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**Overview**

The unit deals with the following:

- 1 Maintain a state of readiness
- 2 Assess situation
- 3 Take effective action
- 4 Establish and maintain communications
- 5 Delegate authority to act
- 6 Manage self and team performance
- 7 Deal with stress in self and others

During this work you must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO YOU.

**Previous Version:** Unit ER5 – National Occupational Standards for Emergency Response – July 2001

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### Performance criteria

- You must be able to:*
- P1 supply valid and reliable, oral and written information to relevant personnel
  - P2 ensure that drills and exercises are consistent with priorities, objectives, procedures and statutory requirements
  - P3 coach the Deputy OIM, The Emergency Management and Response Team and assessed their potential to respond to emergencies during drills and exercises
  - P4 encourage personnel to seek clarification of their allocated roles and responsibilities and gain an awareness of ongoing activities
  - P5 pre-plan actions to deal with potential emergencies
  - P6 confirm the serviceability and sufficiency of equipment in accordance with procedures
  - P7 obtain information from all appropriate sources evaluated it and confirmed it as quickly as possible
  - P8 utilise the appropriate resources throughout the emergency
  - P9 make valid interpretations of the emergency procedures and pre-determined strategies and take valid decisions throughout the emergency
  - P10 review the potential outcomes of the emergency and the possible response actions against the consequences and probabilities
  - P11 develop a plan of action including that required to deal with contingency situations in the light of this evidence (the plan should be continually reviewed)
  - P12 take the appropriate action as quickly as possible
  - P13 coordinate and direct the emergency response teams in an effective manner
  - P14 ensure that working practices are safe and conform to current health and safety legislation
  - P15 inform the onshore team, the coastguard, the standby vessel, the fire team leaders and nearby installations/shipping and helicopters of the emergency and its progression at the appropriate times
  - P16 effectively communicate the plan by using the PA telephone systems and a 2 way radio, with the relevant people in accordance with communication procedures
  - P17 establish and maintain a common understanding of the situation throughout the emergency management team
  - P18 provide reports of the situation as they develop to installation staff at suitable intervals
  - P19 maintain an accurate record of key events and communication
  - P20 establish when necessary, alternative communication methods including: 2 way radio and runners

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- P21 make valid decisions on which activities should be delegated in the light of the circumstances of the moment. Additional activities should be delegated to those most suited to deal with them
- P22 assign all delegated activities to those most suited to deal with them in accordance with established procedures
- P23 make checks to ensure those delegated with the tasks understand them and report back accordingly
- P24 request assistance and action from others in a manner which promotes a positive response
- P25 take action and portray behaviour which contributes to the confidence and effectiveness of the team at all times
- P26 recognise the strengths and weaknesses within the emergency response team and taken the appropriate action
- P27 maintain an appropriate degree of detachment at all times
- P28 recognise stress induced reduction in performance of oneself and colleagues quickly
- P29 take the appropriate action by removing distressed personnel from critical task (especially those involving communication links) and re-allocating these tasks whilst delegating personal tasks if workload becomes excessive and time management difficult
- P30 take action to reduce the stress in oneself and whenever possible in the emergency control team members; and other personnel in direct contact with the emergency control situation and all other persons onboard the installation

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### Knowledge and understanding

*You need to know and understand:*

#### Core Essential Knowledge (OPITO OIM Standard)

##### **K1 Procedures**

- K1.1 safety Case
- K1.2 emergency procedures
- K1.3 sources of help in an emergency (coastguard, sector club, onshore emergency support vessels, helicopter, emergency response vessels) and their facilities, methods of communication and response times
- K1.4 incident escalation prediction models
- K1.5 safety management system
- K1.6 marine search and rescue procedures

*You need to know and understand:*

##### **K2 Hardware**

- K2.1 sources of information on the properties of onsite materials
- K2.2 layout of installation including location and functions of the major systems and pieces of equipment
- K2.3 all relevant sources of energy to prime movers
- K2.4 drain systems
- K2.5 location and operation of emergency systems (fire and gas detection, firefighting, communications and life saving appliances, escape systems and lifeboats)
- K2.6 purpose of significant control systems
- K2.7 causes and effects of significant alarms and trips
- K2.8 effects of loss of any utility and its reinstatement

*You need to know and understand:*

##### **K3 Information**

- K3.1 potential dangers resulting from activities in each area of the installation
- K3.2 consequences of loss of containment
- K3.3 effects of the environmental conditions on emergency response
- K3.4 potential effects of the emergency on external operations eg diving, supply vessel, standby vessel, helicopter
- K3.5 potential effects of the emergency on combined operations
- K3.6 implications of current health and safety legislation and its guidance
- K3.7 principles for preventive and protective measures
- K3.8 performance limitations of personal protective equipment
- K3.9 models which identify root causes of accidents

*You need to know and understand:*

##### **K4 Human Factors**

- K4.1 stress induced reduction in performance

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- K4.2 contributory human factors to failures e.g. optimism in the face of adversity, false sense of security, over-cautious, under-cautious
- K4.3 communication techniques
- K4.4 decision making processes and models

### **Knowledge Endorsements (OPITO OIM Standard)**

The endorsements cannot be awarded in isolation. Competence is assessed in conjunction with the Statements contained in the Core Unit.

