# SIP018 - GUIDANCE ON SAFETY INDUCTION AND TRAINING IN PORTS



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### 1. INTRODUCTION

- 1.1. The Health and Safety Executive provided support to Port Skills and Safety in producing this guidance, which is aimed at improvements within the Ports industry. This guidance may go further than the minimum you need to do to comply with the law regarding health and safety.
- 1.2. It is for companies operating in the UK ports industry with responsibility for the safe design, construction, operation, management and maintenance of ports

- and terminal facilities and management of port and terminal activities. It will also be useful to employees and their representatives.
- 1.3. Following the guidance is not compulsory and you are free to take other action. If you do follow the guidance, you will normally be doing enough to comply with the law. Health and Safety Inspectors seek to secure compliance with the law and may refer to this guidance. If the guidance goes beyond compliance, then this will be clearly identified.
- 1.4. Regulations in this document are referred to by title but not year, as they are amended from time to time and the reader should always seek the current version. Acts are given a year as they tend to change less frequently. The list of references at the end of this document do include a date that was correct at the time of publication.
- 1.5. Guidance within these shaded areas of this document denotes that the contents go beyond statutory compliance. This is industry recommended best practice. The guidelines are not mandatory. Individual organisations have a duty of care to those who might be affected by their operations and are responsible for devising arrangements that meet their obligations.
- 1.6. The guidelines complement general non-safety induction training including.
  - 1.6.1. providing a specific safety element which will enable individuals to have an awareness of health and safety,
  - 1.6.2. the main hazards they are likely to encounter in the port
  - 1.6.3. how to move safely around the port area,
  - 1.6.4. how to undertake organisation tasks safely and efficiently.

### 2. REGULATORY FRAMEWORK AND GUIDANCE

- 2.1. The two principal relevant pieces of law are the <u>Health and Safety at Work etc.</u>

  <u>Act (HSWA) 1974</u>, and the <u>Management of Health and Safety at Work Regulations</u> (MHSWR), which set out the basic requirements to ensure, so far as is reasonably practicable, the health, safety and welfare of all involved.
- 2.2. Port specific, Merchant Shipping and other legislation applies and should be referred to.
- 2.3. Approved Code of Practice (ACOP) L148 'Safety in Docks' was introduced on 6 April 2014: <a href="http://www.hse.gov.uk/pubns/books/l148.htm">http://www.hse.gov.uk/pubns/books/l148.htm</a>
- 2.4. The PSS/HSE Safety in Ports guidance suite, available from the PSS website at: <a href="https://www.portskillsandsafety.co.uk/resources">https://www.portskillsandsafety.co.uk/resources</a> is an important supplement to Safety in Docks ACOP L148.
- 2.5. The guidance is aimed at routine operations. It does not cover some of the specialised and high-risk activities associated with handling dangerous goods and hazardous cargoes. Or major hazards sites which are subject to the Control of Major Accident Hazards Regulations where specialist advice may be required.



- 2.6. Reference can also be made to the International Labour Organisation's (ILO) Code of Practice on Safety and Health in Ports (ILO 152): <a href="http://www.ilo.org/sector/activities/sectoral-meetings/WCMS">http://www.ilo.org/sector/activities/sectoral-meetings/WCMS</a> 546257/lang-en/index.htm
- 2.7. Several Statutory Instruments establish explicit duties for workplace training; they include but are not limited to the following.
- 2.8. <u>Health and Safety at Work etc. Act (HSWA) 1974</u>, section 2 'General Duties' paragraph (2)(c) places a duty on employers to ensure: "...the provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of his employees".
- 2.9. The Management of Health and Safety at Work Regulations:
  - 13 (2) Every employer shall ensure that his employees are provided with adequate health and safety training
  - (a) on their being recruited into the employer's undertaking; and
  - (b) on their being exposed to new or increased risks because of
    - (i) their being transferred or given a change of responsibilities within the employer's undertaking
    - (ii) the introduction of new work equipment into or a change respecting work equipment already in use within the employer's undertaking
    - (iii) the introduction of new technology into the employer's undertaking, or
    - (iv) the introduction of a new system of work into or a change respecting a system of work already in use within the employer's undertaking
  - 13 (3) The training referred to in paragraph (2) shall
  - (a) be repeated periodically where appropriate.
  - (b) be adapted to take account of any new or changed risks to the health and safety of the employees concerned; and
  - (c) take place during working hours
- 2.10. Under the <u>Provision and Use of Work Equipment Regulations 1998 (PUWER)</u> employers are required to ensure that:
  - "...all persons who use work equipment have received adequate training for purposes of health and safety, including training in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken." (Regulation 9(1))

