#### No. 716/2000

# Government Decree on the Prevention of Work-Related Cancer Risks

(as amended by Decree 245/2002)

# **Section 1 – Scope of application**

- (1) This Decree applies to work involving the use or presence of agents which on good grounds may be assumed to give rise to an increased risk of employees contracting cancer.
- (2) As to mutagens used or present at work, the provisions of this Decree on carcinogens apply. Sections 3, 17 and 18 do not, however, apply to mutagens.
- (3) This Decree does not apply to environmental tobacco smoke and the prevention of cancer risks related thereto.

#### **Section 2 – Definitions**

- (1) For the purposes of this Decree,
  - 1) carcinogen means:
  - a) a substance or preparation which meets the criteria for carcinogens of group 1 or 2 in accordance with the Decision of the Ministry of Social Affairs and Health on the criteria for classification of chemicals and the labelling of chemicals (979/1997) and its annexes;
  - b) a substance, preparation or work process mentioned on the list referred to in section 3;
  - 2) *mutagen* means a substance or preparation which meets the criteria for mutagens of group 1 or 2 in accordance with the Decision of the Ministry of Social Affairs and Health on the criteria for classification of chemicals and the labelling of chemicals and its annexes.

#### Section 3 – List of carcinogens

- (1) A list shall be confirmed by a decree of the Ministry of Social Affairs and Health containing such carcinogens which cause cancer risks to employees exposed to them and which at the workplace shall be recorded on a list referred to in section 2 of the Act on a register of persons in their occupation exposed to carcinogenic substances and processes (*list of exposed workers*).
- (2) The list may include prohibitions and restrictions concerning the use of carcinogens at work.

### Section 4 – Identification of hazards and assessment of risks

- (1) In any activity likely to involve a risk of exposure to carcinogens, the nature, degree and duration of employees' exposure and any risk to the health and safety of employees shall be assessed and the necessary measures shall be taken.
- (2) When assessing the risks, all routes of exposure must be considered.
- (3) The assessment must be renewed regularly and in any event when any change occurs in the conditions which may increase employees' exposure to carcinogens.
- (4) The employer must retain the valid risk assessment and corresponding previous assessments, as well as the information used as the basis for the assessments, and on request submit them to the occupational safety and health authority. When closing down the business, the employer must submit the assessments and information mentioned above to the competent occupational safety and health authority. (4.4.2002/245)
- (5) Employees at particular risk must not be allowed to perform work where they are exposed to carcinogens.

## Section 5 – Reduction in the use of a substance and replacement of a substance

The employer shall reduce the use of a carcinogen at the workplace, in particular by replacing it by a substance, preparation or work process which is not dangerous or is less dangerous, in so far as this is technically possible and reasonably feasible.

# Section 6 – Prevention and reduction of exposure

- Where the results of the assessment referred to in section 4 reveal a risk to employees' health, the exposure of employees shall be prevented.
- Where it is not reasonably and technically possible to replace the carcinogen by a substance, preparation or process which, under its conditions of use, is not dangerous or is less dangerous to health or safety, the employer shall ensure that the carcinogen is handled in a closed system, in so far as is technically possible.
- (3) Where a closed system is not technically possible, the employer shall ensure that the degree of employees' exposure is reduced to the lowest level that is technically possible.
- (4) Exposure to carcinogens must not exceed the limit value set out in the annex to this Decree.
- (5) A limit value means the limit of the time-weighted average of the concentration for a carcinogen in the air within the breathing zone of a worker. The average of concentration is calculated for the reference period mentioned in the annex.

#### **Section 7 – Prevention measures**

In any activity where carcinogens are present the employer shall apply the following prevention measures:

- 1) limitation of the quantities of a carcinogenic substance or the use of a carcinogenic process at the workplace;
- 2) keeping as low as possible the number of employees exposed or likely to be exposed;
- 3) design of work processes and engineering control measures so as to avoid or minimize the release of carcinogens in the workplace;
- 4) elimination of carcinogens released in the workplace air as near their source as possible by means of local extraction systems or general ventilation; all such methods must be appropriate and compatible with the need to protect public health and the environment in the manner separately provided by statute;
- 5) use of existing appropriate procedures for the measurement of carcinogens in the workplace air, in particular for the early detection of abnormal exposures resulting from an unforeseeable event or an accident;
- 6) application of suitable work processes and procedures;
- 7) collective protection measures or, where exposure cannot be avoided by them or other means, individual protection measures;
- 8) hygienic measures, in particular regular cleaning of floors, walls and other surfaces;
- 9) information for workers;
- 10) demarcation of risk areas and use of adequate warning and safety signs including 'no smoking' signs in areas where workers are exposed or are likely to be exposed to carcinogens;
- 11) drawing up plans to deal with emergencies likely to result in abnormally high exposure;
- 12) means for safe storage, handling and transportation, in particular the use of sealed and clearly and visibly labelled containers;
- 13) means for safe collection, storage and disposal of waste by workers, including the use of sealed and clearly and visibly labelled containers.

