THE RESPONSE OF FINLAND TO THE QUESTIONNAIRE CONCERNING PROTECTION OF WORKERS FROM HAZARDOUS SUBSTANCES.

1) Please provide the existing national laws and regulations that protect workers from hazardous substances and establish the right of workers to a safe and healthy working conditions. (These may include as per definition proposed by ILO and WHO\(^1\) norms aiming at: the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; and the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities).

a) Please indicate if there are specific standards in place for the protection of health and safety in particular sectors of economic activity.

There are no specific standards in place for the protection of health and safety in particular sectors of economic activity except of asbestos removal work (see answer to 1 b below).

b) Please indicate if there are specific standards in place for protecting workers against specific risks such as the exposure to radiation, toxic substances (including industrial chemicals, pesticides and building materials), and air pollution, among others.

The standards in place for protecting workers against specific risks such as chemicals and radiation are listed below. Links to English translations of the legislation are provided if available.

The Occupational Safety and Health Act (738/2002; [https://www.finlex.fi/en/laki/kaannokset/2002/en20020738](https://www.finlex.fi/en/laki/kaannokset/2002/en20020738)) is a general act regulating the safety of work. The objectives of this Act are to improve the working environment and working conditions in order to ensure and maintain the working capacity of employees as well as to prevent occupational accidents and diseases and eliminate other hazards from work and the working environment to the health of employees. The safe use of
chemicals in workplaces is mainly stipulated in this act and the subordinate statutes issued under the act. Among other things, it lays down provisions on the employers’ general duty to exercise care, analysis and assessment of the risks at work, work that causes particular risks, design of the working environment and work, instruction and guidance to be provided for employees, and the use of personal protective equipment. Occupational Safety and Health Act e.g. contains detailed provisions concerning airborne impurities, chemical agents and dangerous substances used at work.

A statute of particular relevance to chemical safety issued under the Occupational Safety and Health Act is the Government Decree on Chemical Agents at Work (715/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20010715). The employer shall keep an updated list of the chemicals which are used in the workplace (Section 5). The employer shall identify hazards caused by the chemical agents present at the workplace and assess their possible risks to the employees’ health and safety (Section 6). The employer shall, in the event of accidents as well as hazardous incidents and emergencies, have an action plan which includes procedures for employee protection, rescue operations, first aid treatment and for arrangement of relevant safety drills at regular intervals (Section 11). Airborne impurities are stipulated in Sections 12–13 and binding limit values and indicative limit values for biological samples in Sections 14–15. The employer shall provide employees with instructions and guidance concerning chemical safety (Section 16).

Under the Occupational Safety and Health Act, the Ministry of Social Affairs and Health has issued the Decree on Concentrations Known to be Harmful (1214/2016), on the basis of which it has confirmed a list of concentrations of impurities in workplace air known to be harmful (HTP values) and a list of corresponding indicative limit values for biological exposure indicators for employees, measured from biological samples. Government Decree on the Prevention of Work-Related Cancer Risks (716/2000; https://www.finlex.fi/en/laki/kaannokset/2000/en20000716) issued under the Occupational Safety and Health Act includes specific provisions concerning carcinogenic and mutagenic substances. A list of workers exposed to carcinogens which cause cancer risks must be available in the workplace (Section 3). The nature, degree and duration of employees’ exposure to carcinogens and any risk to the health and safety of employees shall be assessed and the necessary measures shall be taken in the workplace (Section 4). The employer shall take appropriate measures to ensure that employees receive adequate and appropriate instruction and guidance concerning potential risks to health, precautions, hygiene requirements and the wearing and use of protective equipment and clothing (Section 13). Binding occupational exposure limit values for workplace air for carcinogens are indicated in the Annex to the Decree.

According to the Act on a Register of Employees Exposed to Carcinogenic Substances and Methods in Work (717/2001), the employer shall keep a list of carcinogens used or occurring in the workplace and of the employees who are exposed to such carcinogens in their work much more than are workers not specifically exposed to them. The information must be submitted to the central register (ASA register) on an annual basis for monitoring employees who are exposed to carcinogenic substances and methods in their work, for preventing illnesses and for carrying out research. Chemical carcinogenic agents referred to in the Act are indicated in an Annex to the Decision by the Ministry of Labour on Carcinogenic Substances (838/1993).

