### **TPTI APPROVED STANDARDS**

# **Basic Onshore Safety Training** (BOnST)

and

Further Onshore Training (FOnT)

Any amendments made to this standard by TPTI will be recorded above.

AMENDMENTS				
AMENDMENT	PAGES	CHANGES MADE BY:	CHECKED BY:	APPROVED BY:
Glossary removed unrelated abbreviation				
Added GHS and SDS in to the glossary	5			
08-Jun-2017				
A1.,B1.Change the module name from Firefighting and Self Rescue to Basic Firefighting and Self Rescue 08-Jun-2017	7,17			
A3.Learning outcome on first paragraph change from principle of emergency response on onshore installations to principle of emergency subject to change depends on site facilities. 08-Jun-2017	8			
A3.,B3. Safety Induction topic 3 change from How onshore safety is regulated to Onshore Basic Safety Awareness  08-Jun-2017	8,18			
A3.,B3. Safety Induction removed topics number 4, 5, 6 and 9 08-Jun-2017	8,18			
A3. Basic First Aid added first paragraph The program is based on International protocols in first aid. The CPR protocols are in accordance with Thai Red Cross Guidelines for Adult Basic Life Support.  08-Jun-2017	9			
A3.,A4.,B3.,B4. Basic First Aid				
Topic B changed from Raising the alarm to Type of alarm and Principle of Raising the alarm.  Topic E changed from Immediate first aid				
actions including ABC to Immediate first aid actions including CPR	9,13, 18, 23			
<b>Topic G</b> changed from how to carry patients with the stretcher to How to carry patients with and without the stretcher				
Removed topic H how to use SCBA				
08-Jun-2017				

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AMENDMENTS				
AMENDMENT	PAGES	CHANGES MADE BY:	CHECKED BY:	APPROVED BY:
A3.,B3 Basic First Aid added topics				
Topic h Recognize the need for CPR				
Topic i Perform CPR on an adult				
<b>Topic j</b> Use of AED (Automated external defibrillation)	9,18			
<b>Topic k</b> Understand the principles of airway obstruction				
<b>Topic I</b> Perform immediate first aid for a chocking victim				
08-Jun-2017				
A4.,B4 Safety induction 2.Onshore Hazzard  Added the topic of GHS and SDS under the chemical hazard 08-Jun-2017	11,21			
A4.,B4 Safety Induction Removed 5. Regulating Onshore Safety (to be added in GCP) 08-Jun-2017	-			

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#### **GLOSSARY**

ABC Airway Breathing Circulation
AED Automated External Defibrillation
ALARP As low as reasonably practical
ACOP Approved Code of Practice
BOnST Basic Onshore Safety Training

COSHH Control of Substances Hazardous to Health

CO2 Carbon Dioxide

CPR Cardio Pulmonary Resuscitation

CR Central Register

DMF Department of Minerals Fuels
FOnT Further Onshore Training
GHS Global Harmonizing System
HELP Heat Escape Lessening Position
HSE Health & Safety Executive
HS&E Health, safety and environment

H2S Hydrogen Sulphide

MHSWR Management of Health & Safety at Work Regulations

MSDS Material Safety Data Sheet
OIM Onshore Installation Manager

OPITO Standards & Approvals function of Cogent Sector

Services Limited (sets international standards)

PRfS Personal responsibility for safety
PPE Personal Protective Equipment

PTW Permit to Work SDS Safety Data Sheet

SMS Safety Management System

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#### **BASIC ONSHORE SAFETY TRAINING**

#### Introduction

This standard was developed by TPTI in conjunction with a workgroup representing the interests of the onshore oil & gas industry in Thailand

The rational behind this development was the need for a "fit for purpose" standard to meet the requirements for basic onshore safety training in Thailand. The key objective was to establish a basic competency based training standard, appropriate for Thailand.

This document introduces and describes the core competency and safety training requirements relative to the onshore Oil & Gas Industry in Thailand. It is envisaged that by achieving the core competence requirements within the TPTI structure of approved training providers and central recording system, personnel will only require additional training when operating outside of Thailand and no duplication of previous training will occur.

It is recognised that a major objective is to prevent incidents occurring and if they do occur to be able to respond effectively to them. The training establishment should recognise that this is only part of a broader training programme. There will also be company and installation specific inductions and emergency response training of which most will be conducted onshore on a regular basis as onshore drills and exercises.

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#### **BASIC ONSHORE SAFETY TRAINING**

### A.1 Target Group

This programme is designed to assist in meeting the initial onshore safety and emergency response training and assessment requirements <u>for personnel</u> new to the onshore oil and gas industry in Thailand.

#### This BOnST Standard contains:

Learning Outcomes
Training Programme Content
Statements on:

Assessment Further Training/Assessment

#### The standard consists of the following modules:

Safety Induction Basic first Aid Basic Firefighting and Self Rescue

### A.2 Delegate Prior Achievement

No prior achievement required

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The responsibility for delivering and assessing this programme rests with TPTI Approved Training Providers.

### A.3 Learning Outcomes

During the BOnST programme delegates will gain a basic level of understanding and an awareness of safety and principle of emergency response subject to change depend on site facilities

They will be required to demonstrate their skills and the level of knowledge and understanding of the following key areas.

#### **SAFETY INDUCTION**

Delegates will explain/identify: (testing knowledge)

- 1. Onshore hazards, their control and consequences.
- 2. Waste disposal/environmental awareness.
- 3. Basic safety awareness
- **4.** PPE requirements.
- **5.** Procedure for reporting incidents, accidents and near misses.

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### A.3 Learning Outcomes (continued)

#### **BASIC FIRST AID**

The program is based on International protocols in first aid. The CPR protocols are in accordance with Thai Red Cross Guidelines for Adult Basic Life Support.

Delegates will demonstrate practically: (testing knowledge)

#### Give an explanation and demonstration of:

- a. First aid overview.
- b. Type of alarm and Principle of Raising the alarm.
- c. Appropriate behaviour at the first aid scene.
- d. Immediate first aid actions suitable for use prior to the arrival of the medic / first-aider.
- e. How to carry patients with and without the stretcher

#### **Delegates to demonstrate and practise:**

- f. Immediate first aid actions including CPR
- g. How to carry patients with and without the stretcher.
- h. Recognize the need for CPR
- i. Perform CPR on an adult
- j. Use of AED (Automated external defibrillation)
- k. Understand the principles of airway obstruction
- I. Perform immediate first aid for a chocking victim

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### A.3 Learning Outcomes (continued)

#### FIREFIGHTING AND SELF RESCUE

Delegates will demonstrate practically: (testing skills and knowledge)

- 1. Use of appropriate hand held portable fire extinguishers.
- 2. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- 3. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- 4. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

### **Basic Onshore Safety Training**

### A.4 Training Programme

The training programme outlined below will assist delegates to meet the stated training outcomes.

