

**Health and Safety Representative Training  
for the  
Offshore Oil and Gas Industry**

**Course descriptor and suggested outline for Registered Training  
Organisations**

**National Oil and Gas Safety Advisory Committee  
(NOGSAC)**

## Health and Safety Representative Training for the Offshore Oil and Gas Industry

### Introduction

Since the inception of the NOGSAC Health and Safety Representatives (HSR) Forums in April 2000, HSR training has been on the agenda. To assist in the process of identifying appropriate course content the forums concentrated on defining the role of the HSR. Once this was defined training needs were identified. The out come from these forums identified key areas for coverage in a HSR training course. The following list is a summary of input from the various forums and therefore does not reflect the changes to the legislation published in 2004.

1. The Legislation
  - Role of HSRs, regulator and employer
  - Responsibilities and authority of HSRs
  - Intent of the Safety Case legislation
  - Role of NOPSA
2. Safety Case
  - Structure
  - Understanding terminology
  - Understanding the FSA process and tools
  - Risk assessment methodology
3. Safety Management Systems
  - SMS and Safety Case
  - SMS structure
  - Audit process – recognising an effective audit]
4. Incident Investigation
  - Root cause analysis methodologies
  - Recognising a “good” investigation
5. Tools for the HSR
  - Communication / presentation skills
  - Negotiation Skills
  - Running effective meetings
  - Research skills
  - Conflict / Issue resolution
  - Time Management
6. Hazard Identification and the hierarchy of control

Module descriptors for the course have been developed based on the information gathered at the HSR Forums and the changes to the legislation initiated in 2004. It is proposed that for a course to be accepted / accredited by NOPSA it shall, as a minimum, be aligned with the course descriptors outlined in this document. To maintain a level of quality assurance the accepted / accredited course should be presented by a Registered Training Organisation (RTO).

## **Information for the Trainer**

### Scope

The course is to be developed for presentation to Health and Safety Representatives working in the oil and gas industry with an emphasis on the offshore working environment and legislative regime.

### Health and Safety Representatives

The health and safety representatives are employees within the oil and gas industry and have been elected or have volunteered to represent a designated work group. The HSR will, in the main, have worked within industry for a number of years and will have a basic understanding of safety systems as they relate to their work. They may also be familiar with the current safety case regime as it relates to their respective work place.

Health and Safety Representatives may come from a variety of backgrounds and some may have English as their second language. Many HSR will have been in a number of jobs with various employers and will have been out of a classroom environment for many years.

### Presentation

No time frame has been suggested for the course. It is recognised that sufficient time needs to be allocated to allow for a variety of presentations, workshops and case studies to ensure an enjoyable and meaningful course. It is anticipated the course will be delivered by RTOs.

It is anticipated the course will be enhanced by offering a variety of presenters with expert knowledge of the subject area or a particular case study. These presenters could be drawn from within the oil and gas industry, the respective unions or government.

### Assessment

No formal assessment of the participants is required. However self assessment through participation in case studies and subsequent discussions should be encouraged. Participation in the full course is required before an attendance certificate can be issued.

## Module 1 : Legislation

### Module Descriptor

In a typical scenario an HSR will need to have an understanding of the Petroleum (Submerged Lands ) Act Schedule 7. The HSR will need to know how to access information relating to legislation and safety in general. This unit includes identification of relevant resources including internet sites to obtain information.

The HSR would:

- be able to explain the general provisions of Schedule 7 with particular reference to the duties employers and employees.
- describe the role of the employer, operator, member of the workforce, the HSR and the regulator in regard to a healthy and safe workplace.
- recognize the regulations and codes of practice that apply under the P(SL)A
- have an overview of the evolution of the legislation from prescriptive to goal setting
- know the various reference sources available to research any safety and health issues

Generally the HSR would be part of a team and would be expected to be capable of explaining the legislation to a group of peers. They would be liaising and communicating with fellow workers and management representatives.