- ...any of his employees who supervises or manages the use of work equipment has received adequate training for purposes of health and safety, including training in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken." (Regulation 9(2))
- 2.11. Regulation 3 of PUWER extends these requirements to the self-employed and those who have control (to the extent that their control allows) of work equipment, of people at work who use, supervise, or manage the use of work equipment, or of the way in which work equipment is used at work.
- 2.12. The <u>Lifting Operations and Lifting Equipment Regulations (LOLER)</u>: require that: "Every employer shall ensure that every lifting operation involving lifting equipment is ... properly planned by a competent person" [8(1)(a)].
- 2.13. HSE guidance on Competence in Health and Safety states that: "Competence can be described as the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely. Other factors, such as attitude and physical ability, can also affect someone's competence".
- 2.14. As competence can be affected by physical ability, employers may also refer to <a href="PSS guidance Documents">PSS guidance Documents</a> : SiP011 Sources of Occupational Health Information and SiP017 Management of Fitness For Work In Ports
- 2.15. Employers have a legal duty to consult with their employees, or their representatives, on health and safety matters The Safety Representatives and Safety Committees Regulations and The Health and Safety (Consultation with Employees) Regulations. Active consultation and involvement of employees and their health and safety representatives is essential to good health and safety management. Employers should have arrangements to consult on the best ways of providing information and training.
- 2.16. Reference can also be made to the <u>International Labour Organization's (ILO)</u>
  Code of Practice on Safety and Health in Ports (ILO 152).
- 2.17. Employers should not allow anyone who has not satisfactorily completed training and testing, except for those undergoing training under adequate supervision, to operate potentially hazardous processes, plant, or equipment, even on a very occasional basis.
- 2.18. An employer who does not ensure personnel are trained and competent may find themselves in breach of the regulations.

### 3. **HEALTH**

- 3.1. The wide range of activities in ports can give rise to possible health risks such as exposure to dusty cargoes; back injuries, sprains, and strains from lifting and handling, pushing and pulling; noise and vibration. There is specific legislation including the Control of Substances Hazardous to Health Regulations, the Control of Noise at Work Regulations, the Manual Handling Operations Regulations and Personal Protective Equipment at Work Regulations.
- 3.2. There is reference to some specific health risks in these guidance documents, it is not possible to cover all the issues. Further information and guidance on the identification, assessment and reduction or avoidance of such risks can be found on the HSE website at:
  - 3.2.1. Ports web pages: http://www.hse.gov.uk/ports/index.htm
  - 3.2.2. Control of Substances Hazardous to Health: <a href="https://www.legislation.gov.uk/uksi/2002/2677/regulation/7/made">https://www.legislation.gov.uk/uksi/2002/2677/regulation/7/made</a>
  - 3.2.3. HSE Whole Body Vibration in Ports Information Paper <a href="http://www.hse.gov.uk/vibration/wbv/ports.pdf">http://www.hse.gov.uk/vibration/wbv/ports.pdf</a>
  - 3.2.4. Musculoskeletal disorders (MSDs) http://www.hse.gov.uk/msd/index.htm
  - 3.2.5. Noise at Work http://www.hse.gov.uk/noise/
  - 3.2.6. Personal Protective Equipment http://www.hse.gov.uk/toolbox/ppe.htm
  - 3.2.7. Vibration at Work <a href="http://www.hse.gov.uk/vibration/">http://www.hse.gov.uk/vibration/</a>

### 4. RISK ASSESSMENT

- 4.1. Risk Assessments must be undertaken in accordance with the <u>Management of Health and Safety at Work Regulations</u>. The risk assessment must consider the risks, not only to permanent employees but also to others including non-permanent employees (NPE's), ship's crew, passengers and visitors that may be affected by the activity. The appropriate control measures must be introduced and should consider collective measures ahead of personal or individual measures.
- 4.2. Risks should be reduced to as low as is reasonably practicable by taking preventative measures in order of priority below. The diagram below sets out an ideal order to follow when planning to reduce risk.

### **ELIMINATION**

Redesign the job or substitute a substance so that the hazard is removed or eliminated. For example, duty holders must avoid working at height where they can.

