# **Safety in Ports Guidance**

**SiP 009: Guidance on Lighting** 







Produced in conjunction with the Health and Safety Executive

Published: October 2025



## **Contents**

- 1. Disclaimer 3
- 2. Introduction 4
- 3. Lighting in ports 5
- 4. Guidance on lighting levels 7
- 5. Other factors to consider with lighting schemes 8
- 6. Lighting in hazardous areas 11
- 7. Emergency escape lighting 12
- 8. Light surveys 13
- 9. Monitoring and maintenance 14
- 10. Measurements 16

General considerations 16

Recording measurements 18

- 11. Portable and temporary task lighting 19
- 12. Appendix 1: Safety in Ports guidance 20
- 13. Appendix 2: Other links referred to in this document 21
- 14. Appendix 3: Further information and guidance 22

## Version control

First published February 2018

This version (2.0) October 2025



#### 1. Disclaimer

This publication has been made available under the public sector information license and may be used by third parties. It may not be altered in anyway or used outside the terms of the Open Government Licence. <a href="https://www.nationalarchives.gov.uk">www.nationalarchives.gov.uk</a>.

External links are provided to enhance information, but Port Skills and Safety Ltd (PSS) does not guarantee the accuracy of any external links.

HSE's guidance document <u>Lighting at Work(HSG38)</u>, and British Standards <u>BS EN 12464-1:2011</u> <u>Lighting of workplaces: Indoor workplaces</u> and <u>BS EN 12464-2:2014 Lighting of work places:</u>
<u>Outdoor work places</u>, provide generic guidance on lighting in all workplaces.

Regulations in this document are referred to by title but not year, as they may have been amended post publication. The reader should always seek the current version.

Following this guidance is not a legal requirement, however, by following the guidance, users may ordinarily expect to be doing enough to comply with the law. HSE and other government-appointed inspectors who seek to secure compliance with the law and may refer to this guidance in their investigations.

This document provides guidance only and due care and attention must be given to any operation being conducted.



#### 2. Introduction

This guidance covers port lighting and should be used in conjunction with SiP000 Regulatory Framework and Guidance. The Safety in Ports guidance suite is available from the PSS website: <a href="https://www.portskillsandsafety.co.uk">www.portskillsandsafety.co.uk</a>.

The guidance provided here is specific to lighting, and whilst it makes reference to legislative requirements and general operations (e.g., lifting operations and work equipment practices) the overall application details of such legislative expectations are provided within SiP000.

Particular reference to SiP000 should be made for the purposes of these related activities:

- Risk Assessment.
- Consultation, Cooperation and Coordination.
- Vessel Access and Egress.
- Confined and Enclosed Spaces.
- Hazardous Atmospheres.
- Lifting Operations.
- Dangerous Goods.
- Planning for Safe Loading and Discharge.
- Work at Height.

The Safety in Ports Guidance is made available to all interested parties for the general improvement of safety in ports. However, members of PSS will find additional recourses (including video demonstrations, easy reference guides and additional best practice examples) on the members section of the website.



## 3. Lighting in ports

General lighting guidance is available from the HSE and relevant British Standards, such as <u>HSE HSG38</u>, <u>BS EN 12464</u>, and <u>CIBSE LG01</u>. However, ports are specialist work environments and require additional consideration, with particular caution taken for hazardous or high-traffic areas via risk assessment of lighting. Lighting systems should reflect the specific needs of each terminal, including the layout, operational activities, and expected lighting coverage.

