# CONTROL OF ARTIFICIAL OPTICAL RADIATION AT WORK REGULATIONS 2026

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Statutory Document No. 20XX/XXXX

*Health and Safety at Work etc. Act 1974*

# CONTROL OF ARTIFICIAL OPTICAL RADIATION AT WORK REGULATIONS 2026

*Approved by Tynwald:*
*Coming into Operation:* *1 August 2028*

The Department of Environment, Food and Agriculture makes the following Regulations, after consulting such organisations as it considers represent the interests affected by the Regulations[1], under section 15(1), (2), (4)(b) and (8), and 82(3)(a) of, and paragraphs 1(1)(a) to (c), 8(1) and (2), 9, 11, 12, 13(2) and (3), 14, 15(1) and 16 of Schedule 3 to, the Health and Safety at Work etc. Act 1974[2] (of Parliament), as it has effect in the Island[3].

## 1 Title

These Regulations are the Control of Artificial Optical Radiation at Work Regulations 2026.

## 2 Commencement

If approved by Tynwald[4], these Regulations come into operation on 1 August 2028.

## 3 Interpretation

SI 2010/1140/1

(1) In these Regulations —

**"the 1974 Act"** means the Health and Safety at Work etc. Act 1974 (of Parliament), as it has effect in the Island;

**"the 2003 Regulations"** means the Management of Health and Safety at Work Regulations 2003[5];

[1] As required by section 82(4) of the 1974 Act.
[2] 1974 c.37.
[3] The Act applies in the Island by virtue of SD 2024/0073.
[4] Tynwald approval is required under section 82(5) of the 1974 Act.
[5] SD 2003/877.

**"artificial optical radiation"** means any electromagnetic radiation in the wavelength range between 100nm and 1mm which is emitted by non-natural sources;

**"the Department"** means the Department of Environment, Food and Agriculture;

**"the Directive"** means Directive 2006/25/EC of the European Parliament and of the Council on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation) (19th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC), and references in these Regulations to the Annexes to the Directive are to those Annexes as amended from time to time;

**"the exposure limit values"** means —

(a) for non-coherent radiation, those exposure limit values set out in Annex I to the Directive; and

(b) for laser radiation those exposure limit values set out in Annex II to the Directive;

**"health surveillance"** means assessment of the state of health of an employee, as related to exposure to artificial optical radiation and its effects on the skin;

**"irradiance"** means the radiant power incident per unit area upon a surface expressed in watts per square metre (W $m^{-2}$);

**"laser"** (light amplification by stimulated emission of radiation) means any device which can be made to produce or amplify electromagnetic radiation in the optical radiation wavelength range primarily by the process of controlled stimulated emission;

**"laser radiation"** means artificial optical radiation from a laser;

**"non-coherent radiation"** means any artificial optical radiation other than laser radiation; "radiance" means the radiant flux or power output per unit solid angle per unit area expressed in watts per square metre per steradian (W $m^{-2}$ $sr^{-1}$); and

**"radiant exposure"** means the time integral of the irradiance, expressed in joules per square metre (J $m^{-2}$).

(2) Other expressions used in these Regulations which are used in the Directive have the same meaning as they have in the Directive.

(3) A reference to an employee being exposed to artificial optical radiation is a reference to that exposure which arises while the employee is at work, or arises out of, or in connection with, the employee's work.

## 4 Application of these Regulations

SI 2010/1140/2 and drafting

(1) Where a duty is placed by these Regulations on an employer in respect of its employees, the employer must, so far as is reasonably practicable, be under a like duty in respect of any other person at work who may be affected by the work carried out by the employer.

(2) Despite paragraph (1), the duties of the employer —

(a) under regulation 7 (information and training) do not extend to persons who are not its employees, unless those persons are present in the workplace where the work is being carried out;

(b) under regulation 8 (health surveillance) do not extend to persons who are not its employees.