### **SUBSTITUTION**

Replace the material or process with a less hazardous one. For example, use a small MEWP to access work at height instead of step ladders. Care should be taken to ensure the alternative is safer than the original.

### **ENGINEERING CONTROLS**

Use work equipment or other measures to prevent falls where you cannot avoid working at height. Install or use additional machinery such as local exhaust ventilation to control risks from dust or fume. Separate the hazard from operators by methods such as enclosing or guarding dangerous items of machinery/equipment. Give priority to measures which protect collectively over individual measures.

### **ADMINISTRATIVE CONTROLS**

These are all about identifying and implementing the procedures you need to work safely. For example: reducing the time workers are exposed to hazards (eg by job rotation); prohibiting use of mobile phones in hazardous areas; increasing safety signage, and performing risk assessments.

### PERSONAL PROTECTIVE CLOTHES AND EQUIPMENT

Only after all the previous measures have been tried and found ineffective in controlling risks to a reasonably practicable level, must personal protective equipment (PPE) be used. For example, where you cannot eliminate the risk of a fall, use work equipment or other measures to minimise the distance and consequences of a fall (should one occur). If chosen, PPE should be selected and fitted by the person who uses it. Workers must be trained in the function and limitation of each item of PPE.

Reference: HSE Leadership and Worker Involvement Toolkit. Available at

 $\underline{http://www.hse.gov.uk/construction/lwit/assets/downloads/hierarchy-risk-controls.pdf}$ 

- 4.3. Risk assessments must be reviewed:
  - regularly
  - immediately after any incident
  - when there are significant changes to the operation
- 4.4. Most accidents and near misses can be avoided if the risks from the work are suitably and sufficiently assessed and appropriate control methods are adopted.

- 4.5. The risk assessment should record the significant hazards and the risks of the operation together with the relevant control measures. In port operations risk assessments should consider changes such as tidal changes, weather, trim, list, load/cargo and vessel dynamics.
- 4.6. Planning and work execution is discussed in HS(G) 177, Managing Health and Safety in Dockwork: http://www.hse.gov.uk/pubns/books/hsg177.htm
- 4.7. The Health and Safety at Work Act 1974 applies on board a ship when shore-based workers are engaged in cargo handling or other tasks on board. Cargo handling may include, but is not limited to,
  - 4.7.1. loading, unloading, stowing, unstowing, pouring, trimming, classifying, sizing, stacking, unstacking,
  - 4.7.2. composing and decomposing unit loads; and
  - 4.7.3. services in relation to cargo or goods such as tallying, weighing, measuring, cubing, checking, receiving, guarding, delivering, sampling and sealing, lashing and unlashing.
- 4.8. The Health and Safety at Work Act 1974 also applies to the Master and ship's crew when working with shore-based personnel on board ship.
- 4.9. Cooperation and coordination between shipside and landside employers is required. Employers must carry out risk assessments and develop safe systems of work (in consultation with the workers involved). All parties must agree, so that employers can co-operate effectively with each other.
- 4.10. A signed agreement or an agreed and recorded system of work with the master of each vessel is recommended this is not a legal requirement but may help to ensure effective co-ordination with other parties.
- 4.11. The Regulations made under the Health and Safety at Work Act 1974 such as.
  - The Management of Health and Safety at Work Regulations
  - The Lifting Operations and Lifting Equipment Regulations and
  - The Provision and Use of Work Equipment Regulations

do **not** apply to a master or crew of a ship, or any persons employing them, in relation to:

- safe access, plant and equipment which remain on board the ship
- any undertakings or work which are carried out on board ship solely by the master and the crew.

Instead, the Merchant Shipping Act 1894 and related Merchant Shipping Regulations impose similar duties on board ship in UK territorial waters.

- 4.12. A ship's master has duties under the Health and Safety at Work Act 1974 in relation to the ship's crew who are put ashore to perform their own tasks (for example loading ship's stores or carrying out maintenance work on their ship). Those duties also extend to plant and equipment (for example a forklift truck) which is under the master's control that is used ashore by ship's crew, or when used by shore-based workers ashore or on-board ship.
- 4.13. Training programmes should:
  - be risk assessed.
  - consider the findings and content of relevant risk assessments.
  - ensure that the trainee is aware of and understands the relevant health and safety risks and controls.
- 4.14. Risk assessment(s) for training activities should account for the level of skill, knowledge, aptitude, experience, and competence of the trainee. Additional or enhanced control measures may be appropriate during training that might not be necessary during normal operations with a competent worker and higher levels of supervision may be required.