### Element

### Performance criteria

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| 1. Petroleum (Submerged Lands) Act                 | 1.1 Be able to explain the scope of the P(SL)A<br>1.2 Discuss the changes to the P(SL)A with regard the move from prescriptive schedules to “Safety Case” legislation<br>1.3 Discuss the changes in the regulations under the P(SL)A<br>1.4 Recognise the Regulations and Codes of Practice that apply   |
| 2. P(SL)A – Schedule 7 and subordinate legislation | 2.1 Explain the general provisions of Schedule 7 with particular reference to the duties of employers, operators, members of the workforce and employees etc.<br>2.2 Be able to discuss the role of the HSR, operator, employer and inspector .<br>2.3 Discuss the powers and HSRs, disqualification of HSRs, Designated Work Groups, Health and Safety Committees<br>2.4 Discussion of the consultative process and the different mechanism for issue resolution.<br>2.5 Demonstrate an understanding of when Provisional Improvement Notices apply.<br>2.6 Knowledge of legislative requirements for reporting incidents and dangerous occurrences |

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- 3. The National Offshore Petroleum Safety Authority – P(SL)A Part 111C, Division 2
  - 4. Research
- to NOPSA
- 3.1 Describe the function of NOPSA
  - 3.2 Discuss the events leading up to the formation of NOPSA
  - 4.1 Assess relevant Safety and Health and legislative information through library and / or internet searches
  - 4.2 Conduct searches of data base

## Module 2 : Hazard Identification and Risk Management

### Module Descriptor

In a typical scenario an HSR will need to be able to recognise a range of potential hazards and risk management strategies. The HSR will need to know likely sources of information on hazards, what constitutes a hazard and how to prioritise the hazard based on the risk it presents. This unit includes identification of relevant controls for example engineering controls, Permit to work.

The HSR would:

- Recognise a hazard and determine the risk it represents
- Be aware of the appropriate type of control to put in place.
- Research an appropriate website / document to gain information on a hazard
- Understand how to interpret an MSDS
- Understand the concept of risk management

Generally the HSR would be part of a team and would be expected to be capable of explaining hazard identification and risk management strategies to a group of peers. They would be liaising and communicating with fellow workers and management representatives

<b>Element</b>	<b>Performance criteria</b>
1. Recognise a Hazard	<ul style="list-style-type: none"><li>1.1 Be able to define a Hazard</li><li>1.2 Be able to discuss the hazard represented by a given work situation, chemical, noise, a dust and working in an exposed location.</li><li>1.3 Access suitable information about a given hazard.</li><li>1.4 Discuss consultation and involvement in the risk management process</li></ul>
2 Hazard Control	<ul style="list-style-type: none"><li>2.1 Use the hierarchy of control to develop a strategy to overcome a given hazard.</li><li>2.2 Understand the difference between preventative controls as opposed to mitigative controls</li><li>2.3 Discuss the relationship of controls such as Permit to Work, PPE within the hierarchy</li><li>2.4 Read an MSDS and act on the information</li></ul>
3. Understand Risk	<ul style="list-style-type: none"><li>3.1 Understand risk and its components</li><li>3.2 Explain accepted, perceived, societal risk</li><li>3.3 Be able to use a risk matrix to reach a team consensus of risk</li><li>3.4 Understand the limitations of risk assessment</li><li>3.5 Identify risk assessment tools – Quantitative and Qualitative and the merits and limitations</li></ul>

4. Risk Management

4.1 Differentiate between hazard control and risk reduction

4.2 Discuss "as low as is reasonably practical"

## Module 3 : Safety Management System and Safety Case

### Module Descriptor

In a typical scenario an HSR will need to have an understanding of Safety Management Systems and safety case development. The HSR will need to know how the various elements of an SMS come together to assist in providing a safe place of work. This unit includes identification of elements of an SMS and the SMS processes that produce a case for safety. The HSR should also understand the linkages between the SMS and the Safety Case.

The HSR would:

- Understand the elements of an SMS
- Be able to discuss their understanding of the critical elements of an effective SMS
- Be able to follow a logical development of a safety case.
- Be familiar with the Formal Safety Assessment process and the impact of the assumptions and data bases used in the assessments
- Understand the Hazard Identification and ALARP workshop process
- Understand the role of audit in a self regulating regime.
- Be able to discuss the outcomes as portrayed in the Hazard Register

Generally the HSR would be part of a team and would be expected to be capable of explaining SMS and Safety Case to a group of peers. They would be liaising and communicating with fellow workers and management representatives.