In order to make efficient use of time and ensure effective learning, the three phases of explanation, demonstration and practice should be integrated wherever practicable.

Full use should be made of visual/audio-visual aid and course handout materials.

Practical exercises should be designed and delivered solely to meet these standards, and must not place on delegates any physical or mental demands other than those required to meet the standard.

<sup>\*</sup> smoke hoods to be used in cosmetic smoke only

<sup>\*\*</sup>This may be achieved by conducting exercises in darkness or by using "blacked out" smoke hoods

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#### **A.4** Training Programme (continued)

#### SAFETY INDUCTION

#### 1. Industry Overview and Installation Overview

#### Give an overview of:

- a. Onshore oil and gas activities.
- b. Formation, finding and exploitation of oil and gas.
- c. Types of installations
  - drilling
  - production oil and gas/gas
  - construction
  - accommodation
  - special vessels.
- d. The onshore environment.

#### 2. Onshore Hazards

#### Give an explanation of:

Onshore hazards and comparative risk levels

- e.g.
- pressure hazards
- motion hazards
- chemical hazards
  - GHS
  - SDS
- electrical hazards
- gravity hazards.

#### 3. Managing Onshore Safety

#### Give an explanation of:

The multiple barriers model and systems in place to prevent hazards from contacting targets including:

- safe systems of work
- personal responsibility for safety
- safety observation programmes.

#### 4. Controlling Onshore Hazards

#### Give an explanation of:

The hierarchy of control and how control measures are implemented onshore; discuss the consequences of failure to control the risks.

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#### A.4 Training Programme (continued)

#### **SAFETY INDUCTION (continued)**

### 5. Living and Working Onshore

#### Give an explanation of:

Onshore routines: reporting in installation induction cabin/laundry/bond recreation /smoking getting on with others

Working routines:
procedures
work authorisation
maintaining a safe workplace
personal protective equipment
waste disposal
the right to stop unsafe work

#### Give an explanation of:

Involvement in safety e.g.

- observation systems
- Permit to Work (PTW)
- toolbox talks
- safety meetings
- drills & exercises
- additional duties

#### Communicating safety, including:

- lines of communication

#### Injuries and illness:

- reporting incidents, accidents near misses and illnesses
- the role of the medic
- investigation
- preventing a recurrence
- support available to relatives in the event of illness/injury/major incident/evacuation

# A Trainer's Guide for Basic Onshore Safety Training is shown in Appendix 1

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### **A.4 Training Programme** (continued)

**Basic First Aid** 

#### 1. Emergency First Aid

#### Give an explanation and demonstration of:

- a. Type of alarm and Principle of Raising the alarm
- b. Appropriate behaviour at the first aid scene.
- c. Immediate first aid actions suitable for use prior to the arrival of the medic / first-aider.
- d. How to carry patients with and without the stretcher.

#### Delegates to demonstrate and practise:

- e. Immediate first aid actions including CPR.
- f. How to carry patients with and without the stretcher.

A Trainer's Guide for Basic Onshore Safety Training is shown in Appendix 1.

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### **A.4 Training Programme** (continued)

#### FIREFIGHTING AND SELF RESCUE

#### 1. Firefighting Onshore

#### Give an overview of:

- a. The common causes and nature of fires onboard onshore oil and gas installations.
- b. Raising the fire and emergency alarm.
- c. The purpose of fixed fire and gas detection and firefighting systems; the actions to take in areas where these systems are deployed.
- d. Hydrogen Sulphide; the hazards, methods of detection and the actions to take in the event of discovery.

#### This is in advance of the information detailed during installation safety briefings

#### Give an explanation and demonstration of:

- e. The actions on discovering a fire.
- f. The operation of hand held portable fire extinguishers, small bore fire hose reels, fire blankets and their use against Class A and B fires.

#### Each delegates to practise and demonstrate:

- g. Raising the alarm on discovery of a fire.
- h. The operation of water (or foam), dry chemical and CO2 hand held portable fire extinguishers in extinguishing Class A and Class B fires as appropriate.

Note: Delegates may practice operation of small bore fire hose reel and/or fire blanket if requested and if sufficient time is available.

#### 2. Self Rescue

#### Give an explanation and demonstration of:

a. Self rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat.

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### A.4 Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE (continued)

#### 2. Self Rescue (continued)

b. Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat.

#### Delegates to practise and demonstrate:

- c. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- d. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- e. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

#### A Trainer's Guide for Basic Onshore Safety Training is shown in Appendix 1

### A.5 Duration of Training

The optimum 'contact time' for this training and assessment is seen as 10 hours 45 minutes.

The Safety Induction part of this module is 100% theory.

It is suggested that the ratio of 60% theory to 40% practical is appropriate for the remaining parts of the module.

Where this training is part of a programme of longer duration:

- the total contact time per day shall not exceed 8 hours.
- the total training day shall not exceed 10 hours

#### The total training day includes

- contact time
- refreshment and meal breaks
- travel between training sites where applicable.

<sup>\*</sup> smoke hoods to be used in cosmetic smoke only

<sup>\*\*</sup>This may be achieved by conducting exercises in darkness or by using "blacked out" smoke hoods

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#### A.6 Assessment

Delegates will be judged against the learning outcomes using direct observation and oral and/or written questions as appropriate.

Training Providers should have a policy and procedure in place for dealing with persons not meeting the stated learning outcomes.

### A.7 Further Training/Assessment

The initial BOnST certificate is valid for a period of three years. Thereafter, further training should be undertaken. The Further Onshore Training (FOnT) is conducted at TPTI Approved Training Centres and is undertaken by all onshore workers and should be completed every three years.

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The responsibility for delivering and assessing this programme rests with TPTI Approved Training Providers.

#### **Further Onshore Training**

The information in this section is for Trainers. It provides the requirements, outcomes, content and guidance for further training. This programme will enable those being trained to acquire the necessary knowledge and skills that underpin the tasks to be performed.

#### **B.1 Target Group**

This programme is designed to meet the further onshore safety and emergency response training and assessment requirements for personnel working in the onshore oil and gas industry.

