

# INFORMATION



## LESOTHO Government Gazette EXTRAORDINARY

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## LEGAL NOTICE NO. 74 OF 2003

**LESOTHO TELECOMMUNICATIONS AUTHORITY  
(LICENSING FEES) RULES 2003**

Pursuant to section 16 of the Lesotho Telecommunications Authority Act 2000<sup>1</sup>, the Authority makes the following Rules -

**Citation and commencement**

1. These Rules may be cited as the Lesotho Telecommunications Authority (Licensing Fees) Rules 2003 and shall come into operation on the date of publication in the Gazette.

**Payment of licensing fees**

2. (1) The licensing fees are as set out in the Schedule.

(2) The fees are payable annually with an exception of-

- (a) the application fee; and
- (b) the initial licence fee.

(3) The fees shall be payable-

- (a) on such date as the Authority may indicate; or
- (b) in accordance with a payment schedule as may be agreed by the Authority and a licensee.

**Penalties**

3. Failure to pay the fees as required by Rules shall attract the penalties as shown in the Schedule.

**Repeal**

4. The Rules repeal Legal Notice NO. 167 of 2001 and Government Notice NO. 57 of 2001.

**DATED: 13-05-2003**

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**LISA LEIDIG  
CHIEF EXECUTIVE OFFICER**

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<sup>1</sup> Act No. 5 of 2000

## SCHEDULE

## LICENSING FEES

Amended 2003

Type of Service	Fee (Maloti)
<b>1.0 AMATEUR RADIO</b>	
(a) Application Fee for all classes of licences under this category-	250
(b) Beacon	60
(c) Change of call sign on request	50
(d) Temporary permit	30 up to six months
(e) Listener	24
(f) Repeater station <b>including radio link</b>	60
(h) Digipeater/Bulletin Board	80
(j) Experimental station for weather satellite reception and transmission	60
(j) Amateur operator's licence	60
<b>2.0 AERONAUTICAL SERVICES</b>	
(a) Application fee for all licences in this category	500
(b) Aeronautical Station	
(i) MF, HF, UHF, VHF	120 per station
(ii) VOR, VHF Beacon, SSR, PAR, MLS, ILS, NDB	200 per station
(iii) Other	160 per station
(c) Aircraft station	750
(d) Ground station	600
(e) Relay station	350 per station
(f) Radio link	300
<b>3.0 LAND MOBILE SERVICE (non-cellular service)</b>	
<b>3.1 Alarm station</b>	
(a) Application fee	500 per station
(b) Annual Usage fee	48 per station

Type of Service	Fee (Maluti)
<b>3.2 Radio Base station</b>	
(a) Application Fee for all licences in this category-	500 per station
(b) Civil Security services	
(i) Station without private frequency	72
(ii) Station with private frequency /ies	108
(c) 27/29 MHz frequency band: Citizen band	
(i) Station with one frequency channel	72
(ii) Station with more than one frequency channel	120
(d) Other:	
(i) Station with one single frequency channel	120
(ii) Station with more than one single frequency channel	144
(iii) Station with one or more double frequency channels	144
(iv) High frequency band: (HF; Short wave)	
- First base station	120
- Each additional base station	144
-Civil Security station	120
<b>3.3 Experimental station</b>	
(a) Application fee	500 per station
(b) Annual Usage fee	156 per station
<b>3.4 Mobile Two-Way Radio Stations</b>	
(a) Application fee for all licences in this category	500
(b) Civil Security Services	
(i) Station without private frequency	60
(ii) Station with private frequency /ies	96
(c) 26/27MHz:	
(i) Frequency band with apparatus not exceeding 100mW	48
(ii) Station in the ultra high frequency band for on-site communication and apparatus that does not exceed 2 watts	48
(d) 27/29 MHz: Citizen band	
(i) Station with one frequency channel	72
(ii) Station with more than one frequency channel	120



(e) Other:	
(i) Station with one single frequency channel	120
(ii) Station with more than one single frequency channel	144
(iii) Station with more than one double frequency channels	144
(iv) High frequency band	
Per station	144
Civil Security station	120
<b>3.5 Relay station:</b>	
(a) Application fee	500
(b) Station with one single frequency channel	350 per station
(c) Station with more than one single frequency channel	420 per station

Type of Service	Fee (Maloti)
<b>3.6 Repeater</b>	
(a) Application fee	500
(b) Ordinary	72 per station
(c) Communal	
(i) Annual Usage fee	120 per repeater
(ii) Annual Royalty fee (for commercial)	1.5% of gross turnover
(iii) Annual Licence fee	250
<b>3.7 Special radio service:</b>	
(a) Application fee	100
(b) Permit	250 per permit
<b>3.8 Telemetry station</b>	
(a) Application fee	250
(b) Annual Licence fee	36 per station
<b>3.9 Licence fees for Disciplined Forces (Frequency Bands).</b>	
(a) Application fee	250
(b) Annual Licence fee	60 per station
(c) Annual Spectrum fee	750 per MHz