When planning, installing, or reviewing lighting in port areas, the following factors should be considered:

- Use suitable lighting with appropriate colour rendering to ensure people, vehicles, and objects are clearly visible.
- Ensure light switches are clearly marked and easily accessible.
- Provide consistent and uniform lighting and avoid sharp contrasts.
- Make obstacles and hazards clearly visible with suitable lighting and/or marking, especially where vehicles and lifting equipment operate.
- Avoid sudden changes in lighting levels when moving between areas (e.g., from ship to quayside), as this affects eye adaptation. This also applies to areas of deep shadow.
- Vessel operators must provide suitable and sufficient lighting on board before cargo operations begin.
- Lighting may be restricted in holds, stairways and access routes on vessels. Where required and following risk assessment, additional lighting should be provided.
- Consider the impact of high lighting levels on vessel navigation, particularly where pilots and masters need to maintain night vision.
- Ensure lighting does not interfere with the visibility of navigational aid and cause glare and confusion during operations.
- Arrange lighting to minimise shadows from cargo and equipment, reducing likelihood of hazards and maintaining clear visibility.
- Position lighting to minimise glare.
- Provide lower lighting levels in enclosed work areas such as crane cabs, vehicle cabs, control rooms and security posts operating at night.
- Assess environmental impacts and potential light pollution, particularly where ports are close to sensitive habitats or residential areas.
- Select colour temperature appropriate to the task and area, and consider using risk assessment to define acceptable ranges.



- Ensure lighting on moving plant is adjustable and directional, preventing glare to operators and nearby workers while minimising spill light.
- Consider smart lighting controls to reduce energy use and environmental effects.
- Identify tasks and areas that require higher lighting levels, such as work beneath ship-toshore cranes.
- Ensure adequate lighting at railheads and rail loading areas.
- Lighting should enable clear identification of package damage, leaks, and warning labels on cargo transport units.
- Build redundancy into lighting systems so a single light failure does not create unsafe conditions.
- Refer to historical lighting data where available to support planning and improvement.
- Where hazardous or explosive materials are present, ensure lighting complies with applicable design requirements (e.g., DSEAR) to reduce fire and explosion risks.
- Protect cargo from excessive heat or light where these may cause ignition or degrade lightsensitive goods.
- Prevent contamination of cargo from broken or damaged lamps.
- Protect lighting towers and equipment from collision, particularly in areas used by heavy plant and vehicles.
- Design lighting systems to allow safe access for maintenance and reduce the need for work at height.



# 4. Guidance on lighting levels

It is the ship's responsibility to provide safe on-board conditions for port work. Before cargo operations begin, the stevedore must also confirm that adequate deck and under-deck lighting is available and arrange additional lighting where necessary.

Separately, the port is responsible for providing and maintaining its own lighting systems but must also check that shipboard lighting is sufficient for safe deck operations.

Although ship and port duties are distinct, they overlap at the ship-port interface. Both parties must coordinate to ensure that port personnel can work safely on board throughout loading and unloading activities.



## 5. Other factors to consider with lighting schemes

There are other factors to consider along with the brightness of the lighting sources, these include colour rendering, glare, illuminance ratios, environmental and energy use, and correction factors.

## **Colour rendering**

Colour rendering is a measure of how accurately colours can be perceived under a specific light source. This is particularly important when distinguishing between colour-coded equipment. Calculating the colour-rendering index of a light source is complex, and specialist advice should be sought.

However, industrial lamps and bulbs can be bought with specific colour rendering classes applicable to certain site circumstances. Refer to relevant guidance such as <a href="HSE HSG38">HSE HSG38</a> and <a href="CIBSE LG01">CIBSE LG01</a> and apply it appropriately to terminals and port areas depending on their specific characteristics, as well as to both indoor and outdoor lighting. In addition, consult <a href="BS EN 12464-1">BS EN 12464-1</a> and <a href="BS EN 12464-2">BS EN 12464-2</a> on the lighting of workplaces.



## **Glare**

Glare may be caused either directly from a light source or indirectly through reflections, and in both cases it can lead to discomfort, distraction, or reduced visibility. In safety-critical environments, controlling glare is essential to minimise risk.

Practical measures to reduce glare, as recommended by British Standards and CIBSE guidance, include:

 Careful arrangement of luminaires, including height, spacing, positioning, and angle of floodlighting.