#### This FOnT Standard contains:

Learning Outcomes
Training Programme Content
Statements on:

Assessment Further Training/Assessment

#### The programme consists of the following parts:

Safety Induction
Basic first Aid
Basic Firefighting and Self Rescue

#### **B.2** Delegate Prior Achievement

Persons who have previously attended a TPTI approved BOST, FOT, BOnST or FOnT and hold a current certificate; alternatively holders of a current OPITO approved T-BOSIET, T-FOET, BOSIET or FOET certificate.

In the case that, persons who hold a current certificate of BOST, FOT, BONST, FONT, T-BOSIET, T-FOET, BOSIET or FOET want to work for onshore oil and gas industry in Thailand, they shall be deemed to further study on uncovering issues on SAFETY INDUCTION over those certificates and also finish the paper examination with the minimum of 70% screening criteria.

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### **B.3** Learning Outcomes

During the FOnT programme delegates will have an opportunity to practice and demonstrate skills which it is not possible to practice onshore during drills, exercises and onshore training. They will be required to demonstrate their skills and the level of knowledge and understanding of the following key areas.

#### SAFETY INDUCTION

# Delegates will explain/identify: (testing knowledge)

- **1.** Onshore hazards, their control and consequences.
- 2. Waste disposal/environmental awareness.
- 3. Basic safety awareness
- **4.** PPE requirements.
- **5.** Procedure for reporting incidents, accidents and near misses.

#### **BASIC FIRST AID**

# Delegates will demonstrate practically: (testing knowledge)

- Immediate first aid actions including CPR
- b. How to carry patients with and without the stretcher.
- Recognize the need for CPR
- d. Perform CPR on an adult
- e. Use of AED (Automated external defibrillation)
- f. Understand the principles of airway obstruction
- g. Perform immediate first aid for a chocking victim

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### **B.3** Learning Outcomes

#### FIREFIGHTING AND SELF RESCUE

Delegates will demonstrate practically: (testing skills and knowledge)

- 1. Use of appropriate hand held portable fire extinguishers.
- 2. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- 3. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- 4. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

<sup>\*</sup> smoke hoods to be used in cosmetic smoke only

<sup>\*\*</sup>This may be achieved by conducting exercises in darkness or by using "blacked out" smoke hoods

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### **B.4** Training Programme

The training programme outlined below will assist delegates to meet the stated training outcomes.

In order to make efficient use of time and ensure effective learning, the three phases of explanation, demonstration and practice should be integrated wherever practicable.

Full use should be made of visual/audio-visual aid and course handout materials.

Practical exercises should be designed and delivered solely to meet these standards, and must not place on delegates any physical or mental demands other than those required to meet the standard.

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### **B.4 Training Programme** (continued)

#### SAFETY INDUCTION

#### 1. Industry Overview and Installation Overview

#### Give an overview of:

- a. Onshore oil and gas activities.
- b. Formation, finding and exploitation of oil and gas.
- c. Types of installations
  - drilling
  - production oil and gas/gas
  - construction
  - accommodation
  - special vessels.
- d. The onshore environment.

#### 2. Onshore Hazards

#### Give an explanation of:

Onshore hazards and comparative risk levels e.g.

- pressure hazards
- motion hazards
- chemical hazards
  - GHS
  - SDS
- electrical hazards
- gravity hazards.

#### 3. Managing Onshore Safety

#### Give an explanation of:

The multiple barriers model and systems in place to prevent hazards from contacting targets including:

- safe systems of work
- personal responsibility for safety
- safety observation programmes.

#### 4. Controlling Onshore Hazards

#### Give an explanation of:

The hierarchy of control and how control measures are implemented onshore; discuss the consequences of failure to control the risks.

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### **B.4** Training Programme (continued)

#### **SAFETY INDUCTION (continued)**

### 5. Living and Working Onshore

#### Give an explanation of:

Onshore routines: reporting in installation induction cabin/laundry/bond recreation /smoking getting on with others Working routines:
procedures
work authorisation
maintaining a safe workplace
personal protective equipment
waste disposal
the right to stop unsafe work

#### Give an explanation of:

Involvement in safety e.g.

- observation systems
- Permit to Work (PTW)
- toolbox talks
- safety meetings
- drills & exercises
- additional duties

#### Communicating safety, including:

- lines of communication

#### Injuries and illness:

- reporting incidents, accidents near misses and illnesses
- the role of the medic
- investigation
- preventing a recurrence
- support available to relatives in the event of illness/injury/major incident/evacuation

#### A Trainer's Guide for Further Onshore Training is shown in Appendix 1

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### **B.4** Training Programme (continued)

**Basic First Aid** 

### 1. Emergency First Aid

#### Delegates to demonstrate and practise:

- a. Immediate first aid actions including CPR
- b. How to carry patients with and without the stretcher.
- c. Recognize the need for CPR
- d. Perform CPR on an adult
- e. Use of AED (Automated external defibrillation)
- f. Understand the principles of airway obstruction
- g. Perform immediate first aid for a chocking victim

A Trainer's Guide for Further Onshore Training is shown in Appendix 1.

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### **B.4** Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE

#### 1. Firefighting Onshore

#### Give an overview of:

- a. The common causes and nature of fires onboard onshore oil and gas installations.
- b. Raising the fire and emergency alarm.
- c. The purpose of fixed fire and gas detection and firefighting systems; the actions to take in areas where these systems are deployed.
- d. Hydrogen Sulphide; the hazards, methods of detection and the actions to take in the event of discovery.

#### This is in advance of the information detailed during installation safety briefings

#### Give an explanation and demonstration of:

- e. The actions on discovering a fire.
- f. The operation of hand held portable fire extinguishers, small bore fire hose reels, fire blankets and their use against Class A and B fires.

#### Each delegates to practise and demonstrate:

- g. Raising the alarm on discovery of a fire.
- h. The operation of water (or foam), dry chemical and CO2 hand held portable fire extinguishers in extinguishing Class A and Class B fires as appropriate.

Note: Delegates may practice operation of small bore fire hose reel and/or fire blanket if requested and if sufficient time is available.

#### 2. Self Rescue

#### Give an explanation and demonstration of:

a. Self rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat.

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### **B.4** Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE (continued)

#### 2. Self Rescue (continued)

b. Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat.

#### **Delegates to practise and demonstrate:**

- c. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- d. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- e. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

#### A Trainer's Guide for Further Onshore Training is shown in Appendix 1

### **B.5** Duration of Training

## The optimum 'contact time' for this training and assessment is seen as 6 hours 30 minutes

Where this training is part of a programme of longer duration:

- the total contact time per day shall not exceed 8 hours.
- the total training day shall not exceed 10 hours

The total training day includes

- contact time
- refreshment and meal breaks
- travel between training sites where applicable.

