1985 No. 273

HEALTH AND SAFETY

Ionising Radiations Regulations (Northern Ireland) 1985

Made	*14th October 1985*
Coming into operation—	
for the purposes of regulation 10	*18th November 1985*
for all other purposes	*1st January 1986*

ARRANGEMENT OF REGULATIONS

PART I

INTERPRETATION AND GENERAL

1. Citation and commencement.
2. Interpretation.
3. Application of these Regulations in relation to the short-lived daughters of radon 222.
4. Co-operation between employers.
5. Notification of certain work with ionising radiation.

PART II

DOSE LIMITATION

6. Restriction of exposure.
7. Dose limits.

PART III

REGULATION OF WORK WITH IONISING RADIATION

8. Designation of controlled and supervised areas.
9. Designation of classified persons.
10. Appointment of radiation protection advisers and qualified persons.
11. Local rules, supervision and radiation protection supervisors.
12. Information, instruction and training.

PART IV

DOSIMETRY AND MEDICAL SURVEILLANCE

13. Dose assessment.
14. Accident dosimetry.
15. Approved dosimetry services.
16. Medical surveillance.
17. Approved arrangements for the protection of certain employees.

PART V

ARRANGEMENTS FOR THE CONTROL OF RADIOACTIVE SUBSTANCES

18. Sealed sources and articles containing or embodying radioactive substances.
19. Accounting for radioactive substances.
20. Keeping of radioactive substances.
21. Transport and moving of radioactive substances.
22. Washing and changing facilities.
23. Personal protective equipment.

PART VI

MONITORING OF IONISING RADIATION

24. Monitoring of levels for radiation and contamination.

PART VII

ASSESSMENTS AND NOTIFICATIONS

25. Assessment of hazards.
26. Special hazard assessments and reports.
27. Contingency plans.
28. Investigation of exposure.
29. Investigation and notification of over-exposure.
30. Dose limitation for over-exposed persons.
31. Notification of certain occurrences.

PART VIII

SAFETY OF ARTICLES AND EQUIPMENT

32. Duties of manufacturers etc. of articles for use in work with ionising radiation.
33. Equipment used for medical exposure.
34. Misuse of or interference with sources of ionising radiation.

PART IX

MISCELLANEOUS AND GENERAL

35. Defence on contravention of certain regulations.
36. Exemption certificates.
37. Fees for medical examinations.
38. Transitional provisions.
39. Modifications relating to the Ministry of Defence etc.
40. Revocations, modifications and savings.

Schedule 1. Dose limits.
Schedule 2. Quantities of radionuclides.
Schedule 3. Work not required to be notified under regulation 5(2).
Schedule 4. Particulars to be supplied in a notification under regulation 5(2).
Schedule 5. Additional particulars that the Department may require.
Schedule 6. Designation of controlled areas.
Schedule 7. Particulars to be included in an assessment report.
Schedule 8. Further particulars that the Department may require.
Schedule 9. Sealed sources to which regulation 26 does not apply.
Schedule 10. Revocation and modifications.

The Department of Agriculture, the Department of Economic Development, the Department of the Environment and the Department of Health and Social Services, acting jointly as the Department concerned(**a**) in exercise of the powers conferred by Articles 2(5), 17(1), (2), (3), (4), (5) and (6), 40(2) and (4), 54(1), (3) and (5) and 55(2) of and paragraphs 1(1), (2) and (4), 2, 5, 6, 7, 8, 9, 10, 12, 13, 14(1), 15, 19 and 20 of Schedule 3 to the Health and Safety at Work (Northern Ireland) Order 1978(**b**) and of every other power enabling them in that behalf, after consultation in accordance with Article 46(1) of that Order with the Health and Safety Agency for Northern Ireland, the National Radiological Protection Board and such other bodies as appear to them to be appropriate, hereby make the following Regulations:

PART I

INTERPRETATION AND GENERAL

Citation and commencement

1. These Regulations may be cited as the Ionising Radiations Regulations (Northern Ireland) 1985 and shall come into operation—

(*a*) for the purposes of regulation 10 on 18th November 1985;

(*b*) for all other purposes on 1st January 1986.

Interpretation

2.—(1) In these Regulations—

"appointed doctor" means a registered medical practitioner who is for the time being appointed in writing by the Department for the purposes of these Regulations;

"approved" means approved for the time being by the Department;

"approved dosimetry service" means a dosimetry service approved in accordance with regulation 15;

"calendar year" means a period of twelve calendar months beginning with 1st January;

"classified person" means a person who has been so designated in accordance with regulation 9(1);

"contamination" means the contamination by any radioactive substance of any surface (including any surface of the body or clothing) or any part of absorbent objects or materials or the contamination of liquids or gases by any radioactive substance;

(**a**) *See* Article 2(2) of S.I. 1978/1039 (N.I. 9)
(**b**) S.I. 1978/1039 (N.I. 9)

"controlled area" means an area which has been so designated by the employer in accordance with regulation 8(1) or (3);

"the Department" means the Department of Economic Development;

