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STATUTORY RULES OF NORTHERN IRELAND

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**2010 No. 180**

**HEALTH AND SAFETY**

**The Control of Artificial Optical Radiation  
at Work Regulations (Northern Ireland) 2010**

*Made* - - - - *14th May 2010*

*Coming into operation* *14th June 2010*

The Department of Enterprise, Trade and Investment<sup>(1)</sup>, being the Department concerned<sup>(2)</sup>, makes the following Regulations in exercise of the powers conferred by Articles 17(1), (2) and (4)<sup>(3)</sup> and 55(2) of, and paragraphs 1(1), 7, 8, 10, 11, 12(2) and (3), 13, 14(1) and 15 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978<sup>(4)</sup> (“the 1978 Order”), as read with paragraph 1A of Schedule 2 to the European Communities Act 1972<sup>(5)</sup> (“the 1972 Act”).

The Regulations give effect without modifications to proposals submitted to it by the Health and Safety Executive for Northern Ireland under Article 13(1A) of the 1978 Order<sup>(6)</sup> after the Executive had carried out consultations in accordance with Article 46(3)<sup>(7)</sup>.

These Regulations make provision for a purpose mentioned in section 2(2) of the 1972 Act and it appears to the Department of Enterprise, Trade and Investment that it is expedient for references in these Regulations to Annexes to Directive 2006/25/EC<sup>(8)</sup> 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<sup>(9)</sup>) to be construed as including references to those Annexes as amended from time to time.

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- (1) Formerly the Department of Economic Development; see S.I. 1999/283 (N.I. 1), Article 3(5); that Department was formerly the Department of Manpower Services, see S.I. 1982/846 (N.I. 11), Article 3
- (2) See Article 2(2) of S.I. 1978/1039 (N.I. 9)
- (3) Article 17 must be read with S.I. 1992/1728 (N.I. 17), Articles 3(2) and 4(2)
- (4) S.I. 1978/1039 (N.I. 9): the general purposes of Part II referred to in Article 17(1) were extended by S.I. 1992/1728 (N.I. 17), Articles 3(1) and 4(1). Article 55(2) was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraph 19
- (5) 1972 c. 68, paragraph 1A of Schedule 2 was inserted by section 28 of the Legislative and Regulatory Reform Act 2006 (c. 51)
- (6) Article 13(1A) was substituted by S.I. 1998/2795 (N.I. 18), Article 4
- (7) Article 46(3) was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraphs 8 and 18 and the Health Protection Agency Act 2004 (c. 17), Schedule 3, paragraph 10
- (8) O.J. No. L114, 27.4.2006, p.38, as amended by Directive 2007/30/EC of 20 June 2007 (O.J. No. L165, 27.6.2007, p.21) and by Regulation (EC) No. 1137/2008 of 22 October 2008 (O.J. No. L311, 21.11.2008, p.1)
- (9) O.J. No. L183, 29.6.1989, p 1-8

**Citation, commencement and interpretation**

1.—(1) These Regulations may be cited as the Control of Artificial Optical Radiation at Work Regulations (Northern Ireland) 2010 and shall come into operation on 14th June 2010.

(2) In these Regulations—

“the 2000 Regulations” means the Management of Health and Safety at Work Regulations (Northern Ireland) 2000<sup>(10)</sup>;

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

“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;

“enforcing authority” means the Health and Safety Executive for Northern Ireland or district council, determined in accordance with the provisions of the Health and Safety (Enforcing Authority) Regulations (Northern Ireland) 1999<sup>(11)</sup>;

“the exposure limit values” means—

(a) for non-coherent radiation, those exposure limit values set out in Annex 1 of the Directive; and

(b) for laser radiation those exposure limit values set out in Annex II of 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 ( $\text{W m}^{-2}$ );

“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 ( $\text{W m}^{-2} \text{sr}^{-1}$ );

“radiant exposure” means the time integral of the irradiance, expressed in joules per square metre ( $\text{J m}^{-2}$ ); and

“territorial sea” means the territorial sea of the United Kingdom adjacent to Northern Ireland and “within the territorial sea” includes on, over and under it.

(3) Where a word or expression is defined in the Directive and is not defined in these Regulations, it has the meaning as in the Directive.

(4) 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.

<sup>(10)</sup> S.R. 2000 No. 388 amended by S.R. 2001 No. 348, S.R. 2003 No. 454, S.R. 2006 No. 255 and revoked in part by S.R. 2007 No. 291

<sup>(11)</sup> S.R. 1999 No. 90 amended by S.R. 2000 No. 375, S.R. 2003 No. 33, S.R. 2006 No. 205, S.R. 2006 No. 425, S.R. 2007 No. 31, S.R. 2007 No. 291 and S.R. 2009 No. 238

(5) The Interpretation Act (Northern Ireland) 1954(12) shall apply to these Regulations as it applies to an Act of the Northern Ireland Assembly.

