1993 No. 41

HEALTH AND SAFETY

Control of Substances Hazardous to Health (Amendment) Regulations (Northern Ireland) 1993

Made . . . . . *5th February 1993*

Coming into operation . . *15th March 1993*

The Department of Agriculture, the Department of Economic Development and the Department of the Environment acting jointly as the Department concerned(**a**) in exercise of the powers conferred by Articles 17(1) and (2) of and paragraphs 1(1), (2), (3) and 6 to 10, 12(1), 14(1), 15 and 19 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 and such other bodies as appeared to them to be appropriate, hereby make the following Regulations:—

Citation and commencement

1. These Regulations may be cited as the Control of Substances Hazardous to Health (Amendment) Regulations (Northern Ireland) 1993 and shall come into operation on 15th March 1993.

Amendments to the Control of Substances Hazardous to Health Regulations (Northern Ireland) 1990

2. The Control of Substances Hazardous to Health Regulations (Northern Ireland) 1990(**c**) shall be amended as provided in regulations 3 to 10.

Interpretation

3. In regulation 2(1) after the definition of "approved list" there shall be inserted—

' "carcinogen" means—

(*a*) any substance or preparation which if classified in accordance with the classification provided for by regulation 5 of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985 (S.R. 1985 No. 81 amended by S.R. 1988 No. 288, S.R. 1989 No. 182, S.R. 1990 No. 120 and S.R. 1990 No. 303) would be required to be labelled with the risk phrase R45 (may cause cancer) or

(**a**) *See* Article 2(2) of S.I. 1978/1039 (N.I. 9)
(**b**) S.I. 1978/1039 (N.I. 9)
(**c**) S.R. 1990 No. 374, amended by S.R. 1992 No. 61

R49 (may cause cancer by inhalation), whether or not the substance or preparation is required to be classified in accordance with those Regulations; or

(*b*) any substance or preparation listed in Schedule 10 and any substance or preparation arising from a process specified in that Schedule which is a substance hazardous to health;''.

Prohibitions relating to certain substances

4. In regulation 4(2) for the words ''exceeding 0.1 per cent'' there shall be substituted ''equal to or greater than 0.1 per cent by mass.''

Assessment of health risks created by work involving substances hazardous to health

5. In regulation 6(2), after the words ''shall be reviewed'' there shall be inserted ''regularly, and''.

Prevention or control of exposure to substances hazardous to health

6. In regulation 7—

(*a*) in paragraph (2) after the word ''health'' there shall be inserted ''except to a carcinogen'';

(*b*) after paragraph (2) there shall be inserted—

''(2A) Without prejudice to the generality of paragraph (1), where the assessment made under regulation 6 shows that it is not reasonably practicable to prevent exposure to a carcinogen by using an alternative substance or process, adequate control of exposure to the carcinogen shall be achieved by the application of all the following measures—

(*a*) the total enclosure of the process and handling systems unless this is not reasonably practicable;

(*b*) plant, processes and systems of work which minimise the generation of, or suppress and contain, spills, leaks, dust, fumes and vapours of carcinogens;

(*c*) limitation of the quantities of a carcinogen at the place of work;

(*d*) keeping the number of persons who might be exposed to a carcinogen to a minimum;

(*e*) prohibiting eating, drinking and smoking in areas that may be contaminated by carcinogens;

(*f*) the provision of hygiene measures including adequate washing facilities and regular cleaning of walls and surfaces;

(*g*) the designation of those areas and installations which may be contaminated by carcinogens, and the use of suitable and sufficient warning signs; and

(*h*) the safe storage, handling and disposal of carcinogens and use of closed and clearly labelled containers.''.

(*c*) in paragraph (3) for the words ''paragraph (2)'' there shall be substituted ''paragraph (2) or (2A), as the case may be,'';

(*d*) after paragraph (6) there shall be inserted—

"(6A) In the event of the failure of a control measure which might result in the escape of carcinogens into the workplace, the employer shall ensure that—

(*a*) only those persons who are responsible for the carrying out of repairs and other necessary work are permitted in the affected area and they are provided with appropriate respiratory protective equipment and protective clothing; and

(*b*) employees and other persons who may be affected are informed of the failure forthwith.".