Government Decision on Lead Work (1154/1993) issued under the Occupational Safety and Health Act, is applied to metallic lead and its inorganic compounds. It requires the assessment of lead exposure in workplaces by means of biological exposure measurements, measuring the amount of lead in the air and actions by the employer to prevent exposure to lead. The employer must prepare occupational safety and health instructions in which it informs female workers about the health hazards of lead in case of possible pregnancy. The decision lays down binding limit values for workplace air and biological samples.

Government Decree on Agents Causing Risk to Reproductive Health in Work and the Prevention of Such Risk (603/2015), which was issued under the Occupational Safety and Health Act, lays down provisions on chemical, biological and physical agents causing risk to reproductive health in work. In addition, the Decree lays down provisions on the replacement of agents causing risk and the protection of pregnancy. Government Decree on protection of workers against hazards caused by exposure to biological agents (933/2017) issued under the Occupational Safety and Health Act, covers occupational exposure to harmful agents such as different kinds of micro-organisms, cell cultures and parasites.

In addition, Government Decision on Preventing a Major Accident Hazard Imposed on Workers (922/1999), Government Decree on Preventing Hazards Caused by Explosive Atmospheres to Workers (576/2003) and Government Decision on Vessels Containing Dangerous Substances and their Markings (421/1989) have been issued under the Occupational Safety and Health Act. Government Decree on the Safety and Health Requirements for Workplaces (577/2003) has been issued under the Occupational Safety and Health Act (738/2002) contains some requirements relevant regarding chemical safety such as specific requirements on dressing facilities, volume of and air-conditioning in the workplace and protection and rescue instructions for employees.

The Act on Young Employees (998/1993; https://www.finlex.fi/en/laki/kaannokset/1993/en19930998) is applied to work performed by persons aged under 18 years. Government Decree on Premises Especially Harmful and Dangerous to Young Employees (475/2006) and Decree of the Ministry of Social Affairs and Health on a List of Examples of Work Dangerous to Young Employees (188/2012) have been issued under the act.
The Occupational Health Care Act (1383/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20011383) lays down provisions on the duty of an employer to arrange occupational health care and on the content and organization of the occupational health care provided. Government Decree on the Principles of Good Occupational Health Care Practice, the Content of Occupational Health Care and the Qualifications of Professionals and Experts (708/2013; https://www.finlex.fi/en/laki/kaannokset/2001/en20011484) has been issued under the act. Occupational health care measures must concern work, the working environment, the work community and the employees. When determining the content of occupational health care, attention must be paid, among other things, to chemical exposure and to making initiatives and proposals to the employer on measures and courses of action for improving and developing the work, working environment and working methods in the workplace and for preventing health risks and harm.

In addition, Government Decree on Medical Examinations in Work that Presents a Special Risk of Illness (1485/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20011485) has been issued under the Occupational Health Care Act. Working conditions contain a special risk of illness where there is a physical, chemical or biological factor that is likely to lead to illness, undue exposure or a risk to reproductive health. An Annex to the decree contains a list of examples of chemical factors that cause a special risk of illness.

Government Decree (769/2015) issued under the Act on Occupational Accidents and Occupational Diseases (459/2015) lays down provisions on a list of occupational diseases that are set out in Section 26 of the act and that are considered to have a likely, medically confirmed causal relation to the physical, chemical and biological factors specified in the decree. Illnesses of this kind are compensated as professional diseases if the employee is shown to have been exposed to a factor stated in the Decree and specified in Section 26 to the extent that it may have been the primary cause of the illness and the illness cannot clearly be due to any other cause.

The Employment Contracts Act (55/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20010055) lays down provisions on the right of a pregnant employee to special maternity leave if the working duties or conditions of the pregnant employee endanger the health of the employee or the foetus and if the hazard cannot be eliminated from the work or working conditions or the employee transferred to other, suitable duties. Government Decree on the Implementation of the Sickness Insurance Act (1335/2004) contains a list of chemical substances present in the working duties or working conditions that are considered to endanger the health of the insured person or foetus.

The Employment Contracts Act (55/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20010055) lays down provisions on the right of a pregnant employee to special maternity leave if the working duties or conditions of the pregnant employee endanger the health of the employee or the foetus and if the hazard cannot be eliminated from the work or working conditions or the employee transferred to other, suitable duties. Government Decree on the Implementation of the Sickness Insurance Act (1335/2004) contains a list of chemical substances present in the working duties or working conditions that are considered to endanger the health of the insured person or foetus.

