Case Study – Reactor Cont.... - Description – Teams present (PPT) findings
- Title: Course Feedback and Certificates - Description - Hand out of course certificates and course feedback

WHO SHOULD ATTEND?

- All market industry segments and all levels as Workplace Risk Assessment can be used by ALL, including:
- General Managers,
- Project Managers,
- Process, Chemical, Mechanical Engineers,
- Loss Prevention & Security,
- Operating Staff and employees in general.

COURSE DURATION: 5 Days

Instructor

Troy O'Connor,



Been appointed as the Managing Director of a number of Companies and is currently also the MD for ERS and is based in Brisbane, Australia. Studied extensively in the field of risk management and has been awarded an MBA, Bachelor's Degree in Risk Management and Higher National and National Diploma in OH&S Management. Been certified as a Lead OH&S Auditor with RABQSA and a member of the Australian Institute of Management.

Managed projects in 28 countries conducting audits, organizational design and development, training and workshop facilitation in the field of Enterprise Risk Management and trained over 1000 Aramco employees in Risk Management & HAZOP Leaders. Implemented projects at companies such as Sasol, BHP Billiton, SABIC, KUFPEC, CLP Power, CSG, Weyerhaeuser, Saudi ARAMCO etc.

