

## REPORT

for the period 1 June 2010 to 31 May 2015, made by the **Government of Finland**, in accordance with article 22 of the Constitution of the International Labour Organisation, on the measures taken to give effect to the provisions of the

### **Safety and Health in Mines Convention, 1995, No. 176** ratification of which was registered on 9 June 1997.

#### **Direct Request, 2010**

The government proposal for mining act (HE 273/2009) was accepted with certain amendments and the Mining Act (621/2011) entered into force 1.7.2011. With this new law, the mining authority activities were transferred from the Ministry of Employment and the Economy to the Finnish Safety and Chemicals Agency Tukes, which already was the authority responsible for mining safety.

As a new element, a mining safety permit granted by Tukes was included in the Mining Act. By virtue of the Mining Act, a Government Decree on Mining Safety (1571/2011) was issued, and Tukes has published a guide on mining safety regulations, which gives the mining operators, experts on mining safety and those working in a mine information about the Mining Act and the regulations in the decrees issued under it, and about the amendments to old legislation.

See also chapter I

#### **I Legislation and regulations**

- Mining Act (621/2011), entry into force 1.7.2011 (unofficial translation available at Finlex)
- <http://www.finlex.fi/en/laki/kaannokset/2011/en20110621>
- Government Decree on Mining Activities (391/2012), entry into force 1.7.2012 (unofficial translation available at Finlex) <http://finlex.fi/en/laki/kaannokset/2012/en20120391>
- Government Decree on Mining Safety (1571/2011), entry into force on 1.1.2012
- The Ministry of Employment and the Economy Decree on the hoisting installations in mines (1455/2011), entry into force on 1.1.2012

According to the Mining Act, the mining operator is responsible for mining safety. The operator shall pay particular attention to the structural and technical safety of the mine and to prevention of dangerous situations and accidents in the mine, alongside limitation of detrimental consequences caused by them. New safety-related provisions issued in the Mining Act are for example expanding the general plan to a mining safety permit granted by Tukes, a person in charge of mining safety, a written risk assessment report, a internal rescue plan for a mine and instructions concerning accident prevention. Also old mines that are already operating must adapt their operations to be in compliance with the new regulations. The deadline for implementation of the new regulations was 1.7.2013.

The Government Decree on Mining Activities replaces the Decree on Mining (663/1965) and it specifies in particular the requirements of the permit applications pursuant to the Mining Act.

The Government Decree on Mining Safety contains provisions on the mine planning and construction, internal rescue plan and personnel training, mine map, mining safety permit and mining safety supervision.

The Ministry of Employment and the Economy Decree on the hoisting installations in mines replaces the Decision of the Ministry of Trade and Industry (372/1969) on the hoisting installations in mines. The Decree contains provisions on the structural requirements of the hoisting installations and on the requirements related to their installation, use, maintenance and inspection.

The Mining Act (621/2011) repealed the earlier Mining Act (503/1965). The Mining act does not contain actual provisions obliging the occupational safety and health authorities. According to the Mining Act, Section 154, the authority responsible for mining safety is mining authority, i.e. the Finnish Safety and Chemicals Agency (Tukes). The mining authority must monitor mines to ensure that the mining operator complies with the provisions of the Mining Act and the mining safety permit. The mining authority shall conduct periodic supervisory inspections of mines to the extent required by their activity. The occupational safety and health authority has a possibility to participate in an inspection performed by the mining authority.

The Government Decree on the safety of blasting and excavation work (644/2011) replaced the Government Decree on the guidelines for blasting and excavation work (410/1986). (Link to the Decree (in Finnish): <http://www.finlex.fi/fi/laki/alkup/2011/20110644>). When compared to the repealed decision, the scope of application was extended so that it also covers the blasting and excavation work related to mines. The decree contains the central obligations from the existing guidelines and from the mining safety provisions related to occupational safety. The occupational safety and health authorities monitor compliance with the Decree. The provisions related to mining safety are laid down in the Mining Act and in the Government Decree on Mining Safety (1571/2011).

