
GOVERNMENT NOTICE

DEPARTMENT OF MINERALS AND ENERGY

No. 911

8 September 2006

MINE HEALTH AND SAFETY ACT, 1996 (ACT No. 29 OF 1996)

REGULATIONS RELATING TO MACHINERY AND EQUIPMENT

I BJ Sonjica, Minister of Minerals and Energy, in terms of section 98 read of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), after consultation with the Council, hereby make the regulations set out in the Schedule.

BJ Sonjica

Minister of Minerals and Energy

SCHEDULE

CHAPTER 8

MACHINERY AND EQUIPMENT

Fans

Definitions

For purposes of regulation 8.6, unless the context otherwise indicates –

“**booster fan**” means a fan installed underground in the main air stream or in a split of the main air stream to assist the main fan to increase airflow and/or overcome resistance through a section of a mine.

“**main fan**” means a fan that controls the entire air flow of a mine, or the airflow of one or more of the major air circuits.

8.6(1) The employer must take reasonable measures to ensure that combustible materials, explosives or natural vegetation are not located so near to fan installations and its switch-gear used for underground ventilation, that if such combustible materials, explosives or natural vegetation catch fire, there is a significant risk to the supply of clean air to any underground working place as a result of-

- (a) the fan installation or its switch-gear being damaged; or
 - (b) smoke or fumes being drawn into any working place.
- 8.6(2) The employer must ensure, where a significant risk of an explosion of flammable gas or coal dust exists, that measures are in place to ensure that there is always a supply of clean air to all underground working places. Such measures must include:
- (a) installing the main fan on surface;
 - (b) providing an effective means of protecting the main fan against damage caused by explosion;
 - (c) ensuring the main fan is readily accessible to effect emergency repairs; and
 - (d) having a back up system in place to provide clean air should the main fan become inoperative.
- 8.6(3) The employer must ensure, as far as reasonably practicable, that every main fan is provided with:
- (a) an automatic means of alerting a responsible person should it stop or cease to operate;
 - (b) an effective means of giving early warning of defective operation;
 - (c) a power supply from two different sources or networks, which can include an emergency supply alternator / generator, for power supply in the event of an interruption to the normal power supply; and
 - (d) an effective means for safe entrance to and exit (escape) from the main fan housing.
- 8.6(4) The employer must take reasonable measures to ensure that a competent person examines every main and booster fan for effective operation, internally and externally, together with all appurtenant components that are necessary for the operation of the fan, at intervals not exceeding three months, or any other lesser interval determined by the mine's hazard identification and risk assessment in terms of section 11.
- 8.6(5) The employer must keep records of all examinations conducted in terms of regulation 8.6(4), including remedial measures taken, for a period of at least the most recent ten years of the fan installation.
- 8.6(6) The employer must take reasonable measures to ensure that all main and booster fans are installed, operated and maintained in accordance with a written procedure prepared and implemented for that purpose.

Refrigeration and Air-Conditioning Installations

- 8.7(1) The employer must take reasonable measures to ensure that all refrigeration or air-conditioning installations at the mine comply with the requirements of the South African Bureau of Standards Code of Practice – SANS 10147, "Refrigerating systems including plants associated with air-condition systems" (2002: 4th ed) with respect to its safety, construction, erection, operation, inspection and testing.

8.7(2) The employer must take reasonable measures to ensure that a competent person examines and operationally tests the entire refrigeration system as contemplated in SANS 10147, excluding pressure relief devices, at least once every 3 (three) months.

8.7(3) Regulation 8.7(1) and 8.7(2) do not apply to any;

- (a) household refrigerator;
- (b) water cooler or similar equipment that contains less than 1 kg of refrigerant;
- (c) unit type display counter or any commercial refrigerator that contains less than 15 kg of a group 1 refrigerant; and
- (d) refrigeration plant that requires a prime mover of less than 10 kW or less.

8.7(4) Despite Regulation 8.7(3) the clauses in SANS 10147 that refer to the Montreal Protocol apply to all air-conditioning and refrigeration equipment.

8.7(5) The normative references in the above standard of SANS 10147 are not applicable to the employer.

Repeal

8.7(6) The following regulations made under the Minerals Act, 1991(Act No. 50 of 1991) in force in terms of Schedule 4 of the Act are hereby repealed-

Chapter 10	Chapter 23
10.13	23.15.1
10.13.1	23.15.2
10.13.2	23.15.3
10.13.3	23.15.4
10.13.4	23.15.5
10.14	23.15.6
10.14.1	23.15.7
10.14.2	23.15.8
10.14.3	23.15.9
	23.15.11
	23.15.12
	23.15.13
	23.15.14
	23.15.15
	23.15.16

SCHEDULE**CHAPTER 22****22.8 Machinery and Equipment**

- 22.8.6(4) For purposes of regulation 8.6(4) the competent person means a person who is a certificated electrical or mechanical engineer or has an appropriate qualification registered on the National Qualifications Framework and recognised by the Mining Qualifications Authority for this purpose.
- 22.8.7(2) The competent person referred to in regulation 8.7(2) means a person who-
- (i) is a certificated electrical or mechanical engineer or has an appropriate qualification registered on the National Qualifications Framework and which is recognized by the MQA for this purpose;
 - (ii) is familiar with the type of refrigeration and air conditioning plants used at the mine in so far it concerns aspects of safety, construction, erection, operation, inspection and testing of such plants, and
 - (iii) is familiar with any relevant national or international Standards, Codes of Practice and specifications related to the type of refrigeration, and air conditioning plants used at the mine.
-