### **Application**

2.—(1) Where a duty is placed by these Regulations on an employer in respect of its employees, the employer shall, 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 except that the duties of the employer—

- (a) under regulation 5 (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; and
- (b) under regulation 6 (health surveillance and medical examinations) do not extend to persons who are not its employees.

(2) These Regulations do not apply to the master of a crew of a ship or 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, and for the purposes of this paragraph "ship" includes every description of vessel used in navigation, other than a ship forming part of Her Majesty's Navy.

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

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 1 to the 2000 Regulations,

the employer shall 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 shall 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 shall 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 calculations shall follow national or international science-based guidelines.

(5) The assessment shall 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 on 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.
- (6) The risk assessment shall 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 shall 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 4 and 5.
- (8) In paragraphs (3) and (4)—
- (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.

### **Obligations to eliminate or reduce risks**

4.—(1) An employer shall 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 shall be based on the general principles of prevention set out in Schedule 1 to the 2000 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 shall devise and implement an action plan comprising technical and organisational measures designed to prevent exposure exceeding the exposure limit values.

(4) The action plan shall 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; and
  - (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 shall 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 shall 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 (Safety Signs and Signals) Regulations (Northern Ireland) 1996(13).

### **Information and training**

- 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 shall provide its employees and representatives with suitable and sufficient information and training relating to the outcome of the risk assessment, and this shall include the following—
- (a) the technical and organisational measures taken in order to comply with the requirements of regulation 4;
  - (b) the exposure limit values;
  - (c) the significant findings of the risk assessment, including any measurements taken, with an explanation of those findings;
  - (d) why and how to detect and report adverse health effects to the eyes or skin;
  - (e) the circumstances in which employees are entitled to appropriate health surveillance;
  - (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.

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(13) S.R. 1996 No. 119 amended by S.R. 1997 No. 247, S.R. 1999 No. 150, S.R. 2000 No. 388, S.R. 2006 No. 173 and revoked in part by S.R. 2006 No. 1

(2) The employer shall 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.

### **Health surveillance and medical examinations**

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 shall ensure that such employees are placed under suitable health surveillance.

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

(3) The employer shall 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 shall contain a summary of the results of the health surveillance carried out.

(5) The employer shall—

- (a) on reasonable notice being given, allow an employee access to his or her personal health record; and
- (b) provide the enforcing authority with copies of such health records as it may require.

(6) An employer shall 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 shall—

- (a) ensure that a doctor or suitably qualified person—
  - (i) informs the employee of the result of the examination which relates to the employee; and
  - (ii) provides 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 4, taking into account any advice given by a doctor or other suitably qualified person or the enforcing authority; and
- (e) provide continued health surveillance if appropriate.

### **Application within the territorial sea**

7. Within the territorial sea these Regulations shall apply only to and in relation to any activity to which any of paragraphs 2 to 8 of the Schedule applies.

Sealed with the Official Seal of the Department of Enterprise, Trade and Investment on 14th May 2010



*M Bohill*  
A senior officer of the Department of Enterprise,  
Trade and Investment

## SCHEDULE

Regulation 7

## PREMISES AND ACTIVITIES WITHIN THE TERRITORIAL SEA

**Interpretation**

1.—(1) In this Schedule—

“activity” includes a diving project;

“designated area” means any area designated by Order under section 1(7) of the Continental Shelf Act 1964<sup>(14)</sup> and “within a designated area” includes over and under it;

“diving project” has the meaning assigned to it by regulation 2(1) of the Diving at Work Regulations (Northern Ireland) 2005<sup>(15)</sup> save that it includes an activity in which a person takes part as a diver wearing an atmospheric pressure suit and without breathing in air or other gas at a pressure greater than atmospheric pressure;

“energy structure” means a fixed or floating structure, other than a vessel, for producing energy from wind or water;

“offshore installation” shall be construed in accordance with paragraph 2(2) and (3);

“supplementary unit” means a fixed or floating structure, other than a vessel, for providing energy, information or substances to an offshore installation;

“stand-by vessel” means a vessel which is ready to give assistance in the event of an emergency on or near an offshore installation;

“vessel” includes a hovercraft and any floating structure which is capable of being staffed.

(2) For the purposes of this Schedule, any structures and devices on top of a well shall be treated as forming part of the well.

