
ABI3010 – International Oil and Gas©

COURSE OVERVIEW

The oil and gas industry is a highly risk environment, therefore Safety and Health management is becoming an ever more important aspect in the control and reduction of accidents, incidents, illness and expensive litigation claims. Every day, the oil and gas industry must contend with an array of health, safety and environmental concerns throughout its range of operations.

In Oil & Petrochemical industries, the essential purpose of Safety Management regulations is to access the scopes and definitions, areas of specific competency and responsibility of various parties. This course comes in handy as it equips delegates with the technical knowledge, skills and tools necessary to deliver operational excellence in the safe performance of their duties in the Upstream, Midstream, Refining, tank farms and Petrochemical facilities.

PRE-REQUISITE

None

DURATION

:

TARGET AUDIENCE

- Health and Safety Personnel
- Oil and Gas Operatives, Supervisors, Engineers and Managers
- Individuals directly responsible for a company's accident analysis process
- Safety committee representatives
- Regulators and executives from the Oil and Gas Industry
- All others with interest in enhancing the effectiveness of the Health and Safety Function within the Oil and Gas Industry

Element 1 – Health and Safety Management in the Oil and Gas industry.

- 1.1 Managing health and safety risks in the oil and gas industry
- 1.2 Personal protective equipment – PPE
- 1.3 Hazard recognition and control
- 1.4 Common workplace hazards and control
- 1.5 Oil and gas industry hazards and control
- 1.6 Fire and explosion risk in the oil and gas industries.

Element 2 – Operational and Safety management in Filling Stations

- 2.1 Petrol leaks and spills

- 2.2 Control of ignition sources
- 2.3 Operating and emergency procedures for filling stations
- 2.4 Maintenance operations
- 2.5 Working with Contractors
- 2.6 Planning the work
- 2.7 Safe work procedures in filling stations
- 2.7.1 Commissioning and Decommissioning
- 2.7.2 Unloading and venting
- 2.7.3 Storing, handling and dispensing of petroleum products
- 2.7.4 Tank dipping
- 2.7.5 Handling hired trailers and house floats
- 2.7.6 Commissioning and Decommissioning

Element 3 – Storage Tank Farm Operations

- 3.1 Types of tanks
- 3.2 Advantages and disadvantages of different types of tanks
- 3.3 Fittings on different types of tanks
- 3.4 Safe operating practices for floating roof tanks
- 3.5 Critical level of floating roof tanks
- 3.6 Recalibration of tanks
- 3.7 Safety checklist for tank farm operations
- 3.8 Precautionary measures for tank farm operations
- 3.9 Gauging and tank quantity calculation
- 3.10 Contamination and deterioration of product
- 3.11 Tank cleaning and waste water
- 3.11 Tank cleaning and waste water
- 3.12 Loading and unloading of products (sea and land transport)
- 3.13 Tank inspection and safety
- 3.14 Emergency and contingency planning

Element 4 – Safety in Refinery and Petrochemical Plant Operation

- 4.1 Overview of a petroleum refinery
- 4.2 Plant operations and safety.
- 4.3 Product related risks.
- 4.4 Physical hazards involving personnel.
- 4.5 Equipment related risks.

- 4.6 Safety in process operations.
- 4.7 Degassing-inerting: steam, nitrogen, water
- 4.8 Hazard analysis in design and operations
- 4.9 Maintenance hazards and precautions.
- 4.10 Major shutdown and maintenance.
- 4.11 Emergency warning system and procedures

Element 5 – Offshore Safety

- 5.1 Major incidents in the offshore industry
- 5.2 Safety case and safety reports
- 5.3 Safety considerations in Offshore Installation Design
- 5.4 Common offshore structures
- 5.5 Offshore oil and gas hazards and control
- 5.6 Exploration hazards and control
- 5.7 Rig hazards and control
- 5.8 Oilfield trucking hazards and control
- 5.9 Production and plant hazards and control

Element 6 – Hydrocarbon Process Safety Management

- 6.1 Principles of shift handover
- 6.2 Plant operation and maintenance
- 6.3 Elements of Process Safety Management (PSM)
- 6.4 Use of contractors and contractor's management
- 6.5 Permit to work system in an offshore setting
- 6.6 Mechanical integrity
- 6.7 Hot work
- 6.8 Pre-start-up safety review
- 6.9 Emergency planning and response

Award assessed by one 2 hour exam which will consist of 10 questions (8 short question answers and 2 long question answers)

Note: On completion of ABIOSH management certificate student can obtain full membership of the Oil & Gas Council

Course Material is available to purchase together with sample answer papers by contacting ABIOSH on info@abiosh.com