The Radiation Act (592/1991) and the Government Decree on radiation (1512/1991) lay down provisions on protection of workers exposed to ionizing radiation, such as workers in the nuclear industry and other industrial applications, medical staff and those working in places with indoor radon or in activities involving naturally occurring radioactive material against ionizing radiation. There are also legislation covering occupational exposure to non-ionizing radiation i.e Government Decree on protection of workers against hazards caused by exposure to optical radiation (146/2010), Government Decree on laser
equipment and their inspection (291/2008) and Government Decree on protection of workers against risks arising from electromagnetic fields (388/2016).

Majority of the provisions included in the legislation discussed above are based on the EU level legislation. In Finland (as well as in other EU member states) the Occupational Health and Safety (OSH) legislation is largely based on EU directives which must be transposed to the national legislation. Of the EU directives, the Framework directive (89/391/EEC) lays down general principles concerning the prevention and protection of workers against occupational accidents and diseases. On the basis of this Framework Directive a series of individual directives containing more specific provisions have been adopted.

Regarding the exposure to chemicals, the most important directives are:

- Framework Directive (89/391/EEC)
- Directive on chemical agents at work (98/24/EC)
- Directive on carcinogens and mutagens at work (2004/37/EC)
- Directive on asbestos at work (2009/148/EC)

In addition to those directives concerning specifically chemicals, there are several other directives which include provisions concerning chemicals aiming at e.g. protection of groups that may be especially vulnerable. These include e.g. directives on:

- Workplace requirements (89/654/EEC)
- Use of personal protective equipment (89/656/EEC)
- Safety and health signs (92/58/EEC)
- Use of work equipment (2009/104/EC)
- Risks from explosive atmospheres (1999/92/EC)
- Pregnant workers (92/85/EEC)
- Young workers (94/33/EC)

Regarding radiation, there is a Basic Safety Standards (BSS) directive (2013/59/EURATOM), which also covers protections of workers against radiation.

In addition to these OSH directives there is EU level regulation regarding protection of workers against chemical hazards also under the EU REACH regulation (the Regulation 1907/2006/EC on the Registration, Evaluation, Authorisation and Restriction of Chemicals). REACH regulation is binding legislation and directly applicable in all Member States. Restriction procedure can be used to introduce conditions for or prohibitions e.g. of use of a substance if the substance poses a significant risk to environment of health including the health of workers. The use of the most hazardous substances will be subjected to authorisation. National Chemicals Act 599/2013 (https://www.finlex.fi/en/laki/kaannokset/2013/en20130599) lays down provisions on the enforcement of the REACH regulation.
c) Please provide specific information on permissible exposure levels of workers to such risks, including URL links (or other documentation) on established levels, and information regarding procedures for the establishment of such levels.

Under the Occupational Safety and Health Act, the Ministry of Social Affairs and Health has issued the Decree on Concentrations Known to be Harmful (1214/2016), on the basis of which it has confirmed a list of concentrations of impurities in workplace air known to be harmful (HTP values) and a list of corresponding indicative limit values for biological exposure indicators for employees, measured from biological samples. There are currently altogether appr. 570 limit values under this decree. Approximately 140 of these values have been transposed from the EU directives setting indicative occupational exposure limit values ((91/322/EEC), (2000/39/EC), (2006/15/EC), (2009/161/EU), (2017/164/EU)). There is no English translation of this decree, but a Finnish decree and the Annex including the list of limit values can be found at https://www.finlex.fi/fi/laki/alkup/2016/20161214.

There is no written procedure for the establishment of the limit values for chemical substances. Shortly, criteria documents for the health-based values for the substances are prepared by experts from the Finnish Institute of Occupational Health. Final decision is done by a tripartite committee (government, workers, employers). Usually, health-based values proposed by the experts are adopted as such, but in certain cases socioeconomic issues have an impact on the values.

Binding occupational exposure limit values for workplace air for carcinogens are indicated in the Annex to the Government Decree on the Prevention of Work-Related Cancer Risks (716/2000; https://www.finlex.fi/en/laki/kaannokset/2000/en20000716). Currently there are values only for three substances: hardwood dust, benzene and vinyl chloride monomer. These binding values are based on the EU directive on carcinogens and mutagens at work (2004/37/EC). This directive is currently being updated and more binding occupational limit values will be added to the directive. In addition to the limit values issued under the directive on carcinogens and mutagens there are binding limit values for lead issued under Government Decision on Lead Work (1154/1993) and binding limit values for asbestos issued under Decree on the Safety of Asbestos Work (798/2015; https://www.finlex.fi/en/laki/kaannokset/2015/en20150798). These values are also based on the EU directives (2009/148/EC and 98/24/EC, respectively).