<sup>\*</sup> smoke hoods to be used in cosmetic smoke only

<sup>\*\*</sup>This may be achieved by conducting exercises in darkness or by using "blacked out" smoke hoods

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#### **B.6** Assessment

Delegates will be judged against the learning outcomes using direct observation.

Training Providers should have a policy and procedure in place for dealing with persons not meeting the stated learning outcomes.

#### C.1 Staff

In order for a competence programme to be delivered successfully it is necessary to have appropriate persons in presenting and supporting roles.

TPTI Approved Training Providers will deliver and carry out assessment of the programme.

#### 1. Trainer will be:

- full time staff or contractor, working with the training providers. For the training assistance, the freelances can be allowed.
- trained in instructional/lecture techniques and/or have proven instructing /teaching experience.
- graduated from the university, vocational school, school, institute, or any organisation that are accredited by the government.
- included in an ongoing training programme, which includes visits to onshore oil and gas installations, to enable them to maintain and update skills.
- Able to clearly communicate and teach in English language.

#### 2. Assessors will be:

- discipline experts and will hold a recognised formal assessor award
- knowledgeable of the areas being assessed.
- 3. All staff will have the appropriate competencies to conduct/assist with the element of training being undertaken.
- 4. All Training staff will be trained in the causes and consequences of stress/anxiety, coping skills and how to manage delegates who are suffering from anxiety.

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### C.2 Trainer/Delegate Ratio

- 1. The ratio shown for theory sessions indicates the maximum number of delegates attending the course.
- 2. Other ratios indicate the maximum number of delegates to be supervised by an Instructor at any one time during each activity.

Satety	Induction

Theory 1:16

#### 3. Emergency First Aid

Theory 1:16

Demonstration 1:16

#### Practical on:

first aid actions of ABC
with SCBA
practical with a stretcher
1: 8
1: 8

#### Fire fighting & Self Rescue

Theory 1: 16

#### Extinguishers

Theory & Demonstration 1:16Practical Extinguishers 1:4

#### Practical self rescue

Group escape exercise 1 : 4 Self-rescue in cosmetic smoke 1 : 4

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#### C.3 Facilities

**Administration** arrangements appropriate for enrolment and certification of delegates and all aspects of the delivery of training in accordance with this standard.

**Theory** training area(s) so designed to enable each delegate view, to hear and participate fully in the subject matter being taught.

**Practical** training areas so designed to enable each delegate, to individually or as part of a team to view, hear and practise the following;

- (a) The boarding at the muster station after the alarm has been raised.
- (b) Practice with a stretcher
- (c) The use of portable fire extinguishers against the following:
  - Class B contained spill
  - Class A fire
- (d) The donning and wearing of a smoke hood in an area which can be smoke logged using cosmetic smoke.

All facilities must be maintained where appropriate, inspected and tested in accordance with current standards/legislation, guidance and manufacturers recommendations.

### C.4 Equipment

- 1. Equipment, of a type found on onshore oil and gas installations that are required to meet the needs of the training programme.
  - (a) Stretcher
  - (c) Portable Extinguishers water, foam CO<sub>2</sub> and dry chemical
  - (d) H2S detectors
  - (e) Water fire hose reel
  - (f) Fire blanket
  - (g) Smoke hoods
- 2. Safety Equipment appropriate to training being delivered.
  - (a) Personal Protective Equipment (PPE)
  - (b) First Aid Equipment
  - (c) Fire Fighting Equipment

All equipment must be maintained where appropriate, inspected and tested in accordance with current standards/legislation, guidance and manufacturers recommendations.

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#### **GENERAL GUIDANCE & REQUIREMENTS**

### C.5 Certification and Recording

### Registration of BOnST & FOnT Modules

Training Establishments are responsible for the following:

(a) The issuing of certificates direct to the delegate completing the programme and to the sponsoring company (when required). Each certificate must indicate that the delegate has been assessed against the agreed training outcomes and must contain the following:

Establishment name

Full TPTI course title stating that it is TPTI approved

TPTI course identification code

Delegate's name

Course dates

Expiry date (will be the day before the course completion date)

Unique Certificate Number

**Establishment Signatory** 

- (b) Each individual attending any TPTI approved programme must be registered with the Central Register (CR) operated by TPTI. Registration must be made by the training establishment to TPTI on a daily basis.
- (c) All Joining Instructions contain information which indicate certain aspects of the course are of a physical nature. The responsibility for the individual completing the course without any adverse effects to their present state of health lies with the delegate and/or the company sponsoring the delegate.
- (d) Prior to each course commencing, delegates must sign a declaration indicating they have read and understood a written statement regarding the physical nature of the programme and the need for delegates to be in good health. Instructional staff should also read out a statement indicating this at the time.
- (e) Where doubt exists regarding the medical fitness of any delegate the establishment should seek the advice of a medical officer.
- (f) A medical officer, familiar with the nature and extent of the training is "on call".

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### **GENERAL GUIDANCE & REQUIREMENTS (cont)**

- (g) Risk assessment of all training areas and provision of all appropriate safety equipment.
- (h) Written statements of organisation for all sessions, which clearly define responsibilities and relationships for all staff either directly or indirectly involved.
- (i) All training and supporting activities are carried out in accordance with current legislation.

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### **GENERAL GUIDANCE & REQUIREMENTS (cont)**

### C.6 Medical and Health Requirements

Emergency response training contains physically demanding and stressful elements. All personnel who participate in such training should be medically fit and capable of participating fully.

Training Establishments are required to ensure that prior to participating in practical exercises the delegate either;

- a) Possess a valid, current medical certificate from the hospital, clinic, or clinical agents registered under Thai government, and:
- b) Undergoes an appropriate screening by the trainer or medical officer inside the training establishment area.

It is recommended that this information is given to delegates along with pre-course joining instructions

#### Guidance and advice on this standard is available by contacting:

Technical Petroleum Training Institute (TPTI)

Energy Complex Building B Tel: 66 29365184 555/2, 11<sup>th</sup> Floor, Vibhavadi-Rangisit, Fax: 66 29365187 Chatuchak, Bangkok 10900 Thailand E-mail: admin@tpti.org

### Appendix 1.

#### **GUIDANCE TO THE TRAINER**

### **Basic Onshore Safety Training**

### **Trainer's Guide**

It is the intention that the following trainer's guide be used as a reference tool by training staff in the development and provision of theory and practical lessons. Resources and key topics listed should not be seen as lists that are either definitive or exhaustive when being used for lesson preparation.

#### The optimum 'contact time' for this training is seen as 10 hours 45 minutes.

The times indicated for individual lessons are flexible within this overall optimum time. However instructional staff should see these times as indicators to the amount of detail required for the delivery of the topic.