<b>Element</b>	<b>Performance criteria</b>
1. Understand a Safety Management System	1.1 Identify elements that make up an SMS 1.2 Describe an SMS 1.3 Understand role of the SMS in managing ongoing safety at facilities
2. Safety Case	2.1. Describe how the “Safety Case Regime” evolved 2.2. Recognise the Safety Case Regulations & Guidelines 2.3. Be able to discuss the relationship between an SMS and Safety Case 2.4. Be able to map the processes within an SMS that contribute to a Safety Case
3. Formal Safety Assessment	3.1 Understand the terminology FSA / QRA / ALARP 3.2 Identify qualitative and quantitative processes utilized in the development of an FSA 3.3 Explain how changing operational assumptions relevant to their work impact on FSA outcomes. 3.4 Identify elements of a good HAZID workshop
4. Audit	4.1 Understand the differences between monitoring,

- auditing and reviewing
- 4.2 Develop an audit checklist for an Identified Hazard in the Hazard Register
- 4.3 Discuss the role of audit, monitor and review within the context of the safety case regime and SMS
- 4.4 Recognise an effective audit
- 5. Hazard Register
  - 5.1 Explain how the Hazard Register is used in the HAZID workshop

## Module 4 : Incident Investigation

### Module Descriptor

In a typical scenario an HSR will need to have an understanding of root cause analysis so as to enable meaningful participation in and recognition of an effective investigation. The HSR will need to know what constitutes a good root cause methodology and investigation technique and how to access and research incident data to obtain meaningful information.

The HSR would:

- Analyse incident investigation reports to assess thoroughness
- Be able to discuss the root cause methodology
- Recognise potential in a number of incident scenarios
- Participate in investigation scenarios using the basic 5 whys method and present meaningful recommendations designed to prevent a recurrence
- Identify trends in incident database

Generally the HSR would be part of a team and would be expected to be capable of explaining incident investigation to a group of peers. They would be liaising and communicating with fellow workers and management representatives.

<b>Element</b>	<b>Performance criteria</b>
1. Incident Reporting	1.1 Discuss the importance of reporting all incidents 1.2 Discuss the elements of a culture that encourages incident reporting
2. Incident investigation	2.1 Identify different investigation tools / methodologies 2.2 Participate in an investigation team 2.3 Develop meaningful recommendations to prevent a recurrence of the identified root causes 2.4 Assess an incident investigation report 2.5 Identify an effective incident investigation 2.6 Discuss workforce involvement in incident investigation
3. Root Cause Analysis	3.1 Discuss root cause methodology – TapRoot, Tripod, 5 Whys 3.2 Be able to apply the 5 why methodology to an incident scenario. 3.3 Recognise a root cause
4. Incident data	4.1 Be able to recognise trends in supplied incident data 4.2 Present data in a meaningful way.

## Module 5 : Communications

### Module Descriptor

In a typical scenario an HSR will need to be able to communicate effectively with fellow workers and management representatives. The HSR will need to know how to present findings, chair meetings, negotiate outcomes and assist in conflict resolution. This unit includes exposure to the tools that help make communication effective.

The HSR would:

- develop well balanced presentations / arguments based on research of relevant legislation and OHS documents.
- be able to plan and run an effective meeting with specific reference to Safety, Committee and Toolbox meetings
- be able to plan for and participate in a variety of negotiation scenarios.

Generally the HSR would be part of a team and would be expected to be capable of demonstrating good communication skills with his peers. At all times they would be liaising and communicating with fellow workers and management representatives.

<b>Element</b>	<b>Performance criteria</b>
1. Meetings	<ul style="list-style-type: none"><li>1.1 Use a methodology to plan the meeting.</li><li>1.2 Explain the role of the various meeting participants</li><li>1.3 Prepare a meeting agenda</li><li>1.4 Conduct a meeting</li></ul>
2. Presentation of information	<ul style="list-style-type: none"><li>2.1 Identify the media available for presenting information, its merits and limitations</li><li>2.2 Present information using an effective medium.</li><li>2.3 Present to a meeting in a logical sequence, clearly and concisely.</li></ul>
3. Negotiation	<ul style="list-style-type: none"><li>3.1 Recognise various negotiation methodologies</li><li>3.2 Demonstrate negotiation skills in scenarios covering HSR and Employer/Operator, HSR and Employee</li></ul>