The Government Decree on radiation (1512/1991) sets dose limits for occupational exposure to ionizing radiation as well as reference levels for indoor radon concentrations in workplaces. The values are based on the EU basic Safety Standards (BSS) directive (2013/59/EURATOM). There are also limit values concerning exposure of workers to optical radiation issued in the Annex of the Government Decree on protection of workers against hazards arising from exposure to optical radiation (146/2010). These values are transposed from the EU directive on artificial optical radiation (2006/25/EC). The Annex of the Government Decree on protection of workers against risks arising from electromagnetic fields (388/2016) includes limit values on occupational exposure to electromagnetic fields. These values are based on the EU directive on electromagnetic fields (2013/35/EU).
2) Please indicate the main authorities tasked with overseeing the implementation of occupational health norms and a description on their mandate.

In Finland, the authority tasked with overseeing the implementation of occupational health norms is the office of an occupational safety and health inspectorate acting as a district authority under the Ministry of Social Affairs and Health. The occupational safety and health authority has five regional offices. The inspectors of an occupational safety and health authority have the powers to carry out enforcement and inspection activities.

The overseeing of occupational safety norms is regulated in the Act on Occupational Safety and Health Enforcement and Cooperation on Occupational Safety and Health at Workplaces (44/2006; https://www.finlex.fi/en/laki/kaannokset/2006/en20060044_20060701.pdf). Under Section 4 of this act the inspectors have access to workplaces, receive large number of documents concerning occupational safety and health, can have private conversations at workplaces and can take samples and do measurements there. They can also have information from certain other authorities. If an employer does not fulfil his obligations the inspector shall issue to the employer a written advice or under certain conditions also an improvement notice obliging the employer to eliminate or remedy the non-complying conditions.

3) Please provide the national laws establishing the right to information and the instruments establishing the specific rights of workers to information on issues relating to their occupational health and safety.

According to the Occupational Health and Safety Act (738/2002; https://www.finlex.fi/en/laki/kaannokset/2002/en20020738_20060053.pdf), Section 14, the employer shall give his employees necessary information on the hazards and risk factors of the workplace and ensure that the employees receive an adequate orientation to the work, working conditions at the workplace, working and production methods, work equipment used in the work, and the correct method of using it, as well as to safe working practices. He must also makes sure that the employees are given instruction and guidance in order to eliminate the hazards and risks of the work and to avoid any hazard or risk from the work jeopardising safety and health.

When it comes to hazardous substances, for example the Government Decree on Chemical Agents at Work (715/2001; https://www.finlex.fi/en/laki/kaannokset/2001/en20010715_20010715.pdf) Section 16 includes a similar, but more chemicals specific, obligation for the employer to give instruction and guidance for employees.

4) Please provide the national laws and regulations providing protection to whistle-blowers sharing information on their work activity and environment, particularly concerning disclosures on harms to the environment and public health.

According to the Occupational Health and Safety Act, Section 19, employees shall without delay inform the employer and the occupational safety and health representative of any such faults and defects they have discovered in the working conditions or working methods, machinery, other work equipment, personal protective equipment or other devices which may
cause hazards or risks to the employees’ safety or health. Employees shall, in accordance with their experience as well as the instruction and guidance provided by the employer and according to their occupational skills and opportunities, eliminate such faults and defects they have discovered which cause evident hazards. An employee must give the report referred to above also in the case that he or she has eliminated or remedied the fault or defect. The employer, on the other hand, shall inform the employee who gave the report and the occupational safety and health representative what measures have been taken or will be taken in the matter concerned.

According to the Occupational Health and Safety Act (738/2002), Section 23, if the work causes a serious risk to an employee’s own or other employees’ life or health, the employee has the right to leave off such work. The employer or his representative shall be informed of the employee leaving off the work as soon as possible. The right to leave off work continues to exist until the employer has eliminated the risk factors or in some other way ensured that the work can be done safely. Leaving off work shall not restrict working on a larger scale than what is necessary for safety and health. When leaving off work, it must be ensured that the danger that may be caused by this action is as low as possible. If an employee, in accordance with this section, leaves off work, he shall not be liable to compensate for the losses caused by this action.