"dose" means, in relation to ionising radiation, any dose quantity or sum of dose quantities mentioned in Schedule1;

"dose limit" means, in relation to persons of a specified class, the dose limit specified in Schedule 1 in relation to a person of that class and is with respect to—

(*a*) the whole body, the relevant dose limit specified in Part I;

(*b*) any individual organ or tissue except the lens of the eye, the relevant dose limit specified in Part II;

(*c*) the lens of the eye, the relevant dose limit specified in Part III;

(*d*) the abdomen of a woman of reproductive capacity, the dose limit specified in Part IV; and

(*e*) the abdomen of a pregnant woman, the dose limit specified in Part V;

"dose rate" means, in relation to a place, the rate at which a person or part of a person would receive a dose of ionising radiation from external radiation if he were at that place;

"dose record" means, in relation to a person, the record of the doses received by that person as a result of his exposure to ionising radiation, being the record made and maintained on behalf of the employer by the approved dosimetry service in accordance with regulation 13(3)(*a*);

"employment medical adviser" means an employment medical adviser appointed under Article 48 of the Health and Safety at Work (Northern Ireland) Order 1978;

"external radiation" means, in relation to a person, ionising radiation coming from outside the body of that person;

"health record" means, in relation to an employee, the record of medical surveillance of that employee maintained by the employer in accordance with regulation 16(2);

"instantaneous dose rate" means a dose rate averaged over one minute;

"internal radiation" means, in relation to a person, ionising radiation coming from inside the body of that person;

"ionising radiation" means gamma rays, X-rays or corpuscular radiations which are capable of producing ions either directly or indirectly;

"local rules" means rules made in accordance with regulation 11(1);

"maintained", where the reference is to maintaining plant, apparatus or facilities, means maintained in an efficient state, in efficient working order and good repair;

"medical exposure" means exposure of a person to ionising radiation for the purpose of his medical or dental examination or treatment which is conducted under the direction of a suitably qualified person and includes any such examination or treatment conducted for the purposes of research;

"overexposure" means any exposure of a person to ionising radiation to the extent that the dose received by that person causes a dose limit relevant to that person to be exceeded;

"qualified person" means a person who has been so appointed for the purposes of regulation 24(3) in accordance with regulation 10(7);

"radiation generator" means any apparatus in which charged particles are accelerated in a vacuum vessel through a potential difference of more than

5 kilovolts (whether in one or more steps) except an apparatus in which the only such generator is a cathode ray tube or visual display unit which does not cause under normal operating conditions an instantaneous dose rate of more than 5 μSvh^{-1} at a distance of 50 mm from any accessible surface;

"radioactive substance" means any substance having an activity concentration of more than 100 Bqg^{-1} and any other substance which contains one or more radionuclides whose activity cannot be disregarded for the purposes of radiation protection, and the term includes a radioactive substance in the form of a sealed source;

"radiation protection adviser" means a person who has been so appointed in accordance with regulation 10(1);

"sealed source" means a radioactive substance, other than any radioactive substance inside a nuclear reactor or any nuclear fuel element, bonded wholly within a solid inactive material or encapsulated within an inactive receptacle of, in either case, sufficient strength to prevent any dispersion of the substance under reasonably foreseeable conditions of use and shall include the bonding or encapsulation, except that where such bonding or encapsulation is solely for the purpose of storage, transport or disposal, the radioactive substance together with its bonding or encapsulation shall not be treated as a sealed source;

"short-lived daughters of radon 222" means polonium 218, lead 214, bismuth 214 and polonium 214;

"supervised area" means an area which has been so designated by the employer in accordance with regulation 8(2) or (3);

"time average dose rate" means, a dose rate averaged over any 8 hour working period;

"trainee" means a person aged 16 years or over (including a student) who is undergoing instruction or training which involves operations which would, in the case of an employee, be work with ionising radiation;

"transport" means, in relation to a radioactive substance, carriage of that substance on a road within the meaning of Article 2(2) of the Road Traffic (Northern Ireland) Order 1981(**a**) or through another public place (whether on a conveyance or not), or by rail, inland waterway, sea or air, and in the case of transport on a conveyance, a substance shall be deemed as being transported from the time that it is loaded onto the conveyance for the purpose of transporting it until it is unloaded from that conveyance, but a substance shall not be considered as being transported if—

(*a*) it is transported by means of a pipeline or similar means; or

(*b*) it forms an integral part of a conveyance and is used in connection with the operation of that conveyance;

"woman of reproductive capacity" means a woman who is made subject to the additional dose limit for a woman of reproductive capacity specified in Part IV of Schedule 1 by an entry in her health record made by an employment medical adviser or appointed doctor;

"work with ionising radiation" means any work—

(*a*) involving the production, processing, handling, use, holding, storage, moving, transport or disposal of any radioactive substance;

(*b*) involving the operation or use of any radiation generator; or

(*c*) in which there is any exposure of a person to an atmosphere containing the short-lived daughters of radon 222 at a concentration in air, averaged over

(**a**) S.I. 1981/154 (N.I. 1)