The training 'contact time' should not exceed 8 hours per day and except in unusual circumstances the total training day should not exceed 10 hours.

### <u>Content</u> <u>Optimum Contact Time (hrs)</u>

1. Registration and Safety	Not included
2. Safety Induction	3 hrs
3. Basic First Aid	3 hrs
5. Firefighting & Self-Rescue	4 hrs 25 min
6. Assessment of Safety Induction	30 min

**Total Optimum Contact Time 10 hours 55 mins (655 mins)** 

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### **Instructor's Guide** – BOnST (Registration & Safety)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Registration Safety	<ul> <li>Medical Fitness</li> <li>CR (refer to TPTI 'Personal Record')</li> <li>Training Provider Registration</li> <li>Certification</li> <li>Training Provider Health &amp; Safety Policy</li> <li>Fire Alarm/Emergency Actions</li> <li>First Aid</li> <li>Accident reporting</li> <li>Site Plan of training facility</li> </ul>	E			Visual Aid Medical Statement CR Registration Forms Training Provider documentation	Not included in course training time total

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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### <u>Instructor's Guide</u> – BOnST (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Session Introduction	<ul> <li>Aim (what the session is designed to do)</li> <li>Training Outcomes (what is expected of delegates)</li> <li>Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aid	10 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Safety Induction 1 Pg. 11	Industry & Installation Overview	<ul> <li>Overview of onshore oil and gas activities.</li> <li>Formation, finding and exploitation of oil and gas</li> <li>how hydrocarbons are formed, found and produced.</li> <li>Types of installations and specialist vessels and their main functions and features.</li> <li>drilling</li> <li>production oil &amp; gas/ gas</li> <li>construction - heavy lift, pipe laying</li> <li>accommodation</li> <li>specialist vessels - standby, support, transportation support.</li> <li>The onshore environment</li> </ul>	Ш			Visual Aid	30 mins
		<ul><li>remote nature</li><li>harsh conditions</li><li>proximity of working/living environments</li></ul>			Safety Induction 2		

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Safety Induction 2 Pg. 11	Onshore Hazards Introduction	Definitions     hazard     risk     control measure	E		Safety Induction 1	Visual Aid	10 mins
	Onshore	<ul><li>Accident Statistics</li><li>comparison with other industries</li><li>Environmental impact / statistics</li></ul>			Safety Induction 2	Acc/incident figures	
	Hazards	<ul> <li>Pressure Hazards</li> <li>oil/gas reservoir</li> <li>process/drilling pipework</li> <li>water / gas injection</li> <li>gas compression</li> <li>noise</li> <li>Motion Hazards</li> <li>drilling tubulars</li> <li>exposed machinery parts</li> <li>moving heavy equipment</li> <li>manual handling</li> </ul>			Safety Induction 1		20 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Onshore Hazards (cont.) Consequences	<ul> <li>Chemical Hazards</li> <li>GHD/SDS</li> <li>drilling chemicals</li> <li>reservoir fluids/gases (inc. H2s and narcotic effects of hydrocarbon gas)</li> <li>confined space entry</li> <li>process chemicals</li> <li>solvents</li> <li>Electrical Hazards</li> <li>maintenance of electrical equipment</li> <li>faulty electrical equipment</li> <li>Gravity Hazards</li> <li>working under suspended loads</li> <li>working at heights</li> <li>slips &amp; trips</li> <li>Accidents &amp; incidents</li> </ul>	E		Safety Induction 1	examples	

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Safety Induction 3 Pg. 11  A.4 Safety Induction 4 Pg. 11	Managing onshore safety  Controlling Onshore Hazards	Concepts of hazards contacting targets & barriers to the contact being made risk assessments procedures training competency assurance communications permit to work  Behavioural safety programmes the 9 elements of PRfS safety observation programmes  Hierarchy of control Determining risks (inc. to environment) and implementing control measures e.g. reservoir/ pipe work isolation B.O.P. training on handling tubulars guarding of machinery	E		Safety Induction 3  Safety Induction 1	Multiple barriers model  • Step change products  - task risk assessment  - lifting and mechanical handling  - personal responsibility for safety  - look this way  • OIAC "Guidelines to PTW Systems in the Petroleum Industry"	20 mins
Evolana	tion (by training staff)	- MSDS's / chemical & dust protection - electrical isolation - fall protection etc.	P		Practice (by delegate)		

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Safety Induction 6 Pg. 12	Living and Working Onshore	<ul> <li>Living onshore</li> <li>reporting in</li> <li>items permitted/not permitted onshore</li> <li>installation induction</li> <li>cabin/laundry/bond</li> <li>recreation/smoking</li> <li>getting on with others</li> <li>Responsibilities of employer / employee</li> <li>line of reporting</li> </ul>	E		Safety Induction 5	Installation organisation chart	15 mins

E - Explanation (by training staff)

D- Demonstration (by training staff)

P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Living and Working Onshore (cont.)	Working routine     procedures     work authorisation     personal protective equipment (PPE)     maintaining a safe place of work     waste disposal     right to stop unsafe work	E		Safety Induction 4	Examples of common PPE	10 mins
		<ul> <li>Your involvement in safety</li> <li>safety observation systems</li> <li>PTW</li> <li>toolbox talks</li> <li>safety meetings</li> </ul>				STOP/START/TOFS etc. Examples of permits	25 mins
		<ul><li>- emergency drills &amp; exercises</li><li>- additional emergency response duties</li><li>- getting involved</li></ul>				Installation emergency organisation chart	
		- what to do when not satisfied e.g. immediate supervisor OIM					

E - Explanation (by training staff)

- Demonstration (by training staff)

Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Living and Working Onshore (cont.)	<ul> <li>Reporting injuries &amp; illness</li> <li>first aid arrangements onshore</li> <li>reporting incidents, accidents &amp; near misses</li> <li>investigation</li> <li>preventing a recurrence</li> <li>support available to relatives</li> </ul>	E		Safety Induction 5		10 mins
	Summary Assessment	Assessment of Safety Induction				Question papers/ question bank	30mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate) Total 3 hours