### Section 8 – Information for the occupational safety and health authority

Where the results of the assessment referred to in section 4 reveal a risk to employees' health or safety, employers shall, when requested, make available to the occupational safety and health authority appropriate information on:

1) the activities or industrial processes carried out, including the reasons why carcinogens are used;

- 2) the quantities of substances or preparations manufactured or used which contain carcinogens;
- 3) the number of employees exposed;
- 4) the preventive measures taken;
- 5) the protective equipment used;
- 6) the nature and degree of exposure;
- 7) the replacement of a substance with one that is less dangerous.

## Section 9 – Unforeseen exposure

- (1) The employer shall inform the employees of an unforeseeable hazardous incident or an accident which is likely to result in an abnormal exposure of employees.
- (2) Until the situation has been restored to normal and the causes of the abnormal exposure have been eliminated:
  - 1) only those employees who are essential to the carrying out of repairs or other necessary work shall be permitted to work in the affected area;
  - 2) the employees exposed shall be provided with protective clothing and individual respiratory protection equipment which they must wear; the exposure may not be permanent and shall be kept to the strict minimum of time necessary for each employee;
  - 3) unprotected employees shall not be allowed to work in the affected area.

## **Section 10 – Foreseeable exposure**

- (1) For certain activities, such as maintenance, where it is foreseeable that there is the potential for a significant increase in exposure of employees, and where all scope for further technical preventive measures for limiting employees' exposure has been exhausted, the employer shall take, after investigating the matter together with the employees or their representatives, adequate measures to limit the duration of the employees' exposure to the minimum possible and to ensure the protection of the employees.
- In situations referred to in subsection 1, the employees shall be provided with protective clothing and individual respiratory protective equipment which they must wear as long as the abnormal exposure persists. The abnormal exposure may not be permanent and shall be kept to the strict minimum of time necessary for each employee.
- (3) Adequate measures shall be taken to ensure that the areas referred to in subsection 1 are clearly demarcated and indicated or that unauthorised persons are prevented by other means from having access to such areas.

#### Section 11 – Access to risk areas

The employer shall take adequate measures to ensure that only those employees whose work or duties so require are permitted to the areas where such activities are carried out which according to the results of the assessment referred to in section 4 cause danger to the employees' safety and health.

## Section 12 – Hygiene and individual protection

The employer is obliged, in the case of all activities where there is the potential for exposure to carcinogens, take appropriate measures to ensure that:

- 1) employees do not eat, drink or smoke in areas where there is the potential for exposure to carcinogens;
- 2) employees are provided with appropriate protective clothing or other adequate special clothing; separate storage places are provided for work clothing and protective clothing and for street clothes;
- 3) employees are provided with appropriate washing and toilet facilities;
- 4) protective equipment is properly stored in a well-defined place; it is checked and cleaned if possible before, and in any case after, each use; defective equipment is repaired or replaced before further use.

## **Section 13 – Instruction and guidance**

- (1) The employer shall take appropriate measures to ensure that employees receive adequate and appropriate instruction and guidance based on all available information, in particular in the form of notices and directions, concerning:
  - 1) potential risks to health, including the additional risks due to smoking;
  - 2) precautions to be taken to prevent exposure;
  - 3) hygiene requirements;
  - 4) wearing and use of protective equipment and clothing;
  - 5) steps to be taken by employees, including rescue workers, in the case of hazardous incidents and to prevent hazardous incidents;
- (2) The instruction and guidance shall be:
  - 1) adapted to take account of new or changed risks; and
  - 2) repeated periodically if necessary.
- (3) Employers shall inform employees of any installations and respective containers containing carcinogens, ensure that all containers, packages and installations containing carcinogens are labelled clearly and legibly, and display clearly visible warning and hazard signs.