(3) These Regulations do not apply to —

(a) a ship forming part of His Majesty's Navy; or

(b) the master or a crew of a ship or to the employer of such persons in respect of the normal shipboard activities of a ship's crew which are carried out solely by the crew under the direction of the master.

(4) For the purposes of paragraph (3) "ship" includes every description of vessel used in navigation.

## 5 Assessment of the risk of adverse health effects to the eyes or skin created by exposure to artificial optical radiation at the workplace

SI 2010/1140/3

(1) Where —

(a) the employer carries out work which could expose any of its employees to levels of artificial optical radiation that could create a reasonably foreseeable risk of adverse health effects to the eyes or skin of the employee; and

(b) that employer has not implemented any measures to either eliminate or, where this is not reasonably practicable, reduce to as low a level as is reasonably practicable, that risk based on the general principles of prevention set out in Schedule 2 to the 2003 Regulations,

the employer must make a suitable and sufficient assessment of that risk for the purpose of identifying the measures it needs to take to meet the requirements of these Regulations.

(2) The employer must as part of that risk assessment assess, and if necessary, measure or calculate, the levels of artificial optical radiation to which employees are likely to be exposed.

(3) In carrying out the assessment, measurement or calculation, the employer must follow the following standards or recommendations —

(a) for laser radiation, the standards of the IEC; or

(b) for non-coherent radiation, the standards of the IEC and the recommendations of the CIE and the CEN.

(4) In exposure situations which are not covered by those standards or recommendations, the assessment, measurement or calculation must follow national or international science-based guidelines.

(5) The assessment must also include consideration of —

(a) the level, wavelength and duration of exposure;

(b) the exposure limit values;

(c) the effects of exposure on employees or groups of employees whose health is at particular risk from exposure;

(d) any possible effects on the health and safety of employees resulting from interactions between artificial optical radiation and photosensitising chemical substances;

(e) any indirect effects of exposure on the health and safety of employees such as temporary blinding, explosion or fire;

(f) the availability of alternative equipment designed to reduce levels of exposure;

(g) appropriate information obtained from health surveillance, including where possible published information;

(h) multiple sources of exposure;

(i) any class 3B or 4 laser that is classified in accordance with the relevant IEC standard that is in use by the employer and any artificial optical radiation source that is capable of presenting the same level of hazard; and

(j) information provided by the manufacturers of artificial optical radiation sources and associated work equipment in accordance with the relevant European Union Directives as they had effect in Great Britain immediately before IP completion day.

(6) The risk assessment must be reviewed regularly if —

(a) there is reason to suspect that it is no longer valid; or

(b) there has been a significant change in the work to which the assessment relates.

(7) The employer must record —

(a) the significant findings of the risk assessment as soon as is practicable after it is made or changed; and

(b) the measures which have been taken and which the employer intends to take to meet the requirements of regulation 6 and 7.

(8) In this regulation —

(a) a reference to standards or recommendations is a reference to standards or recommendations as revised or re-issued from time to time;

(b) "CEN" means the European Committee for Standardisation;

(c) "CIE" means the International Commission for Illumination; and

(d) "IEC" means the International Electrotechnical Commission.

(9) In paragraph (5)(a) "level" means the combination of irradiance, radiant exposure and radiance to which an employee is exposed.

## 6 Obligations to eliminate or reduce risks

SI 2010/1140/4

(1) An employer must ensure that any risk of adverse health effects to the eyes or skin of employees as a result of exposure to artificial optical radiation which is identified in the risk assessment is eliminated or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.

(2) For the purposes of paragraph (1) measures to eliminate or reduce the risk must be based on the general principles of prevention set out in Schedule 2 to the 2003 Regulations.

(3) If the risk assessment indicates that employees are exposed to levels of artificial optical radiation which exceed the exposure limit values, the employer must devise and implement an action plan comprising technical and organisational measures designed to prevent exposure exceeding the exposure limit values.