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## Instructor's Guide - BOnST (Basic First Aid)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Session Introduction	<ul> <li>Aim (what the session is designed to do)</li> <li>Learning Outcomes (what is expected of delegates)</li> <li>Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aid	15 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## Instructor's Guide - BOnST (Basic First Aid)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Basic First Aid 1 Pg. 13	First Aid Overview	<ul> <li>Overview of onshore first aid precedent.</li> <li>causes of injuries and how to protect .</li> <li>Levels of the serious injurious and their handling methodology.</li> <li>Appropriate behaviour at the first aid scene.</li> </ul>	Е		Basic First Aid a.	Visual Aid	50 mins
	Raising the alarm	<ul> <li>Raising the alarm for coping with the first aid requirement</li> <li>Type of alarm</li> </ul>			Basic First Aid b.		
	First Aid Kit	<ul> <li>Introduction of the first aid kit</li> <li>How to identify and use all ingredients of the first aid kit.</li> </ul>					

E - Explanation (by training staff) D -

- Demonstration (by training staff)

Practice (by delegate)

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## <u>Instructor's Guide</u> – BOnST (Basic First Aid)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Basic First Aid 1 Pg. 13	Immediate first aid actions	<ul> <li>Understanding of CPR</li> <li>How to carry patients with and without the stretcher.</li> <li>Wounded and Bleeding.</li> <li>Bondages.</li> <li>Thermal Stress and Epilepsy.</li> <li>Use of AED</li> </ul>	E,D E,D E E,D E	P P P	Basic First Aid f., g.,h.,i.,j.,k.,l	Visual Aid	1 hr. 45 min.

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

**Total 3 hours** 

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### <u>Instructor's Guide</u> – BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Session Introduction	<ul> <li>Aim         (what the session is designed to do)</li> <li>Learning Outcomes         (what is expected of delegates)</li> <li>Timetable/Programme         (how delegates can achieve what is expected of them)</li> <li>Staff         (who will be involved with the delegates)</li> </ul>	Е			Visual Aid	15 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## <u>Instructor's Guide</u> – BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Firefighting & Self Rescue a) Pg. 14	Fire onboard an onshore installation						
. g	Nature of Fire	<ul> <li>Triangle of combustion</li> <li>Fire spread relate         <ul> <li>conduction, directly to</li> <li>convection, triangle of</li> <li>radiation combustion</li> </ul> </li> <li>Extinguishing media         <ul> <li>water, dry powder,</li> <li>foam, co<sub>2</sub>,</li> </ul> </li> </ul>	Е			Visual Aid	25 mins
	Common causes of fire onboard	<ul> <li>Processes and Activities</li> <li>emphasis on electrical, domestic and welding related fires.</li> </ul>	Е				

E - Explanation (by training staff) D - Demonstration (by training staff) P- Practice (by delegate)

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## <u>Instructor's Guide</u> - BOnST(Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Fixed Systems Onboard  Response	<ul> <li>Purpose of fixed fire and gas detection and firefighting systems.</li> <li>Actions to take in areas where these systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO<sub>2</sub>, and the urgent need to evacuate the area.)</li> <li>Action on discovering a fire ( as Installation Emergency Procedures) with emphasis on         <ul> <li>raising the alarm (methods)</li> <li>location of portable hand held firefighting equipment (types to be used during practical session)</li> <li>evacuate to designated area.</li> </ul> </li> </ul>	E&D			Visual aid  Note:  More detailed information on fire equipment and procedures specific to an installation will be included in installation safety briefings.	
	Hydrogen Sulphide	The hazards of H2S, methods of detection and the actions to take if it is discovered				Visual aid H2S detectors	10 min

E - Explanation (by training staff)

P - Practice (by delegate)

D - Demonstration (by training staff)

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# <u>Instructor's Guide</u> - BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	PPE Issue PPE to delegates	<ul><li>Protection offered</li><li>Correct method of wearing/fit</li><li>Condition of PPE</li></ul>		D&P		PPE as appropriate	15 mins
	Portable hand held firefighting equipment Fire Extinguishers	<ul> <li>Raising the alarm.</li> <li>Recognition of the different types of fire extinguisher (water, dry chemical, foam, CO<sub>2</sub> - not halon)</li> <li>Operate and use of each type of extinguisher on appropriate fire (class A and B)         <ul> <li>position of user</li> <li>techniques</li> </ul> </li> <li>Delegates to practice operation and use of the range of extinguishers</li> </ul>	E	D&P D E,D,P	Firefighting & Self Rescue 1	Extinguishers (Water, Dry Powder, Foam, CO <sub>2</sub> - not halon) Hose Reel Fire Blanket Fuel (Class A & B fires) Props (appropriate to practical training requirements) First Aid	65 mins
	Small bore fire hose reels	Operation and use on class A fire by training staff	E	D			
	Fire Blanket	Use on class B fire by training staff	E	D			

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## <u>Instructor's Guide</u> – BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
		<ol> <li>Notes:-</li> <li>All practical sessions involving the use of the above equipment should include the appropriate procedure on discovering a fire with emphasis on raising the alarm.</li> <li>The TPTI Standard will be satisfied if each trainee practises the operation and use of each of the following types of fire extinguisher:         <ul> <li>water or foam</li> <li>CO2</li> <li>dry chemical</li> </ul> </li> <li>Although not a requirement of the standard, delegates may operate a small bore hose reel and/or fire blanket if sufficient time is available.</li> </ol>					

E - Explanation (by training staff) D - Demonstration (by training staff)

P - Practice (by delegate)

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# <u>Instructor's Guide</u> - BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
A.4 Firefighting & Self Rescue 2 Pg. 15	Self Rescue Self rescue techniques	Self rescue,     without smoke hood     with smoke hood	E&D			Visual Aid	20 mins
		To include correct methods and procedures for escape when exposed to smoke and heat e.g. movement in corridors, on stairs with consideration of heat & visibility levels					
	Smoke hoods	<ul> <li>Donning and use of smoke hood</li> <li>Explanation &amp; demonstration of a selection of smoke hood types to delegates.</li> </ul>	E&D			Selection of smoke hoods for demonstration	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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# <u>Instructor's Guide</u> - BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Self Rescue						
	Practical Self Rescue	<ul> <li>Brief for practical session.</li> <li>Delegates to practise self rescue using smoke hood when,         <ul> <li>operating in restricted visibility (cosmetic smoke)</li> <li>visibility is completely obscured.</li> </ul> </li> <li>Delegates to practise small group escape using smoke hood when visibility is completely obscured</li> </ul>	Е	D&P	Firefighting & Self Rescue 2 Firefighting & Self Rescue 3 Firefighting & Self Rescue 4	Cosmetic smoke generator Smoke hoods Facility/Prop Torches First Aid/Resuscitation equipment	10 mins 80 mins
	Summary	Note:  More detailed information on escape equipment and procedures specific to an installation will be included in installation safety briefings.					10 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

Total 4hrs 25min (265 minutes)

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#### Appendix 2.