According to Section 1, the Decree is applied to detonation and excavation work. The Decree obliges those, who are bound by the provisions of the Occupational Safety Act. According to the definition in Section 2, detonation work is work done at the usage area and contains handling, use and storage of explosives, and excavation work is separation of rock or minerals and work related to that. According to Section 3, based on the risk assessment, the employer must draw up a written safety plan for every work position and work stage, and, according to Section 4, the plan must be discussed with the workers and be available for the workers. According to Section 5, a written detonation plan must be made for each detonation target, and it must contain information on the drilling, explosive and its amount, charging, initiation and initiation sequence, covering, detonation time, danger zone and safety measures, as well as other factors related to detonation safety. The workers must have a visual or hearing communication with each other at short intervals, and the leader of the detonation work must visit the target site at least once a work shift, more often if needed (Section 6). The provisions concerning persons performing detonation work and the maximum amounts of allowed explosives are laid down in Section 7, according to qualification certificate categories. According to Section 8, leader of the detonation supervises the detonation work. Before the entry into force of this Decree, no leader of the detonation was required in mining work. The leader of the detonation work controls and supervises the detonation work at a workplace, and approves of the detonation plan and sees to its implementation. Detonation work is dangerous and requires special expertise. To ensure the safety, Sections 9 and 10 contain provisions on performing detonation work as to for example explosives, initiation tools and equipment, and on properly taking the conditions into account. The storage and record keeping of explosives at a workplace are regulated in Sections 11 and 12.

In order to perform detonation work as safely as possible, Chapter 5 contains regulations on carrying out detonation work. The regulations apply to drilling, charging, covering the area to be blasted, the actual detonation, procedures after the detonation and scaling and support of the detonation target if needed.

The additional requirements concerning underground excavations are laid down in Chapter 6. According to Section 19, the lighting of the workplace must be sufficient, and according to Section 20, inflammable substances are allowed in underground spaces only if there is an immediate need. According to Section 21, ventilation must be organised in such a way, that the oxygen level of the air is at least 18 percent by volume. When organising the ventilation, in addition to exhaust and explosion gases, also the possible dusts and dangerous substances that are caused by the quality of rock, and the fire hazard. The oxygen level and cleanness of the air must be followed, and, as provided in Section 22, the formation of an explosive air mixture must be prevented.

Provisions on organising rescue are laid down in section 23. It states that there must be a communication and warning system between the supervisor of the work and the worker, which enables confirming the location of the worker. In long-term excavation work, an emergency exit must be organised in accordance to the safety plan. The meaning of this is to prevent that a fire, cave-in or some other accident would not cause a person to be trapped. If significant physical effort is needed for moving, another passage with a transport device must be organised. Proper, fireproof shelters must be organised for long-term excavation sites. A shelter or other underground space must have enough proper compressed-air tanks and people who know how to use them. People who work in an underground space must carry a personal safety device, which, in case of an emergency, enables the access to a fireproof shelter or above ground, unless otherwise provided in the safety plan. Rescuing and the use of rescue equipment must be regularly practised to the extent that is necessary. Clear, up-to-date drawings of work sites, passages, exit routes, shelters and other spaces that have an effect to work safety must be available at the workplace. There is a number of regulations in the Chapter 7 of the Decree. Provisions on personnel facilities are laid down in Section 28. The regulations concern the fixtures in the facilities and the storage and washing areas. According to Section 30, the employer must notify the occupational safety and health authority of any such fire, explosion or other accident that has caused severe danger to workers or other persons in the area affected by the work.

## II

### *Article 5, paragraph 4(e)*

The provisions on the personnel facilities in the Government Decree on the safety of blasting and excavation work, Section 28, fulfil the requirement in Article 5, paragraph 4(e).

### *Article 7, (d), (f), (h) and (i)*

The additional requirements in Chapter 6 concerning underground excavations in The Government Decree on the safety of blasting and excavation work for their part meet the requirements of Article 7, paragraphs (d), (f), (h) and (i). Provisions on the structural safety of a mine are especially contained in the Decree on Mining Safety.

### *Article 10, (b) and (e)*

The provision concerning the leader of the detonation work in Section 8 of the Government Decree on the safety of blasting and excavation work is a new regulation in mining. This meets the requirement in Article 10, paragraph (b). Section 30 of the said Decree contains a provision on reporting severe danger that meets the requirement in Article 10, paragraph (e).

### **III-V**

Nothing new to report.

### **VI**

A copy of this report has been sent to the following labour market organisations

1. The Confederation of Finnish Industries (EK)
2. The Central Organization of Finnish Trade Unions (SAK)
3. The Finnish Confederation of Professionals (STTK)
4. The Confederation of Unions for Professional and Managerial Staff in Finland (AKAVA)
5. The Commission for Local Authority Employers (KT)
6. The State Employer's Office (VTML)
7. The Federation of Finnish enterprises