(4) The action plan must take into account —

(a) other working methods;

(b) choice of appropriate work equipment emitting less artificial optical radiation;

(c) technical measures to reduce the emission of artificial optical radiation including, where necessary, the use of interlocks, shielding or similar health protection mechanisms;

(d) appropriate maintenance programmes for work equipment, workplaces and workstation systems;

(e) the design and layout of workplaces and workstations;

(f) limitation of the duration and level of the exposure;

(g) the availability of personal protective equipment;

(h) the instructions of the manufacturer of the equipment where it is covered by relevant European Union Directives as they had effect in Great Britain immediately before IP completion day;

(i) the requirements of employees belonging to particularly sensitive risk groups.

(5) If, despite the measures taken under paragraphs (1) and (3), employees are still exposed to levels of artificial optical radiation that exceed the exposure limit values, the employer must take immediate action to —

(a) reduce exposure to below the exposure limit values;

(b) identify the reasons why employees have been exposed to levels which exceed the exposure limit values; and

(c) modify the measures taken in accordance with paragraph (3) to prevent employees being exposed again to levels which exceed the exposure limit values.

(6) Paragraph (7) applies if the risk assessment indicates that in any of the areas of the workplace under the control of the employer, employees could be exposed to levels of artificial optical radiation which exceed the exposure limit values.

(7) The employer must ensure that the areas in question are —

(a) demarcated and access by the employees to those areas is restricted so far as is reasonably practicable; and

(b) identified by means of the appropriate signs as specified in the Health and Safety (Signs and Signals) Regulations 2026[6].

## 7 Information and training

SI 2010/1140/5

(1) If the risk assessment indicates that employees could be exposed to artificial optical radiation which could cause adverse health effects to the eyes or skin of employees, the employer must provide its employees and representatives with suitable and sufficient information and training relating to the outcome of the risk assessment.

The information provided must include —

(a) the technical and organisational measures taken in order to comply with the requirements of regulation 6;

(b) the exposure limit values;

(c) the significant findings of the risk assessment, including any measurements taken, with an explanation of those findings;

(d) how to detect and report adverse health effects to the eyes or skin, and the importance of such detection and reporting;

(e) the circumstances in which employees are entitled to appropriate health surveillance;

[6] SD 2026/xxxx.

(f) safe working practices to minimise the risk of adverse health effects to the eyes or skin from exposure to artificial optical radiation; and

(g) the proper use of personal protective equipment.

(2) The employer must ensure that any person, whether or not that person is an employee, who carries out work in connection with the employer's duties under these Regulations has suitable and sufficient information and training.

## 8 Health surveillance and medical examinations

SI 2010/1140/6

(1) If the risk assessment indicates that there is a risk of adverse health effects to the skin of employees as a result of exposure to artificial optical radiation, the employer must ensure that such employees are placed under suitable health surveillance.

(2) Health surveillance under paragraph (1) must be carried out by a doctor or occupational health professional and the risk assessment must be made available to that doctor or occupational health professional.

(3) The employer must ensure that a health record of each of its employees who undergoes health surveillance pursuant to paragraph (1) is made and maintained and that the record or copy of it is kept available in a suitable form.

(4) The health record must contain a summary of the results of the health surveillance carried out.

(5) The employer must —

(a) on reasonable notice being given, allow an employee access to the employee's personal health record; and

(b) provide the Department with copies of such health records as it may require.

(6) An employer must ensure that a medical examination is made available to an employee if —

(a) the risk assessment indicates that the employee has been exposed to levels of artificial optical radiation which exceed the exposure limit values; or

(b) as a result of health surveillance the employee is found to have an identifiable disease or adverse health effects to the skin which is considered by a doctor or occupational health professional to be the result of exposure to artificial optical radiation.

