

TPTI STANDARDS

Offshore Emergency Response Team Leader

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AMENDMENTS

| AMENDMENT | PAGES | CHANGES MADE BY: | CHECKED BY: | APPROVED BY: |
|---|-------|------------------|-------------|--------------|
| C2. Trainer/Delegate Ratio Revised the ratios indicate the maximum number of delegates to be supervised by one Instructor at any one time during both practical breathing apparatus and other practical from 1:4 to 1:8 | 15 | | | |
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Any amendments made to this standard by TPTI will be recorded above.

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GLOSSARY

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| BA | Breathing Apparatus |
| CO ₂ | Carbon dioxide |
| EBS | Emergency Breathing System |
| PPE | Personal Protective Equipment |
| TPTI | Technical Petroleum Training Institute |

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Offshore Emergency Response Team Leader

INTRODUCTION

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

The industry recognises that a major objective is to prevent incidents occurring, and if they do occur to control them and minimise their effect. It is important therefore to set common standards and to ensure that they are maintained. Before personnel can be assessed against standards they will require the knowledge and skills to enable them to carry out the tasks involved. They may also require basic training and practice before being assessed.

The purpose of this document is to set out the basic training, further practice and assessment requirements for Offshore Emergency Response Team Leaders which will be conducted at an onshore training establishment. The training establishment should recognise that this is only part of a broader training programme. There will also be company and installation specific emergency response training, most of which will be conducted offshore on a regular basis as offshore drills and exercises.

For the purposes of this document the definition of an Offshore Emergency Response Team Leader is a person who:

- has responsibility for an individual Emergency Response Team
- may take responsibility for more than one team as the Senior Team Leader
- will not be expected to take on the duties of an On-scene Emergency Controller

All personnel undertaking this training will have completed Basic Offshore Safety Training **or** Further Offshore Training **and** Offshore Emergency Response Team Member Training programmes to the agreed TPTI standards or a suitable alternative programme.

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| Offshore Emergency Response Team Leader |
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INITIAL TRAINING

A.1 Target Group

This program is designed to meet the initial onshore training and assessment requirements for an Offshore Emergency Response Team Leader in the oil and gas industry.

This Offshore Emergency Response Team Leader Standard contains:

Learning Outcomes
Training Program Content
Statements on:
 Assessment
 Further Training / Assessment

This Standard consists of the following modules:

Assess the incident
Execute the emergency response plan

A.2 Delegate Prior Achievement

Attendance on this training programme is open to delegates who :

- have previously attended a Basic Offshore Safety Training or
- Further Offshore Training and
- Offshore Emergency Response Team Member Training

to the agreed TPTI Standards or suitable alternative programmes.

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Offshore Emergency Response Team Leader

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

A.3 Learning Outcomes

Delegates, following a series of explanations, demonstrations and opportunities to practice, will as a candidate be assessed against the standards relating to the following training outcomes.

Offshore Emergency Response Team Leader

**Delegates will explain/identify:
(testing knowledge)**

1. Roles of the Emergency Response Team Leaders
2. Elements of teamwork and leadership
3. Offshore emergency response activities (fire and non-fire)
4. Incident Planning and Evaluation
5. Evaluation to select suitable pre-formed plan
6. Communication and execution of the selected plan
7. Planning the responses if there is no suitable pre-formed plan
8. Monitoring progress and taking appropriate corrective actions or altering the plan when necessary
9. Debriefing the team and compile incident summary
10. Communication requirements for offshore incidents
11. The requirement to initiate servicing of equipment and to replenish stocks

**Delegates will demonstrate:
(testing skills and knowledge)**

12. Establishing and maintaining communications including equipment and procedures
13. Allocating and confirming the team's duties and tasks

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Offshore Emergency Response Team Leader

A.3 Learning Outcomes (Continued)

14. Operation and use of firefighting and rescue equipment
15. Operation and use of breathing apparatus
16. Monitoring the team's progress, evaluating, adjusting and communicating the response plan
17. Monitoring stress in self and others
18. Debriefing the team

A.4 Training Programme

The information in this section is for trainers. Firstly, it provides the requirements for initial training which includes a programme to enable candidates to acquire the necessary knowledge and skills which underpin the tasks to be performed. Secondly, it provides the requirements for further practice and assessment of competence.

1. Basic study for Offshore Emergency Response Team Leader

Give an explanation of:

- Legislative requirements
- Emergency response team activities
- Emergency response procedure
- Emergency Response Team activities relevant to non fire incidents.

2. Fire and Emergency Equipment / and Uses

Give an explanation and demonstration of:

- The layout of installation or, plant and location of hazards
- The location of fire / emergency equipment
- Fixed firefighting systems
- How to use the equipment
- How to access the incident area

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A.4 Training Programme (Continued)

3. Emergency Response Planning

Give an explanation of:

- Incident evaluation and planning
- How to select and apply suitable pre-formed plans
- Resources allocation/utilisation
- Monitoring progresses
- Methods of identifying new priorities and objectives.