<b>3.10 Radio link:</b>	
(a) Application fee for all licences in this category	500 per station
(b) Single frequency link below 1 000MHz (per control and/or interconnect point)	
(i) Annual Licence fee	100 per station
(ii) Annual Spectrum fee	1000 per MHz or $k_1 * k_2 * k_3 * 1500$
(c) Double frequency link below 1 000MHz	
(i) Annual Licence fee	150 per station
(ii) Annual Spectrum fee	1000 per MHz or $k_1 * k_2 * k_3 * 1500$
(d) Single frequency link above 1 000MHz	
(i) Annual Licence fee	200 per station
(ii) Annual Spectrum fee	1000 per MHz or $k_1 * k_2 * k_3 * 1500$
(e) Double frequency Link above 1000MHz	
(i) Annual Licence fee	250 per station
(ii) Annual Spectrum fee	1000 per MHz or $k_1 * k_2 * k_3 * 1500$
<b>4.0 RADIO COMMUNICATION SYSTEMS</b>	
<b>4.1 Alarm:</b>	
(a) Application fee for all categories in this class	500
(b) Alarm base	
(i) Annual Usage fee	120 per base
(ii) Annual Licence fee	250
(c) Alarm Remote	120 per alarm station

Type of Service	Fee (Maloti)
<b>4.2 Paging Network</b>	
(a) Public	
(i) Application fee	500
(ii) Annual Usage fee	1,000
(iii) Annual Royalty fee	1.5% of gross turnover
(iv) Annual Licence fee	4,000
(b) Private	
(i) Application fee	250
(ii) Annual Usage fee	1,000

<b>4.3 Radio Trunking</b>	
(a) Application fee	500
(b) Annual Usage fee	1,920
(c) Annual Royalty fee	1.5% of gross turnover
(d) Annual Licence fee	Per Evaluation
(e) Annual Spectrum fee	1000 per MHz
<b>4.4 Cellular radio-communication service</b>	
(a) Application Fee	30,000
(b) Annual Licence Fee	3.5% of gross turnover
(c) Annual Spectrum fee	5000 per MHz
(d) Initial fee: payable on the date of issue of the licence	Per evaluation
<b>4.5 Data Communications Services (Access Provision)</b>	
(a) Application Fee	10,000
(b) Annual Licence Fee	3.5% of gross turnover
(c) Annual Spectrum fee	5000 per MHz
(d) Initial fee: payable on the date of issue of the licence	Per Evaluation

Type of Service	Fee (Maloti)
<b>4.6 Video conferencing system</b>	
(a) Application fee	300
(b) Annual Usage fee	15,000 pro-rata
(c) Annual Licence fee (if service offered for business)	800
<b>4.7 Microwave Multipoint Distribution Systems (MMDS)- (High Capacity)</b>	
<i>Non-Commercial</i>	
(a) Application fee	5,000
(b) Annual Licence fee	Per Evaluation
(c) Annual Spectrum fee	5000 per MHz or k1*k2*k3*1500



<b>Commercial</b>	
(a) Application fee	10,000
(b) Annual Licence fee	3.5 % of gross turnover
(c) Annual Spectrum fee	5000 per MHz
<b>4.8 Wide Area Network (for private use)</b>	
(a) Annual Application fee	350
(b) Annual Usage fee	3,000
(c) Annual Licence fee	Per Evaluation
(d) Annual Spectrum fee	1000 per MHz
<b>4.9 Wireless Local Loop (WLL) (includes DECT licence)</b>	
<b>Non-commercial</b>	
(a) Application fee	5,000
(b) Annual Licence fee	Per Evaluation
(c) Annual Spectrum fee	M5000 per MHz or k1*k2*k3*1500
<b>Commercial</b>	
(a) Application fee	10,000
(b) Annual Licence fee	3.5% of gross turnover
(c) Annual Spectrum fee	M5000 per MHz
<b>4.10 Multiple Access Rural Radio System (MARRS)</b>	
<b>Non-commercial</b>	
(a) Application fee	5,000
(b) Annual Licence fee	Per Evaluation
(c) Annual Spectrum fee	5000 per MHz or k1*k2*k3*1500
<b>Commercial</b>	
(a) Application fee	10,000
(b) Annual Licence fee	3.5% of gross turnover
(c) Annual Spectrum fee	M5000 per MHz
<b>4.11 Mobile Data Telecommunication Service</b>	
(a) Application fee	15,000
(b) Annual Licence fee	3.5% of gross turnover
(e) Annual Spectrum fee	5000 per MHz
(f) Initial fee: payable on the date of issue of the licence	Per evaluation