#### **Section 14 – Information**

The employer shall take appropriate measures to ensure that:

- 1) employees or their representatives can make sure that this Decree is applied, in particular with regard to the selection and use of protective clothing and equipment affecting the safety and health of employees, and the measures determined by the employer in accordance with section 9(1);
- 2) employees and their representatives are informed as soon as possible of abnormal exposures, including those referred to in section 10, of the causes thereof and of the measures taken or to be taken to rectify the situation;
- 3) each employee has access to the information on the list of exposed workers which relates to him or her personally;
- 4) employees or their representatives have access to anonymous information on the group of persons referred to in section 18(1).

## **Section 15 – Monitoring of exposure**

Employees' exposure to carcinogens shall be monitored, where necessary, by hygienic measurements carried out at the workplace and by measuring the employees' exposure from biological samples.

#### Section 16 – Health surveillance

To prevent cancer risks, the employer shall arrange for health surveillance necessary for monitoring the health condition of employees in the manner provided further in the Occupational Health Care Act (743/1978) and in the provisions issued by virtue thereof.

## Section 17 – Identification of exposure

- (1) The employer shall assess the exposure of employees to carcinogens pursuant to sections 4 and 15 in order to record employees on the list of exposed workers.
- When determining the exposure of an employee, a group of employees, an occupational group, or employees in a field of work or industry, the assessment may be based on analyses and measurements made under corresponding circumstances in other workplaces, as well as other applicable information on factors affecting exposure.

#### Section 18 – Determination of annual exposure

- (1) If carcinogens are handled or persons otherwise are exposed to carcinogens at the workplace and the degree of exposure is not sufficiently well known, workers who during the year in question have handled a carcinogen or otherwise have been exposed to a carcinogen for a significant part of their working time during the minimum of 20 work days may be recorded as exposed workers in each year of exposure.
- (2) However, employees who due to an accident, a production disturbance, an exceptional work phase or other similar reason are transiently exposed to a carcinogen to an abnormally high degree shall without exception be recorded as exposed workers.

#### Section 19 – Use of benzene

Benzene and products the benzene content of which exceeds one per cent by volume shall not be used as solvents or diluents, unless they are used in closed installations or unless other equally safe work processes are used.

## **Section 20 – Further provisions**

Further provisions on the application of this Decree shall be issued by the Ministry of Social Affairs and Health.

# Section 21 – Entry into force

- (1) This Decree enters into force on 1 September 2000.
- (2) This Decree repeals the following statutes:
  - 1) Government Decision of 12 May 1982 concerning work involving exposure to benzene (355/1982);
  - 2) Government Order of 26 November 1992 on Occupational Cancer Prevention (1182/1992);
  - 3) Government Decision of 8 October 1992 on work with vinyl chloride (919/1992);
- (3) The provisions issued pursuant to the Government Decision mentioned in subsection 2(2) are still applied. The Government Decision mentioned in paragraph 3 of the same subsection is applied until 31 March 2003.
- (4) This Decree will be applied to mutagens referred to in section 1 from 1 April 2003.
- (5) The limit value of 1 ppm for benzene will be applied from 1 June 2003. Before that date, the limit value of 3 ppm is applied. The limit value of 3 ppm for vinyl chloride monomer and the limit value of 5 mg/m<sup>3</sup> for hardwood dust will be applied from 1 April 2003.

## **ANNEX**

## OCCUPATIONAL EXPOSURE LIMIT VALUES

Name of substance	EINECS (1)	CAS (2)	Limit values		Note	Transposition measures
			$mg/m^3$ (3)	ppm <sup>(4)</sup>		
Benzene	200-753-7	71-43-2	3,25	1	Skin <sup>(6)</sup>	Limit value of 3 ppm until 01.06.2003.
Vinyl chloride monomer	200-831	75-01-4	7,77 <sup>(5)</sup>	3 <sup>(5)</sup>	-	Enters into force on 01.04.2003.
Hardwood dust	-	-	5,00 <sup>(5), (</sup>	(7) -	-	Enters into force on 01.04.2003.

EINECS: European Inventory of Existing Chemical Substances
 CAS: Chemical Abstract Service Number
 mg/m³ = milligrams per cubic meter of air at the temperature of 20 °C and under the pressure of 103 Kpa (760 mmHg).

(4) ppm = parts per million by volume in air (ml/m³)

<sup>(5)</sup> Measured or calculated in relation to a reference period of 8 hours.

<sup>(6)</sup> Considerable increase in total-body load is possible in the case of exposure through skin.

<sup>(7)</sup> Inhalable part: if hardwood dust is mixed with other wood dusts, the limit value will be applied to all wood dusts contained in the mixture.