### 5. CONSULTATION, COOPERATION AND COORDINATION

- 5.1. **Consultation**: Employers have a duty to consult with their employees, or their representatives, on health and safety matters. By gaining worker involvement on health and safety through two-way communication, concerns can be raised and solved together. Views and information can be sought and exchanged in a timely manner.
  - 5.1.1. See: HSE pages: Consulting and involving your workers http://www.hse.gov.uk/involvement/index.htm
- 5.2. **Cooperation and Coordination**: Cooperation and coordination between shipside and landside employers is required. Employers must carry out risk assessments and develop safe systems of work (in consultation with the workers involved) that all parties agree to, so respective employers can co-operate effectively with each other.

# 6. EMPLOYEE INDUCTION

- 6.1. Induction provides an opportunity to set out the organisation's commitment to a safety culture and create positive employee engagement. When safety is shown to be relevant and taken seriously at the outset, it can positively affect the employee and their future health and safety.
- 6.2. Developing a new starter into a competent worker can be broken down into stages. Different training activities and approaches are required at each stage along with different levels of supervision. A new starter may have little or no knowledge, skills, or experience of the port environment. They need a suitable and sufficient **Induction** to start training safely for their role.

New Starter: little or no port knowledge skills or experience

• Trainee: learning on-job

• **Trained:** can do the task safely, but is not yet fully proficient

• Competent: safe and proficient.

- 6.3. Induction is mainly knowledge based and includes both 'generic' and 'local' knowledge. The main purpose of induction includes but is not limited to.
  - get safely to their place of work and to other appropriate parts of the organisation.
  - inform them of significant hazards and risks, for example in some ports the kinds of suspended load operations that may be found.
  - be able to start learning how to safely perform the tasks and activities for which they have been employed
  - know what to do and where to go in an emergency ie the assembly point

It does not normally include 'on-job' skills.

- 6.4. The length of the induction should be determined by the needs of the individual. It must consider their literacy, numeracy and language skillset for the learning objectives, hazards and risks associated with their workplace.
- 6.5. The induction design should consider that the New Starter is handling a lot of new information. Theory content and legislation should be made relevant to the learner and should not overload the new starter with lots of legislation, theory, and text detail. It should focus on 'must know' rather than 'nice-to-know' content. For example, it may be better to talk about specific pieces of legislation and duties later, in the workplace, where it can be linked to task and procedure.
- 6.6. The contents of the Induction should be based on but not limited to relevant legislation, risk assessments and method statements. Risk assessments identify the hazards that might be encountered and the effects of any mitigation. Method statements identify the control measures and practices in place to ensure the mitigation.
- 6.7. Induction should be consistent, systematic, and well documented. Learning content should be recorded, along with 'outcomes-based' learning objectives and enabling objectives. It should be clear what the learner is expected to know, understand and be able to do at the end of the training.
- 6.8. Induction should be formally assessed during and/or at the end to ensure that information has been taken in successfully. If a learner has not understood or retained 'must-know' information they should be given feedback/remedial action. The purpose of the assessment is not to 'fail' a learner but to provide what is necessary, so they acquire the minimum required knowledge. Successful completion of the assessment should be formally recorded.

- 6.9. Industry good practice is to include a sign-off by the individual, confirming that they have "read and understood" the content of any safety documentation at Induction. This can be a useful part of focusing the reader. However, it is the role of the trainer to ensure an appropriate level of understanding. Handing over a manual, polices or getting them to watch an induction video on their own and asking the employee to read and sign them off without providing supporting learning, is unlikely to be considered enough to ensure reliable understanding by the new starter.
- 6.10. Training should be delivered by a competent trainer. The trainer should have sufficient knowledge of the organisation's hazards, risks, and safety systems. The trainer should be skilled in learning delivery and may be either an employee of the organisation or an external specialist.
- 6.11. Third party off-the-shelf, electronic, and remote learning may be used for generic knowledge content where it meets the organisation's needs. However, local bespoke learning will still be required in addition to any generic content.
- 6.12. As the induction version and content are updated over time, a record should be maintained of which version was delivered to each employee.