(7) Where an examination is carried out under paragraph (6), the employer must —

(a) ensure that a doctor or suitably qualified person —

(i) inform the employee of the results of the examination which relate to the employee; and

(ii) provide advice on whether health surveillance may be appropriate;

(b) ensure that it is informed of any significant findings from any further health surveillance of the employee taking into account any medical confidentiality;

(c) review the risk assessment;

(d) review any measures taken to comply with regulation 6 taking into account any advice given by a doctor or other suitably qualified person or the Department; and

(e) provide continued health surveillance if appropriate.

## 9 Extension to the territorial sea

SI 2010/1140/7

These Regulations apply to and in relation to any activity in the territorial sea to which sections 1 to 53 and 80 to 82 of the 1974 Act apply by virtue of the Health and Safety at Work etc Act 1974 (Application to the Territorial Sea) Order 2026,[7] as those provisions apply elsewhere in the Island.

**MADE**

**CLARE BARBER**
*Minister for Environment, Food and Agriculture*



[7] SD 2026/xxxx

## *EXPLANATORY NOTE*

***(This note is not part of the Regulations)***

These Regulations create a regime in relation to the use of artificial optical radiation equipment in the Island which corresponds to that applying in Great Britain by virtue of the Control of Artificial Optical Radiation at Work Regulations 2010 (S.I. 2010/1140: the GB Regulations). The GB Regulations implement as respects Great Britain Directive 2006/25/EC of the European Parliament and of the Council (O.J. L114, 27.4.2006, p.38) on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation) (nineteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) ("the Directive"). The Regulations impose duties on employers to protect both employees who may be exposed to risk from exposure to artificial optical radiation at work and other persons at work who might be affected by that work.

*Regulation 1* gives the Regulations their title, *regulation 2* provides for their commencement and *regulation 3* for the interpretation of certain terms used in them,

Regulation 3 defines exposure limit values as being those set out in Annexes I and II to the Directive, as amended from time to time, and these Annexes provide for exposure limit values for non-coherent radiation and laser radiation respectively.

Regulation 4 deals with the application of the Regulations. Paragraph (1) extends the employer's duty to protect his or her employees to any other person who may be on his premises. Paragraph (2) restricts the application of regulations 7 and 8 in the case of persons not employed by the employer. Paragraph (3) limits the application of the Regulations in relation to ships, disapplying them entirely in the case of Royal Naval vessels, and limiting their application in relation to other vessels.

Regulation 5 imposes a duty to carry out a specific form of risk assessment where an employer carries out work which could expose its employees to levels of artificial optical radiation (i.e. artificial light) that could create a reasonably foreseeable risk of adverse health effects to the eyes or skin and where those risks have not already been eliminated or controlled. Where a risk assessment is necessary the Regulations also impose duties to —

(a) eliminate, or where this is not reasonably practicable, to reduce to as low a level as is reasonably practicable the risk of adverse health effects to the eyes or skin of the employee as a result of exposure to artificial optical radiation where this risk has been identified in the risk assessment (regulation 6(1));

(b) devise an action plan comprising technical and organisational measures to prevent exposure to artificial optical radiation exceeding the exposure limit values where the risk assessment indicates that employees are exposed to levels of artificial optical radiation that exceed the exposure limit values (regulation 6(3));

(c) take action in the event that the exposure limit values are exceeded despite the implementation of the action plan and measures to eliminate or reduce so far as is reasonably practicable the risk of exposure (regulation 6(5));

(d) demarcate, limit access to, and provide for appropriate signs in those areas where levels of artificial optical radiation are indicated in the risk assessment as exceeding the exposure limit values (regulation 6(6) and (7));

(e) provide information and training if the risk assessment indicates that employees could be exposed to artificial optical radiation which could cause adverse health effects to the eyes or skin of the employee (regulation 7); and

(f) to provide health surveillance and medical examinations in certain cases (regulation 8).

Finally, because the rules governing the application of legislation to the territorial waters of the UK and the Island are different, regulation 9 makes provision which limits the application of the Regulations to the territorial sea.