(3) Any reference in this Schedule to premises and activities includes a reference to any person, article or substance on those premises or engaged in, or, as the case may be, used or for use in connection with any such activity, but does not include a reference to an aircraft which is airborne.

**Offshore installations**

2.—(1) This paragraph shall apply to and in relation to—

(a) any offshore installation and any activity on it;

(b) any activity in connection with an offshore installation, or any activity which is immediately preparatory thereto, whether carried on from the installation itself, on or from a vessel or in any other manner, other than—

(i) transporting, towing or navigating the installation; and

(ii) any activity in or from a vessel being used as a stand-by vessel;

(c) a diving project involving—

(i) the survey and preparation of the sea bed for an offshore installation;

(ii) the survey and restoration of the sea bed consequent on the removal of an offshore installation.

(2) Subject to sub-paragraph (3), in this paragraph, “offshore installation” means a structure which is, or is to be, or has been, used while standing or stationed in water, or on the foreshore or other land intermittently covered with water—

<sup>(14)</sup> 1964 c. 29; section 1 was amended by the Oil and Gas (Enterprise) Act 1982 (1982 c. 23), Schedule 3, paragraph 1

<sup>(15)</sup> S.R. 2005 No. 45, as amended by S.R. 2007 No. 247



- (a) for the exploitation, or exploration with a view to exploitation, of mineral resources by means of a well;
- (b) for the storage of gas in or under the shore or bed of any water or the recovery of gas so stored;
- (c) for the conveyance of things by means of a pipe; or
- (d) mainly for the provision of accommodation for persons who work on or from a structure falling within any of the provisions of this sub-paragraph,

together with any supplementary unit which is ordinarily connected to it, and all the connections.

- (3) Any reference in sub-paragraph (2) to a structure or unit does not include—
  - (a) a structure which is connected with dry land by a permanent structure providing access at all times and for all purposes;
  - (b) a well;
  - (c) a structure which has ceased to be used for any of the purposes specified in sub-paragraph (2) and has since been used for a purpose not so specified;
  - (d) a mobile structure which has been taken out of use and is not yet being moved with a view to its being used for any of the purposes specified in sub-paragraph (2); and
  - (e) any part of a pipeline.

### **Wells**

- 3.—(1) Subject to sub-paragraph (2), this paragraph applies to and in relation to—
  - (a) a well and any activity in connection with it; and
  - (b) an activity which is immediately preparatory to any activity in head (a).

(2) Sub-paragraph (1) includes keeping a vessel on station for the purpose of working on a well but otherwise does not include navigation or an activity connected with navigation.

### **Pipelines**

- 4.—(1) This paragraph applies to and in relation to—
  - (a) any pipeline;
  - (b) any pipeline works;
  - (c) the following activities in connection with pipeline works—
    - (i) the loading, unloading, fuelling or provisioning of a vessel;
    - (ii) the loading, unloading, fuelling, repair and maintenance of an aircraft on a vessel, being in either case a vessel which is engaged in pipeline works.
- (2) In this paragraph—

“pipeline” means a pipe or system of pipes for the conveyance of any thing, together with—

  - (a) any apparatus for inducing or facilitating the flow of any thing through, or through part of, the pipe or system;
  - (b) any apparatus for treating or cooling any thing which is to flow through, or through part of, the pipe or system;
  - (c) valves, valve chambers and similar works which are annexed to, or incorporated in the course of, the pipe or system;
  - (d) apparatus for supplying energy for the operation of any such apparatus or works as are mentioned in heads (a) to (c);

*Status: This is the original version (as it was originally made).*

- (e) apparatus for the transmission of information for the operation of the pipe or system;
  - (f) apparatus for the cathodic protection of the pipe or system; and
  - (g) a structure used or to be used solely for the support of a part of the pipe or system;
- but not including a pipeline of which no initial or terminal point is situated in the United Kingdom, within the territorial sea adjacent to the United Kingdom, or within a designated area;

“pipeline works” means—

- (a) assembling or placing a pipeline or length of pipeline including the provision of internal or external protection for it;
- (b) inspecting, testing, maintaining, adjusting, repairing, altering or renewing a pipeline or length of pipeline;
- (c) changing the position of or dismantling or removing a pipeline or length of pipeline;
- (d) opening the bed of the sea for the purposes of the works mentioned in heads (a) to (c), and tunnelling or boring for those purposes;
- (e) any activities incidental to the activities described in heads (a) to (d);
- (f) a diving project in connection with any of the works mentioned in heads (a) to (e) or for the purpose of determining whether a place is suitable as part of the site of a proposed pipeline and the carrying out of surveying operations for settling the route of a proposed pipeline.