Type of Service	Fee (Maloti)
<b>4.12 PSTN: FIXED TELECOMMUNICATIONS NETWORK</b>	
(a) Application fee	50,000
(b) Annual Licence fee	3.5% of gross turnover
(c) Annual Spectrum fee	1000 per MHz
(d) Initial fee: payable on the date of issue of Licence	Per evaluation
<b>5.0 SATELLITE SERVICES</b>	
(a) INTELSAT C-Band and Ka-Band	
(i) Application fee	1,000
(ii) Annual Usage fee	15,000
(iii) Annual Licence fee	Per evaluation
(iv) Annual Royalty fee	1.5% of gross turnover
(v) Annual Spectrum fee	M1000 per MHz
(b) Domestic Satellite Receiver	100
(c) GMPCS	
(i) Application fee	1,000
(ii) Annual Usage fee	650 per terminal
(iii) Annual Licence fee	Per Evaluation
(iv) Annual Royalty fee	1.5% of gross turnover
(v) Annual Spectrum fee	3000 per MHz
(d) GMPCS Trial	
(i) Application fee	200
(ii) Usage fee	25 per hand held set
(iii) Trial Permit	500
(iv) Spectrum fee per 12 months	770 per MHz (pro rata)
(e) Inmarsat	
(i) Application fee	300
(ii) Annual Usage fee	
(1) A terminal	650
(2) B terminal	650
(3) C terminal	250
(4) M terminal	650
(iii) Annual Licence fee	Per evaluation
(iv) Annual Royalty fee	1.5% of gross turnover
(f) Mobile tracking terminal	
(i) Application fee	300

(ii) Annual Usage fee	200
(iii) Annual Licence fee	Per evaluation
(iv) Annual Spectrum fee	M1000 per MHz or $k_1 * k_2 * k_3 * 1500$
(g) V-SAT (Rx only)	
(i) Application fee	
(ii) Annual License fee	1,000
(iii) Annual Usage fee	8,000
Up to Ten Terminals	2,500 per terminal
Above Ten Terminals	2,000 per terminal
(iv) Annual Royalty fee	1.5% of gross turnover
(v) Annual Spectrum fee	M1000 per MHz or $k_1 * k_2 * k_3 * 1500$

Type of Service	Fee (Maloti)
(h) V-SAT (Rx and Tx)	
(i) Application fee	
(ii) Annual License fee	1,000
(iii) Annual Usage fee	18,000
Up to Ten Terminals	
Above Ten Terminals	3,000 per terminal
(iv) Annual Royalty fee	2,750 per terminal
(v) Annual Spectrum fee	1.5% of gross turnover
	M1000 per MHz
<b>5.1 Up link broadcasting signal distribution fixed satellite earth station</b>	
(a) Application fee	
(b) Annual Licence fee	1000
(c) Annual Spectrum fee	3.5 % of gross turnover
(d) Initial fee: payable on date of issue of Licence	1000 per MHz
	Per evaluation
<b>5.2 Satellite news gathering station</b>	
(a) Application fee	
(b) Annual Licence fee	1000
(c) Annual Spectrum fee:	3.5% of gross turnover
(i) Mobile	
(ii) Fixed	5000 per MHz
(d) Initial fee: payable on date of issue of Licence	1000 per MHz
	Per evaluation
<b>6.0 SUPPLY OF CUSTOMER PREMISES EQUIPMENT</b>	
(a) Supply and reticulation of PABX Systems (more	

than one external line)	
(i) Application fee	250
(ii) Annual Licence fee	8000
(b) Supply of <b>mobile radio two-way</b> terminal equipment	
(i) Application fee	250
(ii) Annual Licence fee	2,500
(c) Supply of all types of terminal equipment (telephone and computer) and accessories (excluding PABX systems)	Delisted
<b>7.0 TELE BUREAU SERVICES</b>	
(a) Urban	
(i) Application fee	100
(ii) Annual Licence fee	250
(b) Rural	
(i) Application fee	100
(ii) Annual Licence fee	185

Type of Service	Fee (Maloti)
<b>8.0 BROADCASTING SERVICES</b>	
(a) TV Broadcasting ( <i>Non-commercial</i> )	
(i) Application fee	300
(ii) Annual Usage fee	800 per station
(iii) Annual Licence fee	2000
(iv) Annual Spectrum fee	1000 per MHz or $k1 \cdot k2 \cdot k3 \cdot 1500$
(v) Initial fee: Payable on the date of issue of Licence	20,000
(b) Sound Broadcasting ( <i>Non-commercial</i> )	
(i) Application fee	300
(ii) Annual Usage fee	500 per station
(iii) Annual Licence fee	1000
(iv) Annual Spectrum fee	1000 per MHz or $k1 \cdot k2 \cdot k3 \cdot 1500$
(v) Initial fee: payable on date of issue of Licence	10,000
(c) Video Distribution ( <i>Commercial</i> )	
(i) Application fee	300