4. Teamwork, Leadership and Communications

Give an explanation of:

- The elements of teamwork and leadership and their application to offshore emergency response team
- Communication and control requirements of offshore emergency incidents
- The process of effective briefing and debriefing with The Offshore Emergency Response Team
- The requirement to initiate servicing of equipment and to replenish stocks

5. Practical exercises for Offshore Emergency Response Team Leader

Provide exercise to enable delegates practise and demonstrate:

- The conducting and controlling of offshore emergency response teams
- The briefing and debriefing of team members
- Operation and use of fire-fighting and rescue equipment and breathing apparatus
- The establishing and maintaining of effective communications

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Offshore Emergency Response Team Leader

A.5 Duration of Initial Training

The optimum 'contact time' for this training and assessment is seen as 24 hours.

It is suggested that a ratio of 15%:85% theory/practical is appropriate. The total contact time per day shall not exceed 8 hours.

The total training time in a day shall not exceed 10 hours (the total training time includes contact time, coffee and meal breaks, and travel time between training sites where applicable).

A.6 Assessment

Delegates attending this training and assessment programme (referred to as candidates during assessment) will be given a series of explanations and demonstrations which will identify what they are expected to know and do. This will be followed by practical exercises which will allow candidates to demonstrate their skills, knowledge and understanding of their emergency response role. Assessment of the candidates' performance will be against the stated training outcomes.

If required, further time and opportunity for coaching will be given to delegates to enable them to reach the standard leading to the award of a certificate. However, the time available for this during a programme is limited and it should be recognised there may be occasions where other arrangements need to be made.

A.7 Further Training/Assessment

The initial Offshore Emergency Response Team Leader certificate is valid for a period of two years. Thereafter, further training should be undertaken. The Further Live Fire Scenario is conducted at TPTI Approved Training Centres and is undertaken by all onshore workers and should be completed every two years.

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Further Live Fire Scenario

FURTHER LIVE FIRE SCENARIO

B.1 Target Group

This programme is designed to meet the further practice requirements not able to be met in the workplace for Offshore Emergency Response Team Leader.

B.2 Delegate Prior Achievement

Attendance on this programme course is open to delegates who are preferably in possession of a current Offshore Emergency Response Team Leader or suitable alternative certification. However, a minimum requirement is that the delegate has previously undertaken Emergency Response Team Leader training.

B.3 Training Outcomes

Delegates will have previously demonstrated their knowledge and their skills and will have been assessed as competent Emergency Response Team Leaders. During this programme they will be given the opportunity to demonstrate, as detailed below, their knowledge and the actions required when dealing with live fire and rescue situations as an Emergency Response Team Leader in aspects which they cannot reasonably practise offshore.

Offshore Emergency Response Team Leader

**Delegates will explain/identify:
(testing knowledge)**

1. The role of the Emergency Response Team Leader
2. Offshore emergency response activities (fire and non-fire)
3. Elements of teamwork and leadership
4. Communication requirements for offshore incidents
5. How to brief and debrief team members
6. The requirement to initiate servicing of equipment and to replenish stocks

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Further Live Fire Scenario

B.3 Training Outcomes (Continued)

Delegates will demonstrate: (testing skills and knowledge)

7. Establishing and maintaining communications including equipment and procedures
8. Allocating and confirming the team's duties and tasks
9. Operation and use of firefighting and rescue equipment
10. Operation and use of breathing apparatus
11. Monitoring the team's progress, evaluating, adjusting and communicating the response plan
12. Monitoring stress in self and others
13. Debriefing the team

B.4 Training Program

The programme will be designed to give the delegate maximum opportunity to practise the team fire/emergency response skills previously developed.

The initial exercises should be designed to test the skills, knowledge and understanding in relation to B.3.1 to B.3.13

Where necessary delegates should receive further training or coaching

At the end of the programme the training provider should identify, to the employer, delegates requiring further development and training.

B.5 Duration of Further Practice

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

It is suggested that a ratio of 10%/90% theory/practical is appropriate. The total contact time per day shall not exceed 8 hours.

Total training time in a day shall not exceed 10 hours (total training time includes contact time, coffee & meal breaks, & travel time between training sites where applicable).

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Further Live Fire Scenario

B.6 Assessment

Delegates attending this training and assessment programme (referred to as candidates during assessment) will be given a series of explanations and demonstrations which will identify what they are expected to know and do. This will be followed by practical exercises which will allow candidates to demonstrate their skills, knowledge and understanding of their emergency response role. Assessment of the candidates' performance will be against the stated training outcomes.

If required, further time and opportunity for coaching will be given to delegates to enable them to reach the standard leading to the award of a certificate. However, the time available for this during a programme is limited and it should be recognised there may be occasions where other arrangements need to be made.

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RESOURCES

RESOURCES

In order that a competence programme may be delivered successfully it is essential that the right people are there to support the programme and that the appropriate facilities and equipment are in place.

