



# **MANAGEMENT OF OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL RISKS IN THE OIL AND GAS INDUSTRY**

INSTITUTE FOR PROFESSIONAL AND EXECUTIVE DEVELOPMENT

United Kingdom

**UNIT SPECIFICATION**

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**Unit Title**

Management of Occupational Health, Safety and Environmental Risks in the Oil and Gas Industry

**Credit value**

The credit value for this unit is 30

30 credits equivalent to 300 hours of teaching and learning  
(10 hours is equivalent to 1 credit)

Guided learning hours (GLH) = 50 hours

GLH includes lectures, tutorials and supervised study. This may vary to suit the needs and requirements of the learner and/or the approved centre of study.

Directed learning = 50 hours: This includes advance reading and preparation, group study, and undertaking research tasks.

Self-managed learning = 200 hours: This includes completing assignments and working through the core and additional reading texts. It also includes personal research reading via other physical and/or electronic resources.



<p>3.0 Understand practical health and safety management issues in the oil and gas industry</p>	<p>3.1 Evaluate the significance of a hazard identification study (HAZID), hazard and operability study (HAZOP) or other risk assessment studies</p> <p>3.2 Examine how the design of facilities can help reduce hazards</p> <p>3.3 Discuss what a good health and safety management plan should entail</p> <p>3.4 Give an account on how health and safety issues regarding fire and explosion, air quality, hazardous materials, transportation, well blowouts and, emergency preparedness and response can be effectively managed</p> <p>3.5 Discuss how the following community health and safety issues can be effectively managed:</p> <ul style="list-style-type: none"> <li>○ Physical hazards</li> <li>○ Hydrogen sulphide</li> <li>○ Security</li> <li>○ Environmental monitoring</li> </ul> <p>3.6 Discuss the impact of oil and gas exploration and production on the environment</p> <p>3.7 Discuss how environmental issues such as air emissions, solid and liquid waste management, noise generation, terrestrial impacts and project footprints, spill and the effects of decommissioning can be properly managed</p> <p>3.8 Analyse the principles that can be used in the management of occupational health issues in an organization</p> <p>3.9 Examine how workforce involvement and commitment contributes to the success of any health and safety programme</p> <p>3.10 Examine the significance of a hazard inventory and describe how it can be prepared</p>
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<p>4.0 Understand the categories of hazards associated with petroleum exploration and production</p>	<p>4.1 Give an account on the chemical, physical, biological, ergonomic and psychosocial hazards that exist in the oil and gas industry with respect to examples, sources/uses and potential health effects</p> <p>4.1.1 Investigate applicable preventative measures with respect to respective hazards</p>
<p>5.0 Understand the nature of risk assessment and control</p>	<p>5.1 Discuss how health risk assessment can be conducted</p> <p>5.2 Examine the importance of conducting a risk assessment review</p> <p>5.3 Evaluate how health risks can be controlled (through elimination or substitution, engineered controls, procedural controls, personal protective equipment)</p> <p>5.4 Evaluate how control measures should be used, measured, examined and tested</p>
<p>6.0 Understand the importance of monitoring and reviewing occupational health programmes in an organization</p>	<p>6.1 Explore the nature of workplace monitoring, personal monitoring, performance monitoring, audit and review</p> <p>6.2 Evaluate the importance of monitoring and reviewing an occupational health programme in an organization</p> <p>6.3 Discuss the significance of health surveillance in the management of occupational health risks</p> <p>6.3.1 Explain what is meant by health surveillance and examine what it entails</p> <p>6.3.2 Examine the possible situations where health surveillance should be introduced</p>

## Recommended learning resources

<b>Indicative reading</b>	<p>Health and Safety (Theory and practice in the Oil and Gas Sector) by Seth Oppong 2011: VDM Verlag. ISBN: 978-3-639-36220-6</p> <ul style="list-style-type: none"><li>• For a full list of textbooks and publications relevant to this unit, please contact IPED - UK.</li></ul>
<b>Learning Aid</b>	<ul style="list-style-type: none"><li>• A comprehensive IPED study material is available to aid in learning and research of this unit.</li><li>• We supply IPED course materials free of charge. Our study materials, which offer quick learning start, are comprehensive, use simple English, and are easy to read and understand. The contents are so sufficient and self-explanatory; that in majority of cases readers do not require further support; although support is always available when you need it.</li></ul>