- Use of matt or low-reflectance surface finishes to minimise reflected glare.
- Reducing the intensity of individual light sources.
- Installing a greater number of lower-intensity lights or luminaires that emit light across a wider surface area, creating more uniform illumination.

An effective initial assessment of glare should combine operator feedback with a walkthrough or drive-through survey of the affected areas. Where glare presents ongoing issues, seek advice from a lighting specialist to design appropriate control measures.

## Illuminance ratios and uneven lighting

Large differences in illuminance between adjoining areas can create visual adaptation problems and may affect safety, particularly where people or vehicles move frequently. This situation can arise where:

- Local or localised task lighting exposes workers to a wide range of illuminance levels.
- People move between areas with significantly different brightness levels, such as transitions from outdoors to indoors, or drivers working beneath cranes. Over-lighting a crane working area compared to its surroundings can create this problem.
- The positioning of luminaires does not take account of the surface conditions of the ground or the reflective properties of the type of stored cargo it contains.

## **Environmental aspects and energy use**

Lighting design should take into account both environmental impact and energy efficiency, while ensuring that safety is not compromised. The incorporation of automatic lighting controls such as occupancy sensors, daylight sensors, or dimming systems can reduce unnecessary energy consumption. However, these systems should be used with caution as they must be specified and calibrated carefully to avoid creating uneven lighting, inappropriate illuminance ratios, or situations where lights fail to activate, which could increase the risk of accidents.

Designs should also recognise that acceptable lighting levels may vary depending on how a space is used. For example, areas with multiple or changing functions may require adaptable lighting solutions to maintain safe and compliant illumination under all conditions.

Careful consideration should be taken around the implementation of smart controls, based on how often they would need to be activated and the level of operational risk within the area.

Where smart lighting controls are installed, consideration must be given to the timing and duration of lighting to ensure they do not interrupt and impose risk for ongoing activities or create hazards. The placement of such controls should be risk-assessed, taking into account the frequency of movement in the area to activate lighting, and the severity of potential consequences from lights switching off unexpectedly during critical operations.



#### **Correction factors**

When designing or assessing lighting, it is important to consider the varying correction factors associated with different light sources. For example, LED (Light Emitting Diode) lighting can produce a perceived brightness that differs from measured lux levels. A light calculation for LED flood lights, based on conventional lux requirements, may result in too high perceived light levels at low background luminance levels. If lighting is specified solely on conventional lux requirements without accounting for these differences, the result may be over-lighting, leading to increased energy consumption and unnecessary environmental impact.

To avoid this, lighting calculations should incorporate appropriate correction factors for the type of light source, ensuring that the installed system delivers suitable visual conditions while remaining energy-efficient and compliant with current applicable standards (HSG38, CIBSE LG01).



## 6. Lighting in hazardous areas

The <u>Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)</u> define an explosive atmosphere as a mixture of dangerous substances with air, under atmospheric conditions, in the form of gases, vapours, mist or dust.

Lighting must not contribute to ignition risk within hazardous areas in ports - areas where flammable gases, vapours or combustible dusts may be present. Explosive atmospheres include petroleum vapours, smart fuels and dust from cargo. Low surface temperatures, sealed enclosures and anti-static coatings should be considered in areas with ignition risks, to reduce the likelihood of sparks, heat build-up or static discharge.

Lighting fixtures should be ATEX-certified (<u>Atmosphéres Explosives</u>) for use in zones classified by risk, with the correct selection of protection methods to prevent ignition sources. Caution should be taken for enclosed spaces, ensuring the lighting is intrinsically safe and emergency lighting provisions are available in the event of a power failure.

ATEX lighting requires planned preventative maintenance to ensure seals and lenses and enclosures, remain intact, and must follow a permit-to-work system from a competent person.

Consider the risks associated with dust settling on fittings and accumulating in lighting areas as this can lead to heat build-up and eventual ignition, alongside reduced light output. Ensuring regular cleaning and inspection, the use of dust-proof enclosures, and LED lighting can minimise these risks.