Monitoring exposure at the workplace and health surveillance

7. In regulations 10(3)(*a*) and 11(3) for the words "30 years" there shall be substituted "40 years" in both places where those words appear.

List of substances assigned maximum exposure limits

8. For Schedule 1 there shall be substituted the Schedule set out in Schedule 1 to these Regulations

Prohibition of certain substances hazardous to health for certain purposes

9. In Schedule 2—

(*a*) in item 1, column 1 at the end, after the words "0.1 per cent" there shall be inserted "by mass";

(*b*) in item 9, column 1 after the words "0.1 per cent" there shall be inserted "by mass.";

Other substances and processes to which the definition of carcinogen relates

10. After Schedule 9 there shall be inserted the Schedule set out in Schedule 2.

Sealed with the Official Seal of the Department of Agriculture on 5th February 1993.

(L.S.) *I. C. Henderson*
Assistant Secretary

Sealed with the Official Seal of the Department of Economic Development on 5th February 1993.

(L.S.) *Philip B. Strong*
Assistant Secretary

Sealed with the Official Seal of the Department of the Environment on 5th February 1993.

(L.S.) *Trevor Pearson*
Assistant Secretary

Schedule to be substituted as Schedule 1

SCHEDULE 1 Regulations 2(1), 7(4) and 12(2)

LIST OF SUBSTANCES ASSIGNED MAXIMUM EXPOSURE LIMITS

The maximum exposure limits of the dusts included in the list below refer to the total inhalable dust fraction, unless otherwise stated.

Substance	*Formula*	*Reference periods*			
		Long-term maximum exposure limit (8-hour TWA reference period)		*Short-term maximum exposure limit (10-minute reference period)*	
		ppm	mg m^{-3}	ppm	mg m^{-3}
Acrylamide	$CH_2=CHCONH_2$	—	0.3	—	—
Acrylonitrile	$CH_2=CHCN$	2	4	—	—
Arsenic and compounds except arsine (as As)	As	—	0.1	—	—
Benzene	C_6H_6	5	16	—	—
Bis (chloromethyl) ether	$ClCh_2OCH_2Cl$	0.001	0.005	—	—
Buta-1, 3-diene	$CH_2=CHCH=CH_2$	10	22	—	—
2-Butoxyethanol	$C_4H_9OCH_2CH_2OH$	25	120	—	—
Cadmium and cadmium compounds, except cadmium oxide fume and cadmium sulphide pigments (as Cd)	Cd	—	0.05	—	—
Cadmium oxide fume (as Cd)	CdO	—	0.05	—	0.05
Cadmium sulphide pigments (respirable dust as Cd)	CdS	—	0.04	—	—
Carbon disulphide	CS_2	10	30	—	—
Chromium (VI) compounds (as Cr)	Cr	—	0.05	—	—
1, 2-Dibromoethane (Ethylene dibromide)	$BrCH_2CH_2Br$	0.5	4	—	—
Dichloromethane	CH_2Cl_2	100	350	—	—
2, 2′-Dichloro-4, 4′-methylene dianiline (MbOCA)	$CH_2(C_6H_3ClNH_2)_2$	—	0.005	—	—
2-Ethoxyethanol	$C_2H_5OCH_2CH_2OH$	10	37	—	—
2-Ethoxyethyl acetate	$C_2H_5OCH_2CH_2OOCCH_3$	10	54	—	—
Ethylene oxide	CH_2CH_2O	5	10	—	—