### 7. INDUCTION FOR PERSONS OTHER THAN EMPLOYEES

7.1. Those other persons needing to access the port should be provided with information, instruction, training, and supervision as is necessary to ensure, so far as is reasonably practicable, their health and safety. For example, this could be: a 'visitor safety video', a contractor's handbook or information sheet. The port should assess the risks to third parties and implement suitable and sufficient inductions according to the risk. Refer to section 12 within this document for reassessment and refresher trainings

# 8. JOB AND TASK TRAINING

- 8.1. On the job training enables the worker to acquire the knowledge and skill necessary to safely conduct their work tasks including the operation of process, plant, and equipment. It is specific to individual tasks and operations.
- 8.2. The learning methods employed should fit the learning outcomes. Where it is safe to do so, the best way to learn task skills is to do the task, using the equipment in the working environment. Classroom learning is best suited to acquisition of knowledge, theory and may be part of on job training. However, it will not normally be sufficient to train the individual in a classroom and then release them onto a job without on-job training.
- 8.3. An unqualified worker will require a higher-than-normal level of supervision during training. An individual should not be left unsupervised to undertake any task that might put them at risk.

- 8.4. Training should be delivered by a designated, trainer with skills in the task and how to conduct on-job training. The trainer may be an employee of the organisation or an external specialist.
- 8.5. Adequate learning resources should be provided for the task; this may include but is not limited to suitable training facilities, visual aids, equipment, and elearning.
- 8.6. On-job training progress should be evaluated during the training, with timely corrective feedback provided throughout. Where practicable plant and equipment training should be continuous and without large gaps between training sessions.

### 9. ASSESSMENT

- 9.1. There should be a clear definition of the requirements for the task, against which the worker will be trained and assessed. These should be documented and identify where failure to perform successfully might introduce a risk to the individual, other persons, or the organisation. Typically, the definition should clarify:
  - standards to be met
  - performance required
  - conditions under which the performance and standards are to be delivered
- 9.2. A worker is not yet competent until they
  - 9.2.1. understand why a task is done in a particular way
  - 9.2.2. they meet the performance and standards, under the expected conditions and
  - 9.2.3. know what to do in the event of abnormal/emergency conditions.
- 9.3. Different learners will acquire skills and knowledge at different speeds. All performance will be formally assessed, however the decision on when to conduct the assessment should be based on the individual's capability.
- 9.4. Meeting competence requirements may include the trainee completing a number of recorded (e.g., in a logbook) shifts/operations without non-conformance.
- 9.5. A higher level of assurance is achieved when assessment is carried out by someone other than the individual's trainer. The organisation should identify any instances where a separate assessor should be used.
- 9.6. Robust records should be maintained showing the date and outcome of assessments and referencing the standards against which the person was assessed.

- 9.7. There is no legal requirement to issue certificates of competence. Although a suitable record of all training must be kept on record. A copy should be issued to workers on successful completion of their training. Where practicable, certificates of competence should list the main areas of competence being confirmed. Certificates should include an expiry or reassessment date, depending on the nature of the task.
- 9.8. Organisations should put in place suitable and sufficient Quality Assurance for trainers and assessors. Ideally this will incorporate certification of trainers to train and assessors to assess. Organisations are strongly encouraged to incorporate external verification and nationally recognised qualifications into their training processes.
- 9.9. A newly qualified worker, who has successfully completed the basic training should be given the opportunity to improve their proficiency. There is still significant conscious involvement in executing the new skill. They need to build experience by doing the task. Lighter-touch performance feedback should be delivered along with slightly higher than normal level of mentoring / monitoring in this stage.

### 10. PLANT AND EQUIPMENT TRAINING REQUIREMENTS

- 10.1. There are no government issued licences for vehicles at work. There is also no HSE approved system for training plant except for an Approved Code of Practice for rider operated lift trucks. The law requires that each operator is given adequate training by their employer so that they are competent to operate the machinery which they use (the Provision and Use of Work Equipment Regulations; Regulation 9).
- 10.2. Operators legally do not need a valid UK car driving licence to operate plant in a private workplace. They need a DVLA driving licence if they are operating plant and machinery on a public highway. Employers should ensure that they understand the status of roads and the applicable legal requirements within the port estate. Ports should work with DVLA, local authority, insurance companies etc to understand the definition of a public highway. Some private roads within ports maybe deemed as a highway by virtue of third parties / members of the public using their roads on a regular basis.
- 10.3. It is generally good practice that anyone operating plant and equipment on private port roads hold a vehicle license to demonstrate minimum attainment of competency.
- 10.4. Employers are entitled to require their plant and equipment operators to be trained to any internal, external, accredited, or non-accredited scheme they think appropriate to their workplace. If completion of the chosen scheme means that employees are competent to operate the plant and equipment they will be using. As a minimum, any scheme should include the correct use of the equipment, any risks from its use and the required precautions to be taken.