## 7. Emergency escape lighting

Emergency escape lighting should be implemented to provide safe escape routes with adequate lighting and should not be used for any other purpose. There should be consideration for emergency lighting indoors and outdoors, and each site must undergo a risk assessment to determine whether emergency lighting is necessary.

During the emergency lighting design process, a risk assessment must identify high-risk task areas and define suitable illumination and signage. For spaces over 60 m<sup>2</sup> consider open-area (anti-panic) lighting to support occupant safety.

Emergency escape lighting must comply with relevant standards, such as <u>BS 5266-1:2016</u> and <u>A1:2020 (Emergency Lighting)</u>. These codes of practice set out minimum requirements for illuminance, uniformity, and duration across escape routes, high-risk task areas, and open spaces. Regular testing and maintenance are essential, with a minimum operational duration during a power failure established through risk assessment, and for a minimum of one hour (recommended practice is one to three hours). The positioning of lighting should be determined via risk assessment of the area.



## 8. Light surveys

Clear criteria must be established for lighting surveys and amended following any major changes within a port, such as the construction of new buildings or after any incident or high potential near miss investigation that has identified lighting a contributory factor. The time required to implement effective lighting suitable for port development should be acknowledged and factored into operational planning. The results of each survey must be reviewed by the relevant stakeholders, with specific consideration given to ensuring safe navigation during the review process.

Lighting surveys should consider changes in standards, as well as the unique characteristics of each terminal, including the type of cargo handled and the atmospheric conditions. Surveys must be updated following any change of activity within an area to reduce the risk of accidents.

A structured programme of luminaire inspections should be established, with regular spot checks to ensure compliance and maintain accurate records of replacements, particularly in high-risk areas where lighting degradation poses significant hazards. Each survey should include clearly defined actions to address any identified hazards.

The competency of both the survey team and those interpreting the results must be assured, so that appropriate and decisive actions can be taken to maintain safety and compliance.



## 9. Monitoring and maintenance

The monitoring and maintenance of lighting conditions is essential for ensuring effective health and safety performance. Existing infrastructure must be supported by a structured maintenance regime to ensure that damaged or faulty lighting is promptly repaired or replaced, thereby maintaining the required lighting levels appropriate for each designated area.

This regime should include regular cleaning of luminaires, particularly in areas with high levels of dust where light output can be obscured. This will also minimise potential risk of ignition from dusty conditions that fall within the scope of a dangerous atmosphere, in line with the <u>Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)</u>. Accessibility of lighting fixtures should be taken into account when designing maintenance schedules. It should assess standards, planning, control measures, and organisational practices, with changes implemented where necessary to enhance health and safety while surveying if fit for purpose. For example, the installation of new lighting designs may introduce different risks, requiring lighting levels to be reassessed and adjusted accordingly.

The maintenance regime should also include regular lighting surveys to levels to confirm that adequate conditions are being maintained. Additional spot checks are recommended, to ensure compliance and identify issues.

#### Instrumentation

Accurate measurement of lighting levels is an important part of maintaining safe and effective illumination. The use of a suitable calibrated illuminance meter (light meter) is recommended. The light meter (Illuminance meter) should:

- Have a wide angle of acceptance to minimise measurement errors.
- Have an in-built correction feature for light reaching the detector at oblique angles, with consideration of including cosine correction (e.g. a cosine corrected head).
- Possess a low spectral sensitivity to differing light sources, (e.g. LED, sodium, mercury vapour, or simulated daylight), or be provided with appropriate correction factors to ensure consistent and reliable results, for LED lights as well.
- Provide sufficient sensitivity and range able to measure down to at least 1.0 lux or lower,
  while also coping with levels of several hundred lux without overload or damage to the
  instrument. Note: digital read-outs with a minimum number of scale changes are preferred
  to analogue read-outs where interpolation between scale points at the extremes of the
  range can often lead to significant errors.
- Deliver results with an accuracy in line with the quoted requirements for Type 1
  photometers as defined in BS 667: Illuminance Meters Requirements and Test Methods,
  of at least ±10%.