(ii) Annual Usage fee	1000
(iii) Annual Licence fee	2500
(iv) Annual Spectrum fee	1000 per MHz or $k1 \cdot k2 \cdot k3 \cdot 1500$
(v) Initial fee: payable on date of issue of Licence	Per evaluation
(d) TV Broadcasting ( <i>Commercial</i> )	
(i) Application fee	300
(ii) Annual Usage fee	3,000 per station
(iii) Annual Royalty fee	1.5% of gross turnover
(iv) Annual Licence fee	20,000
(v) Annual Spectrum fee	1000 per MHz or $k1 \cdot k2 \cdot k3 \cdot 1500$
(vi) Initial fee: payable on date of issue of Licence	Per evaluation
(e) Sound Broadcasting ( <i>Commercial</i> )	
(i) Application fee	300
(ii) Annual Usage fee	2,900 per station
(iii) Annual Royalty fee	1.5% of gross turnover
(iv) Annual Licence fee	10,000
(v) Annual Spectrum fee	1000 per MHz or $k1 \cdot k2 \cdot k3 \cdot 1500$
(vi) Initial fee: payable on date of issue of Licence	Per evaluation
(f) TV Broadcasting Distributor	
(i) Application fee	100
(ii) Annual Royalty fee	1.5% of gross turnover
(iii) Annual Licence fee	3,000

Type of Service	Fee (Maloti)
<b>9.0 POSSESSION OF TRANSMITTING AND RECEIVING EQUIPMENT</b>	
(a) Application fee	200
(b) Transmitting equipment	40
(c) Dealers of radio and TV receivers	De-listed
(d) Receiving equipment	
(i) Radio receiver	De-listed
(ii) TV receiver	De-listed
<b>10.0 INTERNET SERVICE PROVISION</b>	

(a) Application fee	4,000
(b) Annual Licence fee	8,000
<b>11.0 ELETRONIC MESSAGING SERVICES (e.g. voice and text mail over cellular)</b>	
(a) Application fee	500
(b) Annual Licence fee	2,000
<b>12.0 CALLING CARD SERVICE</b>	
(a) Application fee	4,000
(b) Annual Licence fee	8,000
<b>13.0 TYPE – APPROVAL</b>	
(a) Approval fee (applicable to all types of equipment)	Per Evaluation
<b>14.0 PRIVATE COMMUNICATIONS NETWORK</b>	
(a) Application fee	300
(b) Usage fee	2,000 per transceiver
(c) Annual Licence fee	10,000
(d) Annual Spectrum fee (if wireless)	1000 per MHz
<b>15.0 PENALTIES (for failure to pay outstanding amount on time)</b>	
<i>(a) Network Operators</i>	
(i) 1 day – 30 days after due date	10% of outstanding amount
(ii) 1 month – 3 months after due date	25% of outstanding amount
(iii) 3 months – 6 months after due date	50% of outstanding amount
(iv) 6 months – 12 months after due date	75% of outstanding amount
(v) Above 12 months	Revoke Licence
<i>(b) Resale services and frequency allocation</i>	
(i) 1 month – 3 months after due date	50% of outstanding amount
(ii) 3 months – 6 months after due date	100% of outstanding amount
(iii) Above 6 months after due date	Revoke Licence
<b>16.0 MISCELLANEOUS</b>	
(a) Computer print-out per licence/certificate	3 per page
(b) Duplicate per licence/certificate	3 per page
(c) New licence where the name and/or title of the licence changes	100

(d) Change of Location of licensee without the change of name	50
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**Explanatory Note to  
Lesotho Telecommunications Authority Licensing Fees**

**Introduction**

One of the main statutory duties of the Authority as stipulated in Part III, Section 15 (2)(b) of the LTA Act, 2000 is to, "take all reasonable steps to ensure the efficient and effective use of the radio frequency spectrum". Implicit in this general objective is the need to ensure efficient utilization of the overall frequency resources through an active and forward looking frequency administration that seeks to forestall frequency scarcity problems and therefore become proactive by solving these problems before they can adversely affect the delivery of telecommunications services.

In order to achieve this objective, the Authority employs, as one of its regulatory instruments, a spectrum pricing regime that is intended to reflect scarcity values of relevant services. Moreover, this pricing regime should enable the Authority to cover costs that are directly associated with discharging its statutory mandate. Pursuant to these factors, the Authority has come up with a fee structure comprising:

- (i) Application fee
- (ii) Type approval fee
- (iii) Annual Licence fee
- (iv) Initial fee
- (v) Annual Spectrum fee
- (vi) Annual Usage fee
- (vii) Annual Royalty fee

The fees, discussed below, shall be adjusted annually in line with the annual inflation.

**Application fee**

This is a once-off fee that is intended to cover costs related to assessing and processing an application for any service offered by the LTA. The fee will therefore differ for various services depending on the effort and costs incurred in assessing an application and the presumed economic value of that service.