### **Mines**

5.—(1) This paragraph applies to and in relation to a mine within the territorial sea or extending beyond it, and any activity in connection with it, while it is being worked.

(2) In this paragraph “mine” has the same meaning as in the Mines Act (Northern Ireland) 1969<sup>(16)</sup>.

### **Other activities**

6.—(1) Subject to sub-paragraph (2), this paragraph applies to and in relation to—

- (a) the construction, reconstruction, alteration, repair, maintenance, cleaning, use, operation, demolition and dismantling of any building, energy structure or other structure, not being in any case a vessel, or any preparation for any such activity;
- (b) the transfer of people or goods between a vessel or aircraft and a structure (including a building) mentioned in head (a);
- (c) the loading, unloading, fuelling or provisioning of a vessel;
- (d) a diving project;
- (e) the construction, reconstruction, finishing, refitting, repair, maintenance, cleaning or breaking up of a vessel except when carried out by the master or any officer or member of the crew of that vessel;
- (f) the maintaining on a station of a vessel which would be an offshore installation were it not a structure to which paragraph 2(3)(d) applies;
- (g) the operation of a cable for transmitting electricity from an energy structure to shore;
- (h) the transfer of people or goods between a vessel or aircraft and a structure mentioned in head (f).

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<sup>(16)</sup> 1969 c. 6 (N.I.)

- (2) This paragraph shall not apply—
- (a) to a case where paragraph 2, 3, 4 or 5 applies; or
  - (b) to vessels which are registered outside the United Kingdom and are on passage through the territorial sea.

#### **Other activities within a designated area**

7. This paragraph shall apply within a designated area to and in relation to the construction, reconstruction, alteration, repair, maintenance, cleaning, use, operation, demolition and dismantling of any structure which would be an offshore installation were it not a structure to which paragraph 2(3)(c) applies, or any preparation for any such activity.

#### **Activities within a renewable energy zone**

8.—(1) Subject to sub-paragraph (2), this paragraph shall apply within a renewable energy zone to and in relation to—

- (a) the construction, reconstruction, alteration, repair, maintenance, cleaning, use, operation, demolition and dismantling of any energy structure or related structure, or any preparation for any such activity;
  - (b) the transfer of people or goods between a vessel or aircraft and an energy structure or related structure;
  - (c) the loading, unloading, fuelling or provisioning of a vessel;
  - (d) the operation of a cable for transmitting electricity from an energy structure or related structure to shore;
  - (e) a diving project associated with any of the works mentioned in heads (a) to (d) of this sub-paragraph.
- (2) This paragraph shall not apply—
- (a) to a case where paragraph 2, 3, 4 or 5 applies; or
  - (b) to vessels which are registered outside the United Kingdom and are on passage through the renewable energy zone.

(3) In this paragraph—

“related structure” means a structure, not being in any case a vessel, related to an energy structure, including—

- (a) a structure for converting energy produced by an energy structure into a form suitable for transmission to shore; and
- (b) a structure mainly for the provision of accommodation for persons carrying out work activities in relation to an energy structure or related structure;

“renewable energy zone” means any area designated by order under section 84(4) of the Energy Act 2004<sup>(17)</sup> and “within a renewable energy zone” includes over and under it.

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(17) 2004 c.20.

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## EXPLANATORY NOTE

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

1. These Regulations implement as regards Northern Ireland 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.

2. Regulation 1(2) 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.

3. The Regulations impose 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 (regulation 3). 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 4(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 4(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 4(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 4 (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 5); and
- (f) to provide health surveillance and medical examinations in certain cases (regulation 6).

4. In Great Britain the corresponding Regulations are the Control of Artificial Optical Radiation at Work Regulations 2010 ([S.I. 2010/1140](#)). The Great Britain Health and Safety Executive has prepared an impact assessment in respect of those Regulations and a copy of that assessment, together with a Northern Ireland supplement prepared by the Health and Safety Executive for Northern Ireland, is held at the offices of that Executive at 83 Ladas Drive, Belfast BT6 9FR from where copies may be obtained. A copy of the transposition note in relation to the implementation of the Directive set out in paragraph 1 can also be obtained from the same address. Copies of both these

documents are annexed to the Explanatory Memorandum which is available on the Office of the Public Sector Information website (<http://www.opsi.gov.uk/>).

**5.** A person who contravenes the Regulations is guilty of an offence under Article 31 of the Health and Safety at Work (Northern Ireland) Order 1978 and is liable—

- (a) on summary conviction to imprisonment for a term not exceeding six months, or a fine not exceeding £20,000, or both; or
- (b) on conviction on indictment to imprisonment for a term not exceeding two years, or a fine, or both.