Illuminance meters should be routinely serviced and calibrated by a competent person at intervals not exceeding 12 months. In addition, functional checks, such as battery verification and comparison with an appropriate check source, should be performed before each use to ensure reliable operation.



#### 10. Measurements

#### **General considerations**

When carrying out lighting surveys, care should be taken to select measurement positions that are representative of typical lighting conditions, rather than extreme points. For example:

- It is not appropriate to orient the meter directly towards the nearest light source, or to take readings in a dark corner far from the main work or access areas.
- A grid of measurement points may be appropriate in larger areas to ensure representative sampling.

## Other considerations include:

- The height of measurement: readings are generally taken at around one metre above ground or floor level, reflecting the typical position of many manual tasks. However, where this does not adequately represent conditions (e.g. obstructions concealing potential tripping hazards), the measurement height may need to be varied.
- Avoiding interference: operators should avoid standing between the light source and the detector, or positioning the meter in an unrepresentative shadow.
- Read-out considerations: where light meters with illuminated read-outs are used at low lighting levels, care should be taken to avoid false readings by holding the detector too close to the display.

In all cases the detector should be parallel to the ground or floor surface. A tripod or adjustable stand may help to ensure stability and accuracy.

## Measurements for working areas

When assessing lighting in working areas, the following approach is recommended:

- The working area should be divided into zones, each representative of the local typical lighting conditions throughout that area.
- Each zone should be divided up into appropriate squares of a suitable size dependant on the area's characteristics, layout and nature of operation sit contains (i.e. limited working space or static operations).
- Measurements should be taken at the centre point of each square or a representative sample of squares. For example, for a yard area illuminated by a symmetrical arrangement of lighting towers, it would suffice to take measurements in squares lying on a line from the centre of the area and passing through the base of one tower, going outwards as far as necessary, and similarly for a line running midway between two adjacent towers.



• Measurements should consider colour rendering, and be repeated as appropriate in one or more additional zones depending on the variability of the lighting throughout the area.

## **General requirements for lighting measurements:**

- No single measurement is less than 5.0 lux ± 20%; and
- The average of the measurements for any one zone (as given by the sum of the levels at each measurement point divided by the number of measurements) should normally be based on not less than 6 individual measurements forming a representative sample. The average of the measurement for any one zone, as given by the number of measurements, is not less than the values specified for each work activity in this guidance.

Averaging across zones may be acceptable where the work is mobile and wide-ranging.

While this guidance is principally designed for evaluating installed lighting systems, account may be taken of local temporary lighting, e.g. vehicle spot lamps, where these form an integral part of the agreed working arrangements.

## Access routes:

When making measurements at a means of access:

- The means of access route should be divided up into zones, each representative of the local lighting conditions along the total path length.
- Within any one zone, a series of measurement positions should be selected along the centre line of the means of access, with a separation of typically 3m for e.g. a long roadway and less, e.g. 1m, for short connecting passageways.
- Measurements should follow the same principles as for working areas and be repeated as appropriate in one or more additional zones depending on the viability of the lighting along the total path or where lighting may vary.

## For pedestrian only access routes:

- No single measurement is less than 1.0 lux ± 20%
- The average of the measurement for any one zone, as given by the number of measurements, is not less than 5.0 lux. Averaging over a zone should normally be based on not less than six individual measurements forming a representative sample.

Where vehicles and pedestrians share an area, the illuminance levels should be higher in line with the figures in HSG38 and BS12464.



In the case of large relatively evenly illuminated extended areas it may be appropriate to divide zones into larger squares, e.g. up to 10m squares, and take measurements in a representative sample of these.