This section looks at each of these and sets out important guidelines.

C.1 Staff

Instructional staff will be required to carry out training and Assessors will be required to judge candidate's competence. It is important that the staff involved have the appropriate qualifications and experience.

C.1.1 Qualifications & Experience

C.1.1.1 Instructional Staff

All instructional staff must:

- (a) have proven experience in fire fighting and emergency response operations at supervisory level.
- (b) be trained in instructional/lecture techniques and/or have proven instructing/teaching experience.
- (c) be included in an ongoing staff training programme, which includes an induction to offshore ERT operations and visits to offshore oil and gas installations, to enable them to maintain and update skills and knowledge.

C.1.1.2 Assessors

All Assessors must be:

- (a) Discipline experts trained and qualified in assessment techniques.

C.1.1.3 All Staff

All staff must have:

- (a) the appropriate competencies to conduct/assist the element of training being conducted.

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C.2 Trainer/Delegate Ratio

- (a) It is recommended that the maximum number of delegates attending this programme is 12.
- (b) The minimum number of delegates attending the programme is 6.
- (c) The following ratios indicate the maximum number of delegates to be supervised by one Instructor at any one time during each activity.

| | |
|-------------------------------|------|
| Theory | 1:12 |
| Practical Breathing Apparatus | 1:8 |
| Other Practical | 1:8 |

- (d) The maximum numbers and theory ratio may be exceeded to accommodate full company/installation emergency response teams. In such cases the practical ratios should not be exceeded

C.3 Facilities

Different facilities may be required and it is important to make sure that these are available.

Administration arrangements to support delegates from booking through registration and assessment to certification

Theory training area(s) so designed to enable each delegate to participate fully.

Practical training areas so designed to enable each delegate to, as a team leader or as part of a team, participate fully in the following:

- (a) using fire hose, hose fittings, hydrants, hose branches, portable monitors, hose running and branch handling on walkways and stairways, against one or more of the following:
 - Class A contained fire
 - Class B contained spill fire
 - Class B running fire

For Class B, LPG may be used to simulate liquid fire.

- (b) isolating fuel valves on a hydrocarbon pressure fed fire whilst using water for structural and personal protection.

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- (c) using foam producing equipment against hydrocarbon running and contained spill fires.
- (d) donning and wearing working duration breathing apparatus on open and enclosed multi-level structure(s) with a minimum of 3 levels with open and enclosed areas on each level.
The structure must be capable of:
 - being smoke logged and heated using cosmetic, real smoke and fire
 - being accessed internally and externally by the use of stairs, fixed ladders and walkways
 - containing internal Class A contained fire(s), Class B contained spill fire(s), Class B pressure fed fire(s) and external Class B pressure fed fire(s), Class B and contained spill fire(s) and Class C fire(s). For Class B, LPG may be used to simulate liquid fire.
 - allowing realistic firefighting operations to be conducted
- (e) firefighting and protecting a structure housing a simulated pressure vessel and associated pipework.

Note:

1. Each of the above facilities used for practical firefighting must be serviced by a water main with above ground hydrants fitted with control mechanisms of a type found on offshore oil and gas installations. The water pumping capacity must be adequate for the expected maximum usage and have a standby capacity of 75%.
2. All pressure fed fires must be capable of being isolated immediately in the event of an emergency or a failure in the firefighting water supply.

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

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RESOURCES

C.4 Equipment - (of a type found on offshore oil and gas installations)

Different types of equipment may be required and it is important to make sure that it is both available and fit for purpose.

- Portable extinguishers - water, foam, CO₂ and dry chemical
- Water fire hose reel
- Fire hose, couplings, branches, monitors
- Foam inductors and branches
- Stretchers
- Working duration breathing apparatus and cylinders
- Breathing apparatus entry control equipment
- First Aid
- Resuscitation
- Training dummies
- PPE

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

C.5 Certification and Recording

A TPTI Certificate will be issued to all delegates assessed as meeting the stated outcomes. The issue of a certificate indicates that the delegate has achieved a level of competence to enable him/her to join an Offshore Emergency Response Team for further installation specific training and development.

Details of all delegates attending the training course and of all certificates issued will be recorded on the Central Register (CR) operated by TPTI.

Following satisfactory assessment the training provider delivering the emergency training will, for every delegate:

- (a) issue a certificate
- (b) register the candidate with TPTI

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RESOURCES

C.6 Medical & Health Requirement

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) Possesses 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.

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GENERAL GUIDANCE & REQUIREMENTS

C.7 General Requirements

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 Certificate Number (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".
- (g) Risk assessment of all training areas and provision of all appropriate safety equipment.

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GENERAL GUIDANCE & REQUIREMENTS (cont)

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

Guidance and advice on this standard is available by contacting:

Technical Petroleum Training Institute (TPTI)
Energy Complex Building B
555/2, 11th Floor, Vibhavadi-Rangisit,
Chatuchak, Bangkok 10900 Thailand

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