### 10.5. Rider Operated Lift Trucks

- 10.5.1. 'Rider-operated' means any truck capable of carrying an operator and includes trucks controlled from both seated and stand-on positions, which may be fixed or fold-away. Straddle carriers and non-lift trucks fitted with removable attachments which modify their function, allowing them to be used temporarily as lift trucks are not included.
- 10.5.2. Rider Operated lift trucks have a specific Approved Code of Practice and guidance which incorporates training and certification. Please see <u>Rider-operated lift trucks: Operator training and safe use ACOP L117</u>
- 10.5.3. HSE do not approve training bodies for Lift Trucks. When arranging rider operated lift truck training, employers should satisfy themselves that it is in accordance with the ACOP L117.
- 10.6. Minimum Age to Operate Plant and Equipment
  - 10.6.1. Plant and equipment operators in ports must be at least 18 years old, except were undergoing a suitable course of training under the proper supervision of a competent instructor.

# 11. RECOMMENDED INDUSTRY STANDARD FOR PLANT AND EQUIPMENT TRAINING

### 11.1. Selection of Instructors

11.1.1. Operator training should normally be carried out by instructors who have themselves undergone appropriate training in instructional techniques and skills assessment.

# 11.1.2. Instructors:

- should only instruct on the types of plant, equipment, and attachments for which they have been trained and successfully tested as operators.
- need an adequate knowledge of the working environment in which the trainee will be expected to operate.
- need sufficient industrial experience to be able to put instruction into context.
- 11.1.3. Employers should obtain evidence of an instructor's suitability before setting them to work. Evidence is likely to include but is not limited to:
  - a valid instructor certificate.
  - proof that the instructor can train on the plant and equipment concerned.
  - an insurance certificate of at least public liability, where an external organisation is being used.

### 11.2. Training Area and Facilities

- 11.3. Training should be given at a suitable training centre, venue or on an employer's premises. Where practicable, training areas should be sheltered from adverse weather conditions.
- 11.4. The training area should simulate the features of the on-job operation. Including for example: obstacles, manoeuvring space, slopes, terrain, and surfaces representative of the conditions for which training is being provided.
- 11.5. A supply of realistic loads and materials appropriate to the training being given should be provided. This might include loaded and unloaded pallets, bags, sacks, bales, drums, bulks, and freight containers as necessary to make training realistic. It might also include appropriate facilities for simulating loading and unloading from vessels, vehicles, stack, storage, and rail.
- 11.6. Plant and equipment used for training must be in good condition, properly maintained (considering manufacturer's recommendations), conform to all legal requirements and be suitable for the uses to which they will be put.
- 11.7. Training rooms or other suitable accommodation should be used where appropriate, together with learning aids (e.g., projectors, models, and documents).
- 11.8. Trainees should not be diverted to other activities while training is in progress. The instructor and trainees should be wholly concerned with training.

### 11.9. Training Structure and Content

- 11.10. The training of plant and equipment operators can typically be divided into three stages:
  - Basic Training providing the basic skills and knowledge required for safe operation.
  - II. Specific Job Training knowledge of the workplace and experience of any special needs
  - III. **Familiarisation Training** operation on the job under close supervision, where it is safe to do so.
- 11.11. Basic and Specific Job Training are sometimes combined but should normally be off the job, away from normal commercial operations. This may be in an area dedicated to training or the normal work environment such as the quayside when operations are not underway. Training areas should be appropriately segregated and marked, with access restricted to the instructor and trainees during training.
- 11.12. Basic Training should cover the skills and knowledge required for safe operation, including any risks arising from the operation and associated tasks. It may include:

