

# Qualification Unit

This unit forms part of a regulated qualification.

**Unit Title:** Control Tug Operations

**Unit Reference Number:** D/652/4128

**Level:** Three (3)

**Credit Value:** Five (5)

**Minimum Guided Learning Hours:** 30

| Learning Outcome (The Learner will):        | Assessment Criterion (The Learner can):                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Be able to prepare for towage operations | 1.1 Plan towage operations with the master in accordance with current legislation and industry standards                                      |
|                                             | 1.2 Ensure all equipment is used in accordance with manufacturers' instructions and guidelines                                                |
|                                             | 1.3 Communicate confirmation to the master that appropriate preparations including assessment of risk for the operation have been carried out |
| 2. Be able to conduct towage operations     | 2.1 Ensure that connecting, adjusting, and disconnecting the tow is in line with procedures and safe practices                                |
|                                             | 2.2 Communicate effectively using onboard internal and external communication systems                                                         |
|                                             | 2.3 Respond correctly to sound signals and special port signals for towage operations                                                         |
|                                             | 2.4 Maintain working environment in a safe condition throughout the operation                                                                 |
|                                             | 2.5 Shut down equipment on completion of operations                                                                                           |
|                                             | 2.6 Stow equipment on completion of operations                                                                                                |

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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Demonstrate knowledge of the equipment required for routine towage operations    | 3.1 Explain the characteristics of different tug types and their application                                                                          |
|                                                                                     | 3.2 Explain the towage system and use of equipment carried for routine operations                                                                     |
|                                                                                     | 3.3 Explain different towage system components including types of rope, wire, chain, shackles, links, staples, jaws, pins, gog systems and their uses |
|                                                                                     | 3.4 Explain winch type, construction, and effective operation                                                                                         |
|                                                                                     | 3.5 Explain tug construction including stability and watertight integrity                                                                             |
| 4. Be able to respond to incidents during towage operations                         | 4.1 Take appropriate action in the event of an incident                                                                                               |
|                                                                                     | 4.2 Operate equipment in an incident to company and port authority requirements                                                                       |
|                                                                                     | 4.3 Respond appropriately to equipment failures promptly and effectively                                                                              |
|                                                                                     | 4.4 Report incidents to the master and appropriate authorities as directed                                                                            |
| 5. Demonstrate knowledge of onboard procedures in adverse conditions for own vessel | 5.1 Explain the types and use of equipment carried for use in adverse conditions                                                                      |
|                                                                                     | 5.2 Explain the procedures and safe operation during adverse conditions                                                                               |
| 6. Demonstrate knowledge of equipment required for emergency response               | 6.1 Explain types and use of emergency towage systems                                                                                                 |
|                                                                                     | 6.2 Explain types and use of pollution control equipment                                                                                              |
|                                                                                     | 6.3 Explain types and use of fixed and portable fire fighting equipment, and casualty recovery equipment                                              |
|                                                                                     | 6.4 Explain types and use of Person In Water recovery equipment                                                                                       |
| 7. Demonstrate knowledge of relevant regulations and guidelines                     | 7.1 Explain application of relevant Statutory Regulations, industry guidelines, and organisational procedures                                         |