Apart from facilitating an assessment of the application, this fee may also be used as a regulatory instrument. That is, the fee may be set in such a way that it discriminates on the basis of applicant's ability to effectively provide the service applied for. Apart from ascertaining that only serious people apply, and therefore saving time, this strategy also guards against the industry destabilising effect that can be brought about by willing but unable operators or service providers.

#### **Type-approval fee**

A once-off fee for testing the technology to ascertain conformity with standards and instructions prescribed by the Authority. The fees in this category will also be largely effort based while also striving for uniformity with those charged by similar bodies in the region.

#### **Annual Licence fee**

This is an annual fee that shall be charged for the continued provision of licensed services. The licence fee is intended to reflect the actual economic value (and therefore the potential business benefit) of a licence. The fee shall therefore be charged on an annual basis to existing operators and service providers. For services such as fixed network provision, where it may not be feasible to outrightly determine the economic benefit that the licensee derives out of the licence, the fee shall be derived on a per case basis following from the analysis of, *inter alia*, the licensee's business plans.

#### **Initial Licence fee**

This is a once-off fee that shall apply mainly to major network operators such as the fixed network operator and the mobile network operator. This fee is intended to reflect the operator's willingness to pay for the long-term right to do business within the sector. The intention is to use the fee, as a regulatory instrument to determine whom, among all applicants, shall be issued a licence. As such, the fee may be determined through an auction of the licence or any other process by which the licence value can be

- (a) Determined by Authority or
- (b) Openly contested for.

As a result, the right to do business shall be awarded to the operator who, *inter alia*, places the highest value to such a right.

### Annual Spectrum fee

While all other fees are largely aimed at ensuring self-sustainability of the Authority, this fee is the major policy instrument at the disposal of the Authority to achieve efficient use of the spectrum. Given the scarcity of spectrum resources, it is to be expected that the price charged should be sensitive to the amount of spectrum the user has sterilized on allocation. That is, the principle is to levy a spectrum fee for exclusive allocation of the spectrum.

The Annual Spectrum fee shall be charged per MHz and or, shall be determined according to the formula ( $k_1 \times k_2 \times k_3 \times 1500$ ), whichever is the lower of the two.

$$S\text{Fee} = K_1 \times K_2 \times K_3 \times F\text{Fee}$$

Where;

**K1** = Spectrum value factor; assuming the following values;

Band	K1
Less than 470 MHz	1
470 – 960 MHz	0.8
960 – 3000MHz	0.6
3000 – 11000MHz	0.5
11000 – 40000 MHz	0.4

**K2** = Area factor

Coverage	K2
National	1
Central Business District only	0.8
Urban only	0.6
Peri-Urban only	0.4
Rural only	0.2

OR

**K2 = Type of Service**

Coverage	Services	Commercial	Non-commercial	Community Services
National	1	0.8	0.6	0.4
Central Business District only	0.8	0.6	0.4	0.2
Urban	0.6	0.4	0.2	0.1
Peri-Urban	0.4	0.2	0.1	0.1
Rural	0.2	0.1		

**K3 = Total amount of spectrum in MHz; including buffers**

**FFee = Fixed Fee = M1, 500**

**SFee = Spectrum Fee**

### **Annual Usage fee**

A fee that reflects the benefit that the user is deriving from the spectrum. It is intended to cover the costs of regulating the issued licence. The usage fee charged shall be subject to the type of service offered.

### **Annual Royalty fee.**

This is an annual fee that is charged as a percentage of the gross annual revenue of an operator. The prescribed percentage depends on the type of licence and may be changed at any time as the Authority may deem it fit.

### **Gross turnover.**

The turnover subject to annual licence fees shall be the gross turnover on telecommunication business, in terms of generally accepted accounting practice in Lesotho, of the operator, inclusive of contracted amounts received for roaming, interconnection and similar arrangements after deducting contracted amounts paid for roaming, interconnection and similar arrangements.



**Rural services.**

Services offered in the rural areas would be charged at 75% of the regulatory fees.

**Penalties**

For failure to pay the prescribed annual licence fees and frequency assignment fees when they are due or as per the payment schedule agreed upon with the Authority, the Authority shall impose penalties that shall be paid by a licensee.

## LEGAL NOTICE NO. 75 OF 2003

**LABOUR CODE (CHEMICAL SAFETY) REGULATIONS 2003****ARRANGEMENT OF REGULATIONS**

## Regulation

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## LEGAL NOTICE NO. 75 OF 2003

**LABOUR CODE (CHEMICAL SAFETY) REGULATIONS**

Pursuant to section 100 of the Labour Code Order 1992<sup>1</sup>, I,

**CLEMENT SELLO MACHAKELA**

Minister of Employment and Labour make the following Regulations:

**Citation and commencement**

1. These regulations may be cited as the Chemical Safety Regulations 2003, and shall come into operation on the date of publication in the Gazette.