#### **GUIDANCE TO THE TRAINER**

#### **Further Onshore Training**

The intention of the following guidance is that it be used as a reference tool by training staff in the development and provision of the exercises indicated on pages 32-33. Resources and key topics listed should not be seen as either definitive or exhaustive when being used for lesson preparation.

#### The optimum 'contact time' for this training is seen as 6 hours 5 minutes.

The times indicated for individual lessons are flexible within this overall optimum time. However instructional staff should see these times as indicators to the amount of detail required for the delivery of the topic.

When this module is part of a longer training programme the training 'contact time' should not exceed 8 hours per day and except in unusual circumstances the total training day should not exceed 10 hours.

<u>Content</u>	Optimum Contact Time

Registration and Safety
 Safety induction
 Basic First Aid
 Fire fighting & Self Rescue
 Assessment of Safety Induction
 Not included
 hrs 40 min
 2 hrs
 3 hr 15 min
 20 min

Total Optimum Contact Time 7 hours 15 minutes (435 minutes)

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### <u>Instructor's Guide</u> – FOnT (Registration & Safety)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Registration Safety	<ul> <li>Medical Fitness</li> <li>CR (refer to TPTI 'Personal Record')</li> <li>Training Provider Registration</li> <li>Certification</li> <li>Training Provider Health &amp; Safety Policy</li> <li>Fire Alarm/Emergency Actions</li> <li>First Aid</li> <li>Accident reporting</li> <li>Site Plan of training facility</li> </ul>	E			Visual Aid Medical Statement CR Registration Forms Training Provider documentation	Not included in course training time total

E - Explanation (by training staff)

D- Demonstration (by training staff)

P - Practice (by delegate)

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## <u>Instructor's Guide</u> – FOnT (Course Introduction)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Course Introduction	<ul> <li>Aim         (what the session is designed to do)</li> <li>Training Outcomes         (what is expected of delegates)</li> <li>Timetable/Programme         (how delegates can achieve what is expected of them)</li> <li>Staff         (who will be involved with the delegates)</li> </ul>	E			Visual Aid	10 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Safety Induction 1 Pg. 21	Industry & Installation Overview	Overview of onshore oil and gas activities.	E		Outcome	Visual Aid	5 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Safety Induction 2 Pg. 21	Onshore Hazards Introduction	Definitions     hazard     risk     control measure	E		Safety Induction 1	Visual Aid	10 mins
	Onshore	<ul> <li>Accident Statistics</li> <li>comparison with other industries</li> <li>Environmental impact / statistics</li> </ul>			Safety Induction 2	Acc/incident figures	
	Hazards	<ul> <li>Pressure Hazards</li> <li>oil/gas reservoir</li> <li>process/drilling pipework</li> <li>water / gas injection</li> <li>gas compression</li> <li>noise</li> <li>Motion Hazards</li> <li>drilling tubulars</li> <li>exposed machinery parts</li> <li>moving heavy equipment</li> <li>manual handling</li> </ul>			Safety Induction 1		20 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
H	Onshore lazards (cont.)	<ul> <li>Chemical Hazards</li> <li>GHS/SDS</li> <li>drilling chemicals</li> <li>reservoir fluids/gases (inc. H2S and narcotic effects of hydrocarbon gas)</li> <li>confined space entry</li> <li>process chemicals</li> <li>solvents</li> <li>Electrical Hazards</li> <li>maintenance of electrical equipment</li> <li>faulty electrical equipment</li> <li>Gravity Hazards</li> <li>working under suspended loads</li> <li>working at heights</li> <li>slips &amp; trips</li> <li>Accidents &amp; incidents</li> </ul>	E		Safety Induction 1	examples	

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Safety Induction 3 Pg. 21 B.4 Safety Induction 4 Pg. 21	Managing onshore safety  Controlling Onshore Hazards	<ul> <li>Concepts of hazards contacting targets &amp; barriers to the contact being made</li> <li>risk assessments</li> <li>procedures</li> <li>Behavioural safety programmes</li> <li>the 9 elements of PRfS</li> <li>safety observation programmes</li> <li>Hierarchy of control</li> <li>Determining risks (inc. to environment) and implementing control measures e.g.</li> <li>reservoir/ pipe work isolation</li> <li>B.O.P.</li> <li>training on handling tubulars</li> <li>guarding of machinery</li> <li>MSDS's / chemical &amp; dust protection</li> <li>electrical isolation</li> <li>fall protection etc.</li> </ul>	E		Safety Induction 3  Safety Induction 1	Multiple barriers model  • Step change products  - task risk assessment  - lifting and mechanical handling  - personal responsibility for safety  - look this way  • OIAC "Guidelines to PTW Systems in the Petroleum Industry"	10 mins

E - Explanation (by training staff)

- Demonstration (by training staff)

Р-

Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Safety Induction 6 Pg. 22	Living and Working Onshore	Responsibilities of employer / employee     Iine of reporting	Е		Safety Induction 5		5 mins

E - Explanation (by training staff)

D- Demonstration (by training staff)

P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Living and Working Onshore (cont.)	<ul> <li>Working routine</li> <li>procedures</li> <li>work authorisation</li> <li>personal protective equipment (PPE)</li> <li>maintaining a safe place of work</li> <li>waste disposal</li> <li>right to stop unsafe work</li> <li>Your involvement in safety</li> <li>safety observation systems</li> <li>toolbox talks</li> <li>safety meetings</li> <li>emergency drills &amp; exercises</li> <li>additional emergency response duties</li> <li>getting involved</li> </ul>	E		Safety Induction 4	Examples of common PPE	5 mins 10 mins

E - Explanation (by training staff)

- Demonstration (by training staff)

P - Practice (by delegate)

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Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Living and Working Onshore (cont.)	<ul> <li>Reporting injuries &amp; illness</li> <li>first aid arrangements onshore</li> <li>reporting incidents, accidents &amp; near misses</li> <li>investigation</li> <li>preventing a recurrence</li> <li>support available to relatives</li> </ul>	E		Safety Induction 5		5 mins
	Summary Assessment	Assessment of Safety Induction				Question papers/ question bank	20 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