The Act on Occupational Safety and Health Enforcement and Cooperation on Occupational Safety and Health at Workplaces (44/2006), Chapter 5, regulates cooperation on occupational safety and health at workplaces. The goal of the cooperation laid down in this Chapter is to improve the interaction between the employer and the employees, and to make it possible for the employees to participate in and influence the handling of matters concerning safety and health at the workplace. According to Section 26, the issues to be handled in cooperation between the employer and employees include, for example, the matters immediately affecting the safety and health of any employee and any changes in those matters, principles and manner of investigating risks and hazards at the workplace, as well as such factors generally affecting the safety and health of employees that have come up in connection with the investigation or a workplace survey carried out by an occupational health care organization and matters affecting the safety, health and working ability of employees and relating to the organization of work or workload, or to any essential changes in the organization or workload. At workplaces where at least ten employees work regularly, the employees shall from among themselves choose an occupational safety and health representative and two vice representatives to represent them in the cooperation referred to in this Chapter, and to keep contact with occupational safety and health authorities. In other workplaces, too, the employees can from among themselves choose the representatives mentioned above. The occupational safety and health representative represents the employees of the workplace when dealing with matters referred to in Section 26 in cooperation with the employer, and in relation to occupational safety and health representatives. The occupational health and safety representative has right to gain information such as documents and records the employer is obliged to keep in accordance with occupational safety and health provisions. The representative also has a right to become familiar with such documents in possession of the employer which concern safety and health at work and are connected with the state of the working environment and work community.
The Act on Occupational Safety and Health Enforcement and Cooperation on Occupational Safety and Health at Workplaces, Section 10, states that when occupational safety and health authorities have received a notice of a defect or shortcoming endangering safety and health at a workplace or any other suspected breach of provisions to be enforced by them, the informant’s identity and the fact that the enforcement action is taken due to a complaint shall be concealed. The informant’s identity may, however, be revealed if it is necessary for enforcement purposes and the informant has consented to it. “The whistle-blower” can also report his information anonymous for example about the harms to the environment, either to the regional Centre for Economic Development, Transport and the Environment or to the police.

5) Please provide information on the existing national laws ensuring workers can realize their right to justice and an effective remedy for occupational exposures to hazardous substances.

Workers Compensation Act (459/2015; unofficial translation available at http://www.tvk.fi/en/finnish-workers-compensation-center/), Section 3 states that the employer is obliged to insure his employees against occupational accidents and diseases. This act regulates, for example, what is considered to be an occupational accident or disease, what kind of expenses are paid, compensation for functional limitation, and the enforcement. Like previously explained in answer 4), there are a number of issues that must be handled in cooperation between the employer and employees. The occupational safety and health representative represents the employees in this process. The employee can also contact the occupational safety and health inspectorate that can make an inspection. If the occupational exposure to hazardous substances has happened due to a crime such as a work safety offence (The Criminal Code, 39/1889, Chapter 47, Section 1), the criminal procedure provides justice for the employee.

6) Please indicate if public officials periodically analyse the situation of occupational safety and health and how these assessments are publicized.

Annually, the occupational safety and health inspectorate reports to the Ministry of Social Affairs and Health the number of inspections they have made that were related to hazardous substances. Every four years a more in-debt analysis of the operation is made when a new general agreement is prepared for the district authorities. Operation is developed continuously and if problems are detected they are fixed.

The Workers Compensation Act, Section 236, states that the Finnish Workers’ Compensation Center is tasked with compiling the statistics on occupational accidents and diseases, conducting studies that contribute to the prevention of occupational accidents and diseases, and preparing reports on the relationships between preventative measures and their effects and reports on the link between insurance premiums and the accident and occupational disease risk caused by work. The Finnish Workers’ Compensation Center can also conduct other studies and calculations required for the enforcement, supervision and development of this Act.

7) Please indicate if your Government considers revising its existing norms for occupational health and safety and the reasons for this possible revision.
The Decree of the Ministry of Social Affairs and Health on Concentrations Known to be Harmful (1214/2016) will be revised during 2018. Updating is needed in order to transpose the Commission Directive establishing the 4th list of indicative occupational exposure limit values (2017/164/EU; http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2017.027.01.0115.01.ENG). The directive need to be transposed to the national legislation before 21.8.2018.