- operation of the plant and equipment within manufacturer's safety limits
- pre-use checks
- getting to and from the operating position safely
- the correct operating position (including guards, seatbelts, restraints etc.)
- competent use of controls
- movement of the plant/equipment with any handling attachments or lifting accessories in the correct travel position
  - Handling Attachments: may include but are not limited to forks, clamps, hooks, spreaders, grabs, buckets, blades, etc.
  - Lifting Accessories means work equipment for attaching loads to lifting equipment or machinery for lifting.
- correct use of any handling attachments or lifting accessories
- manoeuvring, laden and un-laden in typical working environment
- stacking and de-stacking loads (e.g., at different levels, in front of fixed vertical face, from ship to quay, etc.)
- loading and unloading a vehicle
- close and return to secure position.
- 11.13. Basic Training should be adapted in length and content to suit the skills, knowledge, and experience of the trainee, for example as a rough guide, a novice plant and equipment operator typically needs 3-5 days of basic training.
- 11.14. During Basic Training, the ratio of *trainees* to *instructor* to *plant* and *equipment* should enable the trainees to obtain hands-on experience (e.g., maximum of 3 to 1 to 1 during practical sessions). Enough time, under close supervision, should be allocated for each trainee to become a safe operator.
- 11.15. Basic Training should be quickly followed up by Specific Job and Familiarisation training because newly acquired skills can swiftly be lost if not used (Skill Fade)
- 11.16. Specific Job training should:
  - be tailored to the employer's operational needs and address the work to be undertaken, e.g., loading containers, unloading bulk cargoes.
  - include, where appropriate, knowledge of operating principles and controls; routine inspection and servicing; operator handbook and manufacturer's instructions
  - include the use of the plant or equipment in the conditions that the operator will meet at work.

- include site rules such as: layout; one-way systems; speed limits; emergency procedures; use of personal protective equipment and hazards.
- include safe systems of work and the prevention of unauthorised operations

### 11.17. Familiarisation training should:

- be carried out on the job and under close supervision, by someone with appropriate knowledge, possibly the trainee's usual supervisor.
- cover the application, under normal working conditions, of the skills already learned in Basic and Specific Job training.
- include familiarisation with site layout, local emergency procedures and any other feature of the work which it is not practicable to teach off the job.
- 11.18. Plant and equipment training should be largely practical; however realistic simulation may be used in specific circumstances, such as response to a fire.
- 11.19. Training should follow a programme which ensures that each stage is introduced in an appropriate sequence, building on what has gone before, and allowing adequate time for learning and practice before the next stage is tackled. Easier skills should be dealt with first before progressing to more difficult operations. At each stage the instructor will need to explain and demonstrate safe operation, which should then be practised by the trainees under direct supervision.
- 11.20. Additional practical conversion training may be required to transfer the individual to new but similar equipment e.g., where the basic lifting equipment type does not change, but the size and weight, controls or performance is significantly different.
- 11.21. Training content will depend upon the operations the trainee will be expected to carry out. The learning objectives will need to be tailored to fit all the operations to be undertaken by the operator.

### 11.22. Testing

11.23. The instructor should assess a trainee's progress continuously to ensure that the required standards are achieved at each stage of the training. Trainees should not be deemed competent until they have passed a test or tests, practical and theoretical, appropriate to the skills and knowledge needed for safe operation.

### 11.24. Authorisation, Records and Certificates

- 11.25. The organisation should identify which of their plant and equipment require authorisation. Written authorisation should be issued to each competent operator and recorded by the organisation. Authorisations should state the operator's name, the date of authorisation, the plant or equipment to which they relate and any special conditions, such as area limitations.
- 11.26. Employers should not allow an unauthorised person to operate plant or equipment for which they deem authorisation a requirement (except in the case

- of a trainee under close supervision). Employers should ensure that they are satisfied with the continuing competence of authorised operators.
- 11.27. Employers should keep a record for each employee who has satisfactorily completed training and testing. The record should include enough information to identify the employee and the nature and content of the training and testing completed.

### 11.28. Training and Certification Pitfalls

- 11.29. Typical pitfalls that can leave an organisation exposed in their training and certification processes include:
  - not having written training, certification, and refresher procedures
  - not linking the training, certification, and refresher procedures to assessment of risk
  - not applying the system in practice in the way it is described in the written procedures.
  - not having auditable records
  - not reviewing/updating/learning from experience

### 11.30. Supervisors and Management Training

- 11.31. The Health and Safety at Work etc. 1974 Act requires employers to provide adequate supervision. Supervisors and managers need sufficient training and knowledge to recognise safe and unsafe practices. They may not need full operator training, but they do need to understand the risks involved and how to avoid or prevent them. They should be able to:
  - maintain and promote health and safety standards.
  - carry out an effective observation and know what to look for.
  - recognise unsafe practice and behaviour.
  - communicate effectively with operators and line managers.