**Application**

2. These Regulations shall apply to all establishments as defined in the Labour Code Order 1992 or to other places of work as the Minister may prescribe by notice published in the Gazette determine.

**Interpretation**

3. In these Regulations, unless the context otherwise requires:

“acceptable exposure limit value” means the value which shall not be exceeded by any mean airborne concentration, integrated with respect to time in the working environment under which it is believed that nearly all workers may be repeatedly exposed day after day within their working life without adverse effects;

“article” includes any solid, liquid or gas or any combination thereof;

“authorised agent” means any person appointed by the Chief Factory Inspector for purposes of these Regulations;

“biological monitoring” means the quantitative analysis of body fluids, tissue or expired air for the presence of chemical substance or metabolite on a worker;

"any product(s)" means substances which are formed during a chemical reaction and which remain at the end of the reaction or process;

"CAS" means Chemical Abstract Service which is a number assigned to a distinct chemical compound by American Chemical Society;

"chemical" means chemical elements, compounds, and mixtures thereof, whether natural, synthetic, or biological and in whatever state;

"chemical substance" means any chemical or substance;

"Chief Factory Inspector" means any person whom the Minister has designated as such;

"competent doctor" means a Medical Practitioner registered with the Lesotho Medical Dental & Pharmacy Council;

"controls" means measures, including devices, to regulate a process, action, system, apparatus or a machine for either short or long-term duration and include administrative, engineering, safe work practices and use of personal protective equipment or other means for eliminating, limiting or reducing the exposure to chemicals;

"dust" means a disperse distribution of solids in air brought about by mechanical processes or stirred up;

"environmental monitoring" means measurement and determination of quantities and types of contaminants in the work environment including the immediate environs of the factory premises;

"employer" means any person or undertaking, corporation, company, public authority or body of persons as defined in the Labour Code;

"Factory" means a factory as defined in the Labour Code;

"flash point" of a substance means the lowest temperature at which the substance yields a vapour which will furnish a momentary flash or

flame when tested by the standard method of determining the flash point of petroleum;

“fume” means a disperse distribution of solids in air brought about by thermal and or chemical process;

“handling” means manufacture, production, processing, treatment, packaging, storage, transporting, use, disposal, collection, destruction, conversion, offering for sale, transfer or other proceedings;

“hazardous chemical” means any chemical which has been classified as hazardous in accordance with international instruments or for which relevant information exists to indicate the chemical is hazardous;

“highly flammable” means any liquid, liquid solution, emulsion or suspension which gives off flammable vapour at a temperature less than 38 degrees centigrade;

“impurities” means substances which are formed during a chemical reaction, are converted and thereafter disappear by the end of the reaction or process;

“label” means a sign or mark attached to an object to give information about that object;

“Labour Code” means the Labour Code Order of 1992.

“manufacturer” means any producer, purifier, or otherwise processing a product; and includes packaging, repackaging, and anyone who changes the name of a product for further transfer in his own name;

“medical surveillance” means the keeping of a person under medical supervision; persons under such surveillance may be required to remain within a specified area or to attend for medical examination at specified places and times;

“mist” means a disperse of liquids in air brought about by condensation;



“NACOSH” means the National Advisory Council for Occupational Safety, Health and Welfare as established under the Labour Code.

“occupier” means the person or persons in actual occupation of a factory or place of work, whether as owner or not;

“package” means anything in which substances are packed including boxes and containers;

“safety sign” means a sign giving information and or a warning;

“substances” means chemical elements and their compounds as they occur in natural state or as produced by industry, including any additives required for the purposes of placing them on the market;

“supplier” includes the manufacturers, producers, formulators, distributors, exporters, importers, agents and others;

“symbol” means a pictorial presentation describing a specific situation, used on one of the safety signs referred to elsewhere;

“toxic” means any chemical substance in such concentration as is capable of causing injury to, or harmful pathological change in any part of a person by inhalation, ingestion or contact with skin;

“use of chemicals at work” means any work activity which may expose a worker to a chemical including the production, handling, storage, and transport of chemicals, the release of chemicals resulting from work activities, the maintenance, repair and cleaning of equipment and containers of chemicals;

“waste products” means the remains of a chemical substance which remain at the end of the reaction or process;

“worker representative” is as defined in the Labour Code Order 1992.

**Adequate measures for workers safety, health and welfare**

4. (1) An employer shall take adequate measures to ensure that a worker is not exposed, to an extent that may cause injury to his health, to a chemical that is used, handled or stored at the place of work in excess of the Acceptable Exposure Limit Values set under Schedule V.