## **Recording measurements**

Written records of lighting surveys should be prepared by a competent person, and should include the following particulars:

- The date, time and location of the survey.
- Designation of the location, i.e. access route or working area, and the nature and frequency
  of use.
- A full description of the lighting, including any defects.
- Information on weather and other environmental conditions.
- Details of the light meter used and measurement position.
- The individual measurements, minimum values and average values.
- Recommendations for any remedial action, which could include improved decoration for indoor parts of port premises.
- Details of remedial action taken.



## 11. Portable and temporary task lighting

If fixed lighting schemes are not practical, portable or temporary lighting may be deemed suitable and sufficient, having considered the environment in which it will be used, i.e. explosive atmospheres. Where portable or temporary lighting is used the supports and leads should be arranged, secured or covered to prevent a person tripping, or being hit by moving fittings, or walking into cables or supports.

Temporary and portable lighting should only be used when existing lighting is inadequate for a specific task, when a task changes, or in an emergency situation requiring additional illumination. Such lighting should be considered a last resort, must always be risk assessed before use, applied strictly for the duration of the task, and removed once it is no longer required. It should not be regarded as a permanent measure unless explicitly included in lighting surveys.

The timescale, frequency, and duration of operations must also be considered when determining whether temporary lighting is sufficient or if permanent solutions are more appropriate. Risk assessments should additionally address fire hazards, particularly in environments such as terminals containing dry bulk or dusty cargo, where portable lighting may overheat.

Where possible, environmentally friendly alternatives to diesel-powered generators should be employed. Options such as solar-powered or battery storage lighting towers are especially suitable for continuous use during night shifts. Always consider lower voltage power systems to improve safety and reduce environmental impact.

## **Diesel Powered Generators**

If using diesel powered generators, the following should be considered:

- · Diesel fumes and confined spaces.
- Sufficient fuel.
- Noise.
- Transporting fuel.
- Security.
- Environmental spillage.
- Ignition source

A key complication is the risk from electrical cables. Where cables are used, carry out a risk assessment, considering hazards such as entrapment in doors, jamming fire doors, or interference with moving equipment, machinery, and loads.

Follow the manufacturers guidance on the use of temporary lighting. Further guidance is available in <u>HSG107 Maintaining portable and transportable electrical equipment.</u>



# 12. Appendix 1: Safety in Ports guidance

SiP000 Guidance framework

<u>SiP001 Workplace transport – planning & terminals</u>

SiP002 General cargo

SiP003 Container handling

SiP004 Timber handling

SiP005 Mooring operations

SiP006 Transfer of bulk liquids & gases

SiP007 Loading & unloading of dry bulk cargo

SiP008 Storage of dry bulk cargo

SiP009 Lighting

<u>SiP010 Workplace transport – StoRo & RoRo operations</u>

SiP011 Sources of occupational health information

SiP012 Ro-Ro passenger and cruise operations

SiP013 Management of non-permanent employees

SiP014 Safe access and egress

SiP015 Confined spaces in ports

SiP016 Emergency planning in ports

SiP017 Guidance on fitness for work and health surveillance

SiP018 Safety induction and training

SiP020 Water safety

SiP021 Access to small craft

SiP022 Biomass



## 13. Appendix 2: Other links referred to in this document

The links contained in this SiP are provided here for ease of reference. Port Skills and Safety has no control over the content of external websites and the documents referred to may move or no longer be available from those organisations.

ACOPL148, Safety in Docks. Approved Code of Practice:

https://www.hse.gov.uk/pubns/books/l148.htm

BS EN 12464-1:2011 Lighting of work places: Indoor work places:

https://landingpage.bsigroup.com/LandingPage/Standard?UPI=000000000030206727

BS EN 12464-2:2014 Lighting of work places: Outdoor work places:

https://landingpage.bsigroup.com/LandingPage/Undated?UPI=000000000030163020

BS EN 60598-2-22:2014+A1:2020 Luminaires - Particular requirements. Luminaires for emergency lighting:

https://knowledge.bsigroup.com/products/luminaires-particular-requirements-luminaires-for-emergency-lighting

BS 5266 - Emergency lighting - Code of Practice:

https://landingpage.bsigroup.com/LandingPage/Standard?UPI=000000000030331554

British Standard BS 667:2005, Illuminance Meters: Requirements and Test Methods:

https://www.en-standard.eu/bs-667-2005-illuminance-meters-requirements-and-test-methods/#:~:text=lt%20specifies%20the%20performance%20requirements%20for%20two%20types,intended%20for%20use%20by%20meter%20manufacturers%20and%20users.

Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002:

https://assets.publishing.service.gov.uk/media/5f89b951d3bf7f49a9a4f184/20201007\_JSP375\_ Vol1\_Chapter\_09\_V1.3\_Dangerous\_Substances\_and\_Explosive\_Atmospheres\_Regulations\_FINAL\_1\_.pdf

HSG38 Lighting at Work - Health and Safety Executive, 2002:

https://www.hse.gov.uk/pubns/books/hsg38.htm

HSG107 Maintaining portable electrical equipment Health and Safety Executive, 2013:

https://www.hse.gov.uk/pubns/books/hsg107.htm

International Commission on Illumination (CIE 129:1998):

https://civilnode.com/download-standard/10657713583147/CIE-

<u>129#:~:text=The%20present%20document%20updates%20and%20replaces%20Publication%20ClE,ratio%2C%20the%20minimum%20to%20maximum%20ratio%20was%20introduced.</u>

CIBSE LG01 Guide on Lighting for Industry:

https://www.cibse.org/knowledge-research/knowledge-portal/lighting-guide-01-the-industrial-environment-2018

ATEX and explosive atmospheres - HSE:

https://www.hse.gov.uk/fireandexplosion/atex.htm

SiP009 version with photographs (PSS members only):

https://www.portskillsandsafety.co.uk/?post\_type=knowledge\_hub&p=7116



## 14. Appendix 3: Further information and guidance

These links are provided to enable members to find further information and are correct at the time of publication. Port Skills and Safety has no control over the content of external websites and the documents referred to may move or no longer be available from those organisations.

Site lighting - HSE:

https://www.hse.gov.uk/construction/safetytopics/site-lighting.htm

Emergency Lighting Pocket Guide June 2021:

https://www.iheem.org.uk/wp-

content/uploads/2021/04/Emergency\_Lighting\_Pocket\_Guide\_June\_2021.pdf

Code of Safe Working Practices for Merchant Seafarers (COSWP):

www.gov.uk/government/publications/code-of-safe-working-practices-for-merchant-seafarers

Control of Major Accident Hazards Regulations (COMAH) 2015:

www.hse.gov.uk/comah

Control of Substances Hazardous to Health Regulations (COSHH) 2002:

www.hse.gov.uk/coshh

Dangerous Goods in Harbour Areas Regulations 2016:

https://www.legislation.gov.uk/uksi/2016/721/contents

The Electricity at Work Regulations 1989 and guidance on electrical safety:

www.hse.gov.uk/electricity

Health and Safety at Work etc. Act (HSWA) 1974:

https://www.hse.gov.uk/legislation/hswa.htm

International Labour Organisation's (ILO) Code of Practice on Safety and Health in Ports (ILO 152):

https://www.imo.org/en/ourwork/facilitation/pages/ilocode-default.aspx

Managing Health and Safety in Dockwork HSG 177:

https://www.hse.gov.uk/pubns/books/hsg177.htm

Port Marine Safety Code (PMSC):

www.gov.uk/government/uploads/system/uploads/attachment\_data/file/564723/port-marine-safety-code.pdf

Provision and Use of Work Equipment Regulations (PUWER) 1998:

https://www.hse.gov.uk/work-equipment-machinery/puwer.htm

Workplace health, safety and welfare a short guide for managers:

www.hse.gov.uk/pubns/indg244.pdf