### 12. REASSESSMENT AND REFRESHER TRAINING

- 12.1. There is no specific requirement to re-assess or provide refresher training after set intervals. However, even trained, and experienced operators need to be re-assessed from time to time to ensure that they continue to operate safely and retain their competence.
- 12.2. Individual organisations should make their own decision on the time-period. The period should be based on the risks that might arise from an individual no longer being competent. Industry standards suggest this is likely to be between three and five years.

- 12.3. Re-assessment might also be appropriate when:
  - the individual has not undertaken the operation for a significant time.
  - the individual is only an occasional user.
  - there is a significant change in working practices, equipment, or environment.
  - the operator appears to have developed unsafe working practices, has had an accident or near miss.
- 12.4. There is normally no need to deliver a full novice training course for someone whose certification has expired or requires refresher training. Good practice is to re-assess against current standards for the task. Then to provide bespoke training on specific aspects where the individual has not met the required standard.

### 13. NON-PERMANENT EMPLOYEE OPERATORS

- 13.1. Some ports use non-permanent employees to operate port plant and equipment. In such instances, the port must satisfy themselves that the supplied person is competent and safe to operate the plant/equipment. Where practicable, the port should ensure that the non-permanent employee operator has also had a familiarisation session with the specific piece of plant/equipment and/or operational process before commencing work on it for the first time. This should be formally documented.
- 13.2. See also <u>SiP013 Guidance on management of non-permanent employees in ports</u>

# 14. RELEVANT LEGISLATION AND GUIDANCE

- 14.1. Relevant legislation and guidance include the following. Please note that these are the correct versions at the time of publishing, but the reader should always seek out the most current version.
- 14.2. See related SiP documents; <u>SiP011 Sources of occupational health information</u>, <u>SiP013 Management of non-permanent employees in ports</u> and SiP017 Management of fitness for work in ports. The current versions of these and other PSS Safety in Ports Guidance documents can be found at: <a href="https://www.portskillsandsafety.co.uk/resources">https://www.portskillsandsafety.co.uk/resources</a>
- 14.3. Competence in health and safety: HSE web page <a href="http://www.hse.gov.uk/competence/">http://www.hse.gov.uk/competence/</a>
- 14.4. Consulting and involving your workers: http://www.hse.gov.uk/involvement/index.htm
- 14.5. Health and Safety (Safety Signs and Signals) Regulations 1996; <a href="http://www.hse.gov.uk/pubns/books/l64.htm">http://www.hse.gov.uk/pubns/books/l64.htm</a>

- 14.6. Health and Safety at Work etc. Act (HSWA) 1974 http://www.hse.gov.uk/legislation/hswa.htm
- 14.7. Health and safety training: A brief guide (INDG345) http://www.hse.gov.uk/pubns/indg345.htm
- 14.8. HSE Whole Body Vibration in Ports Information Paper http://www.hse.gov.uk/vibration/wbv/ports.pdf
- 14.9. International Labour Organisation's (ILO) Code of Practice on Safety and Health in Ports (ILO 152):
  <a href="http://www.ilo.org/sector/activities/sectoral-meetings/WCMS">http://www.ilo.org/sector/activities/sectoral-meetings/WCMS</a> 546257/lang-en/index.htm
- 14.10. Lifting Equipment at Work: A brief guide http://www.hse.gov.uk/pubns/indg290.htm
- 14.11. Lifting Operations and Lifting Equipment Regulations (LOLER) 1998; <a href="http://www.hse.gov.uk/work-equipment-machinery/loler.htm">http://www.hse.gov.uk/work-equipment-machinery/loler.htm</a>
- 14.12. Lift-truck training: Advice for employers (INDG462) http://www.hse.gov.uk/pubns/indg462.htm
- 14.13. Management of Health and Safety at Work Regulations 1999; http://www.hse.gov.uk/managing/index.htm
- 14.14. Provision and Use of Work Equipment Regulations (PUWER) 1998; http://www.hse.gov.uk/work-equipment-machinery/puwer.htm
- 14.15. Rider-operated lift trucks: Operator training and Safe Use, ACOP <a href="http://www.hse.gov.uk/pubns/books/l117.htm">http://www.hse.gov.uk/pubns/books/l117.htm</a>
- 14.16. Use lift trucks safely: A brief guide for operators (INDG457) http://www.hse.gov.uk/pubns/indg457.htm

### 15. DOCUMENT AUTHORS

This guidance document has been produced by Port Skills and Safety with the assistance of the Health and Safety Executive and representatives of the UK ports industry.

### 16. FURTHER INFORMATION

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