(2) Adequate measures referred to in sub-regulation (1) of may include the following:

- (a) reduction of the use of a chemical which may constitute a danger or in any other way affect the well being, safety and health of a worker;
- (b) replacing the chemical in so far as is technically possible by a substance preparation or process which is not dangerous under its conditions of use or is less dangerous to the workers health or safety;
- (c) providing appropriate training to the worker (including the worker who is at management level), for the protection of the workers health and safety and of those within the environs of the place of work;
- (d) ensuring that a hazardous chemical or substance is, in so far as is technically possible, manufactured and used in a closed system, where there is risk of exposure to the hazardous chemical or substance;
- (e) reducing, to as low a level as is technically possible, the level of exposure, where a closed system is not technically possible;
- (f) limiting, to the acceptable exposure limit values reflected under Schedule V to these Regulations, the quantities of the hazardous chemical at the work area;
- (g) keeping the number of workers exposed as low as possible;

- (h) use of proper design of work processes and engineering control measures so as to avoid or minimise the release of the hazardous chemical or substance into the place of work;
- (i) application of suitable measures for the removal of the hazardous chemical or substance at source, such as the use of effective local exhaust system to ensure that exhaust gases do not enter the workplace.
- (j) in the case of general ventilation, ensuring that the method adopted is appropriate and compatible with the need to protect pollution or other ill-effects to life and property;
- (k) demarcation of risk areas and use of adequate warning and safety signs including smoking signs and notices in areas where workers are exposed or likely to be exposed to hazardous chemicals or substances;
- (l) provision of adequate plans to deal with emergencies for the protection of the workers health and safety and property;
- (m) provision of safe means for disposal of any waste; and
- (n) provision of workers with appropriate and suitable protective equipment and instructions on its proper use and care, including storage in a well defined place, its checking and cleaning before use or after each use, repairing or replacing of defective equipment.

(3) The sign or notice displayed in accordance with paragraph (k) of sub-regulation (2) shall indicate the following:

- (a) the hazards;



- (b) the preventative measures to be taken;
- (c) protective equipment to be used;
- (d) first aid and emergency measures to be taken if need arises; and
- (e) emergency exit.

#### **Additional measures**

5. (1) In a place of work where a chemical or substance handled or used may cause any of the occupational diseases listed in the Schedule I of the Workmen's Compensation Act, 1977 or any amendment thereto or, where chemicals listed under Schedule III are handled, or where the Chief Factory Inspector is of the opinion that workers are exposed to chemicals that are dangerous to their health, an employer shall, in addition to measures provided for in Regulation 4, take the following measures to control or reduce the exposure of a worker to the hazardous chemicals:
- (a) periodic air monitoring of the work environment for any hazardous substance;
  - (b) ensure that biological monitoring and medical examination of a worker is done by a competent doctor at the time the worker takes up employment, at least every 12 months and at the time the workers employment is terminated.
- (2) The results of the air monitoring, medical examination or biological monitoring done pursuant to paragraphs (a) and (b) of sub-regulation (1) shall be made available to each worker.

## Labelling and packaging

6. (1) An employer shall ensure that -
- (a) all chemical substances handled, used, transported or stored in a place of work are marked with a label so as to indicate their identity;
  - (b) the label referred to in sub-regulation (1)(a) includes the following information clearly printed on it:
    - (i) trade name;
    - (ii) chemical name;
    - (iii) name, address and telephone number of supplier;
    - (iv) safety signs regarding health, fire and explosion hazard in international colours;
    - (v) composition of the substances;
    - (vi) nature of special risks associated with the handling of, and the precautionary measures to be taken in handling the chemical substance;
    - (vii) recommended first aid measures, and measures for dealing with spillage or any foreseeable danger;
  - (c) the label is complete, accurate, properly presented with no advertising information on it, and securely fixed with its entire surface in contact with the package, or securely tagged in the case of small packages;
  - (d) the label is so adequately legible that the particulars can be read easily from the place where it is placed;

- (e) the label is of such adequate durability that it can still be legible even at the time of the disposal of the package;
- (f) the label is of such a size in relation to the package as to be sufficiently conspicuous;
- (g) the label is written in both the Sesotho and English language.

(2) An employer shall also ensure that chemical substances handled, used or stored in a place of work are -

- (i) in packages so designed, secured or fastened as to prevent an accidental escape of the contents;
- (ii) packaged and secured in material not susceptible to attack by the chemical itself, or other material ;
- (iii) in packages which are of adequate material to withstand the transport, storage and handling operations without letting out its contents; and
- (iv) packaged in such a manner as not to cause damage to workers when they are emptying its contents.

(3) The Provisions of this Regulation shall also apply where a chemical, substance or mixture is transferred to a secondary package.

#### **Identification and classification**

7. (1) An employer shall ensure that chemicals handled in the place of work are classified according to the type and degree of their intrinsic health and physical hazards including the following:

- (a) toxic properties including acute and chronic health effects on all parts of the body;

- (b) chemical or physical characteristics including flammable, explosive, oxidizing and dangerous reactive properties;
- (c) corrosive and irritant properties;
- (d) allergic and sensitizing effects;
- (e) carcinogenic effects;
- (f) teratogenic and mutagenic effects;
- (g) effects on the reproductive system.