**Total 1hours 40 mins** 

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## <u>Instructor's Guide</u> – FOnT (Basic First Aid)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Session Introduction	<ul> <li>Aim         (what the session is designed to do)</li> <li>Learning Outcomes         (what is expected of delegates)</li> <li>Timetable/Programme         (how delegates can achieve what is expected of them)</li> <li>Staff         (who will be involved with the delegates)</li> </ul>	E			Visual Aid	15 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## <u>Instructor's Guide</u> – FOnT (Basic First Aid)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Basic First Aid 1 Pg. 23	Immediate first aid actions	<ul><li>Understanding of CPR.</li><li>How to carry patients with and without the stretcher.</li></ul>	E,D E,D	P P	Basic First Aid f., g.,h.,i.,j.,k.,l.	Visual Aid	1 hr. 45 min.
		Wounded and Bleeding.	E,D	Р			
		Bondages.	Е	Р			
		Thermal Stress and Epilepsy.	E,D				
		Use of AED	Е	Р			

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

**Total 2 hours** 

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### <u>Instructor's Guide</u> – FOnT (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Session Introduction	<ul> <li>Aim         (what the session is designed to do)</li> <li>Learning Outcomes         (what is expected of delegates)</li> <li>Timetable/Programme         (how delegates can achieve what is expected of them)</li> <li>Staff         (who will be involved with the delegates)</li> </ul>	Е			Visual Aid	15 mins

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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# <u>Instructor's Guide</u> – FOnT (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Firefighting & Self Rescue 1 Pg. 24	Fire onboard an onshore installation						
	Nature of Fire	<ul> <li>Triangle of combustion</li> <li>Fire spread relate         <ul> <li>conduction, directly to convection, triangle of radiation combustion</li> </ul> </li> <li>Extinguishing media         <ul> <li>water, dry powder, foam, co<sub>2</sub>,</li> </ul> </li> </ul>	Е			Visual Aid	20 mins
	Common causes of fire onboard	<ul> <li>Processes and Activities</li> <li>emphasis on electrical, domestic and welding related fires.</li> </ul>	E				

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## <u>Instructor's Guide</u> – FonT (Firefighting & Self Rescue)

Fixed Systems Onboard  Purpose of fixed fire and gas detection and firefighting systems.  Purpose of fixed fire and gas detection and firefighting systems.  • Actions to take in areas where these systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO <sub>2</sub> , and the urgent need to evacuate the area.)  • Action on discovering a fire ( as least lateral systems) with the state of the systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO <sub>2</sub> , and the urgent need to evacuate the area.)  • Action on discovering a fire ( as least lateral systems) with the systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO <sub>2</sub> , and the urgent need to evacuate the area.)	Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
Hydrogen Sulphide  Installation Emergency Procedures) with emphasis on - raising the alarm (methods) - location of portable hand held installation will be included in installation safety briefings.  Hydrogen Sulphide  Installation Emergency Procedures) with emphasis on - raising the alarm (methods) - location of portable hand held installation will be included in installation safety briefings.  Visual aid H2S detectors		Onboard Response Hydrogen	<ul> <li>Actions to take in areas where these systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO<sub>2</sub>, and the urgent need to evacuate the area.)</li> <li>Action on discovering a fire (as Installation Emergency Procedures) with emphasis on <ul> <li>raising the alarm (methods)</li> <li>location of portable hand held firefighting equipment (types to be used during practical session)</li> <li>evacuate to designated area.</li> </ul> </li> <li>The hazards of H2S, methods of detection and the actions to take if it is</li> </ul>				Note:  More detailed information on fire equipment and procedures specific to an installation will be included in installation safety briefings.  Visual aid	10 min

E - Explanation (by training staff)

P - Practice (by delegate)

D - Demonstration (by training staff)

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## <u>Instructor's Guide</u> - FOnT (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	PPE Issue PPE to delegates	<ul><li>Protection offered</li><li>Correct method of wearing/fit</li><li>Condition of PPE</li></ul>		D&P		PPE as appropriate	15 mins
	Portable hand held firefighting equipment Fire Extinguishers	<ul> <li>Raising the alarm.</li> <li>Recognition of the different types of fire extinguisher (water, dry chemical, foam, CO<sub>2</sub> - not halon)</li> <li>Operate and use of each type of extinguisher on appropriate fire (class A and B)         <ul> <li>position of user</li> <li>techniques</li> </ul> </li> <li>Delegates to practice operation and use of the range of extinguishers</li> </ul>	E	D&P D E,D,P	Firefighting & Self Rescue 1	Extinguishers (Water, Dry Powder, Foam, CO <sub>2</sub> - not halon) Hose Reel Fire Blanket Fuel (Class A & B fires) Props (appropriate to practical training requirements) First Aid	50 mins
	Small bore fire hose reels	Operation and use on class A fire by training staff	Е	D			
	Fire Blanket	Use on class B fire by training staff	Е	D			

E - Explanation (by training staff) D - Demonstration (by training staff) P - Practice (by delegate)

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## <u>Instructor's Guide</u> – FOnT (Firefighting & Self Rescue)

Std Outcome	Time
Notes:-  1. All practical sessions involving the use of the above equipment should include the appropriate procedure on discovering a fire with emphasis on raising the alarm.  2. The TPTI Standard will be satisfied if each trainee practises the operation and use of each of the following types of fire extinguisher:  - water or foam  - CO2 - dry chemical  3. Although not a requirement of the standard, delegates may operate a small bore hose reel and/or fire blanket if sufficient time is available.	

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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# <u>Instructor's Guide</u> - FOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
B.4 Firefighting & Self Rescue 2 Pg. 24	Self Rescue Self rescue techniques	Self rescue,     without smoke hood     with smoke hood	E&D			Visual Aid	10 mins
		To include correct methods and procedures for escape when exposed to smoke and heat e.g. movement in corridors, on stairs with consideration of heat & visibility levels					
	Smoke hoods	<ul> <li>Donning and use of smoke hood</li> <li>Explanation &amp; demonstration of a selection of smoke hood types to delegates.</li> </ul>	E&D			Selection of smoke hoods for demonstration	5 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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## <u>Instructor's Guide</u> - FOnT (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	Р	Learning Outcome	Resource	Time
	Self Rescue						
	Practical Self Rescue	<ul> <li>Brief for practical session.</li> <li>Delegates to practise self rescue using smoke hood when,         <ul> <li>operating in restricted visibility (cosmetic smoke)</li> <li>visibility is completely obscured.</li> </ul> </li> <li>Delegates to practise small group escape using smoke hood when visibility is completely obscured</li> </ul>	E	D&P	Firefighting & Self Rescue 2 Firefighting & Self Rescue 3 Firefighting & Self Rescue 4	Cosmetic smoke generator Smoke hoods Facility/Prop Torches First Aid/Resuscitation equipment	5 mins
	Summary	Note: More detailed information on escape equipment and procedures specific to an installation will be included in installation safety briefings.					5 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

Total 3hrs 15min (195 minutes)

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#### TPTI Standard – BOnST/ FOnT

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