Formaldehyde	HCHO	2	2.5	2	2.5
Grain dust		—	10	—	—
Hydrogen cyanide	HCN	—	—	10	10
Isocyanates, all (as-NCO)		—	0.02	—	0.07
*Man-made mineral fibre		—	5	—	—
2-Methoxyethanol	$CH_3OCH_2CH_2OH$	5	16	—	—
2-Methoxyethyl acetate	$CH_3COOCH_2CH_2OCH_3$	5	24	—	—
Nickel and its inorganic compounds (except nickel carbonyl):	Ni				
water-soluble nickel compounds (as Ni)		—	0.1	—	—
nickel and water-insoluble nickel compounds (as Ni)		—	0.5	—	—
Rubber process dust		—	8	—	—
†Rubber fume		—	0.6	—	—
Silica, respirable crystalline	SiO_2	—	0.4	—	—
Styrene	$C_6H_5CH=CH_2$	100	420	250	1050
1, 1, 1-Trichloroethane	CH_3CCl_3	350	1900	450	2450
Trichloroethylene	$CCl_2=CHCl$	100	535	150	802
‡Vinyl chloride	$CH_2=CHCl$	7	—	—	—
Vinylidene chloride	$CH_2=CCl_2$	10	40	—	—
Wood dust (hard wood)		—	5	—	—

* In addition to the maximum exposure limit specified above man-made mineral fibre is also subject to a maximum exposure limit of 2 fibres ml^{-1}, 8-hour TWA, when measured or calculated by a method approved by the Department.

† Limit relates to cyclohexane soluble material.

‡ In addition to the maximum exposure limit specified above vinyl chloride is also subject to an overriding annual exposure limit of 3 ppm.

Schedule to be inserted as Schedule 10

SCHEDULE 10 Regulation 2(1)

OTHER SUBSTANCES AND PROCESSES TO WHICH THE DEFINITION OF "CARCINOGEN" RELATES

Aflatoxins

Arsenic and inorganic arsenic compounds

Beryllium and beryllium compounds

Bichromate manufacture involving the roasting of chromite ore

Electrolytic chromium processes, excluding passivation, which involve hexavalent chromium compounds

Mustard gas (B, B'Dichlorodiethyl sulphide)

Calcining, sintering or smelting of nickel copper matte or acid leaching or electrorefining of roasted matte

Ortho-toluidine

Coal soots, coal tar, pitch and coal tar fumes

The following mineral oils:

(i) unrefined and mildly refined vacuum distillates;

(ii) catalytically cracked petroleum oils with final boiling points above 320°C;

(iii) used engine oils;

Auramine manufacture

Leather dust in boot and shoe manufacture, arising during preparation and finishing

Hard wood dusts

Isopropyl alcohol manufacture (strong acid process)

Rubber manufacturing and processing giving rise to rubber process dust and rubber fume

Magenta manufacture

4-Nitrobiphenyl

EXPLANATORY NOTE

(This note is not part of the Regulations.)

These Regulations amend the Control of Substances Hazardous to Health Regulations (Northern Ireland) 1990 (''the 1990 Regulations'').

These Regulations, together with the 1990 Regulations, implement as respects Northern Ireland Council Directive 90/394/EEC (OJ No. L196, 26.7.90, p. 1) on the protection of workers from the risks related to exposure to carcinogens at work (''carcinogens Directive'') except insofar as that Directive relates to asbestos.

These Regulations make the following changes of substance to the 1990 Regulations by:

(*a*) inserting a definition of carcinogen into regulation 2(1) (regulation 3),

(*b*) amending regulation 6 to provide that assessments are reviewed regularly (regulation 5),

(*c*) inserting new regulations 7(2A) and 7(6A) with respect to the application of measures to prevent or control exposure to carcinogens (regulation 6),

(*d*) amending regulations 10(3)(*a*) and 11(3) to provide that certain monitoring records and health records are to be kept for 40 years (regulation 7),

(*e*) substituting a new Schedule 1 so as to prescribe maximum exposure limits for certain substances hazardous to health; a new exposure limit for bis (chloromethyl) ether is introduced and the exposure limit for benzene is amended,

(*f*) inserting a new Schedule 10 (regulation 10).

Minor amendments to regulation 4 of and Schedule 2 to, the 1990 Regulations are made to align the wording with that used in Council Directive 89/677/EEC (OJ No. L398, 30.12.89, p. 19) on the marketing and use of certain dangerous substances (regulations 4 and 9).