*You need to know and understand:*

#### **K5 Production Operations (Fixed)**

- K5.1 principles of operation of all hydrocarbon systems and their safety critical interfaces and dependencies
- K5.2 process shutdown logic and its effects (operational intent and response to activation)
- K5.3 methods and consequences of isolation and depressurization
- K5.4 flare and vent systems
- K5.5 consequences of process upsets
- K5.6 purpose of the major components of wellhead and well completions
- K5.7 the effects which Wireline, Coiled Tubing and other maintenance activities and workover operations may have on well integrity
- K5.8 hazards associated with pipelines
- K5.9 simultaneous operations

*You need to know and understand:*

#### **K6 Production Operations (Floating)**

- K6.1 principles of operation of all hydrocarbon systems and their safety critical interfaces and dependencies
- K6.2 process shutdown logic and its effects (operational intent and response to activation)
- K6.3 methods and consequences of isolation and depressurization
- K6.4 flare and vent systems
- K6.5 consequences of process upsets
- K6.6 purpose of the major components of wellhead and well completions
- K6.7 the effects which Wireline, Coiled Tubing and other maintenance activities and workover operations may have on well integrity
- K6.8 hazards associated with pipelines
- K6.9 simultaneous operations
- K6.10 basic principles and effects of loss of stability and its control
- K6.11 basic principles and effects of loss of mooring (fixed or dynamic positioning)
- K6.12 marine damage control

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K6.13 installation design constraints affecting loading limitations

*You need to know and understand:*

### **K7 Drilling Operations (Fixed)**

- K7.1 purpose of the drill string equipment, circulating system, rotary equipment, diverter, BOP, riser and gas separator devices
- K7.2 causes and effects of mud loss and influx from the formation into the well bore and the implications
- K7.3 causes and effects of loss of pressure control systems
- K7.4 principles of hydrostatic well control and its application in drilling, running casing, workover operations and well testing including extended well testing
- K7.5 purpose of rig emergency shutdown systems
- K7.6 the effects which Wireline, Coiled Tubing and maintenance activities and workover operations may have on well integrity
- K7.7 flare and vent systems
- K7.8 basic principles of leg loading and soil bearings and effects on leg bearings in case of shallow blowout or severe storm (where appropriate to installation type)
- K7.9 simultaneous operations

*You need to know and understand:*

### **K8 Drilling Operations (Floating)**

- K8.1 purpose of the drilling string equipment, hoisting equipment, circulating system, rotary equipment, diverter, BOP, riser and gas separator devices
- K8.2 causes and effects of mud loss and influx from the formation into the well bore and the implications
- K8.3 causes and effects of loss of pressure control systems
- K8.4 principles of hydrostatic well control and its application in drilling, running casing, workover operations and well testing including extended well testing with tender support
- K8.5 purpose of rig emergency shutdown systems
- K8.6 the effects which Wireline, Coiled Tubing and maintenance activities and workover operations may have on well integrity
- K8.7 flare and vent systems
- K8.8 ongoing drilling programme
- K8.9 basic principles and effects of loss of stability
- K8.10 basic principles and effects of loss of mooring (fixed or dynamic positioning)
- K8.11 basic principles and effects of loss of ballast control
- K8.12 marine damage control
- K8.13 installation design constraints affecting local loading limitations

*You need to know and understand:*

### **K9 Mobile/Floating Installations**

- K9.1 basic principles and effects of loss of stability
- K9.2 basic principles and effects of loss of sinkage/punch through

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- (where appropriate to installation type)
- K9.3 basic principles and effects of loss of mooring (fixed or dynamic positioning)
- K9.4 basic principles and effects of loss of ballast control
- K9.5 marine damage control
- K9.6 installation design constraints affecting local loading limitations
- K9.7 flare and vent systems

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**Relevant occupations** Engineering and manufacturing technologies; Engineering; Process, Plant and Machine Operatives; Plant and Machine Operatives

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**Suite** Emergency Response

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