(2) In addition to requirements of this Regulation, the United Nations Recommendations on Transportation of Dangerous Goods shall apply.

#### **Safety signs, posters or notices to be displayed**

8. An employer shall, where exposure to hazardous chemicals is anticipated, display safety signs, posters or notices so as to warn workers of the dangers of the hazardous chemicals and inform them of safety measures to be taken when need arises.

#### **Notification**

9. (1) An employer who manufactures, supplies, imports or distributes a chemical substance which may constitute danger to or in any other way affect the health and safety of a worker, or is listed in Schedule V shall, prior to the commencement of the proposed activities, submit notification to the Chief Factory Inspector and in the form presented in Schedule II.

(2) An employer who submits notification in accordance with sub-regulation (1) shall inform the Chief Factory Inspector about any changes in the information including whether new data on hazards is available or whether there has been any changes in the composition of the material.



(3) An employer who, before the coming into operation of these Regulations, manufactured, supplied, imported or distributed chemical substances listed in Schedule V which are likely to constitute danger to or in any other way adversely affected the health and safety of workers, shall within six months of the coming into operation of these Regulations submit notification to that effect to the Chief Factory Inspector.

### **Notice of substantial risk**

10. (1) An employer who obtains information relating to the substantial risk of the chemical substance or mixture pursuant to the provisions of these regulations shall as soon as he receives the information, inform the Chief Factory Inspector of the chemical substance or mixture.

(2) At a place of work where there are major chemical plants or installations, an employer shall ensure that a plan of work is drawn up during the commissioning, major maintenance or dismantling of such plants or installations, prescribing the measures adopted to ensure the safety and health of workers at the place of work.

(3) The Chief Factory Inspector shall be notified of the plan of work drawn pursuant to these Regulations prior to the activity.

### **Special risks**

11. (1) Where certain hazardous chemicals, to which certain groups of workers including women, young persons, the aged, disabled or any other person who may be vulnerable upon exposure, are handled or used, the employer shall inform the Chief Factory Inspector of the precautions taken or intended to be taken for the safe handling of the chemicals.

(2) The Chief Factory Inspector may, on receipt of this information, take any decision he may deem fit in the interest of safeguarding the health and safety of workers.

**Records to be kept**

12. In a place of work where chemicals listed in Schedule III are handled or used, the employer shall keep a record of, and notify the Chief Factory Inspector of the following:

- (a) the chemical name of the chemical;
- (b) the CAS registration number;
- (c) the activities or industrial processes carried out, including the purpose for which the chemicals are used;
- (d) the number of workers exposed;
- (e) the control measures taken;
- (f) any type of protective equipment and clothing used;
- (g) the nature and degree of exposure;
- (h) the medical surveillance programme given to the workers;

**Exposure to radioactive chemical substances:**

13. (1) In a place of work where chemical substances that may emit ionizing radiation are manufactured, produced, processed, handled or used, the employer shall, in the light of knowledge available to him at the time, take all appropriate steps to ensure effective protection of workers, as regards their health and safety against ionizing radiation.

(2) The Minister may make regulations prescribing measures necessary for the effective control and protection of workers against radiation referred to in sub-regulation (1).

### Material safety data sheets

14. (1) An employer shall ensure that he has the material safety data sheet for every hazardous chemical handled or used, or any chemical substance that may adversely affect the safety and health of workers upon exposure.
- (2) The material safety data sheet referred to in sub-regulation (1) shall include the information outlined in Schedule I.
- (3) The Minister may, after consultation with NACOSH, amend Schedule I by notice in the Gazette.
- (4) Where workers handle or use chemicals which constitute danger or in any other way adversely affect their health and safety, an employer shall prepare a material safety data sheet for each and every individual chemical or mixture, and make it available to the workers within their work-station.
- (5) An employer shall also ensure that the workers understand the contents of the chemical safety data sheet prepared pursuant to subsection 4.
- (6) The Chief Factory Inspector may require that the material safety data sheets be written in Sesotho and English.
- (7) The chemical or common name used to identify the chemical or mixture on the material safety data sheet shall be the same as that used on the label.
- (8) Where the composition or information on ingredients needed for the purpose of hazard evaluation is regarded by any supplier, manufacturer or employer to constitute confidential information, such information may be omitted from the chemical safety data sheet, but shall be disclosed when requested for by Chief Factory Inspector in writing.
- (9) The Chief Factory Inspector shall bear the confidentiality of any information coming his way by virtue of his position and use it only for the purposes of protecting the health and safety of workers in the particular place of work.



### Work place and health surveillance

15. (1) The Chief Factory Inspector or his authorised agent may, at any time he thinks is appropriate, carry out in the place of work and within its environs, measurements of occupational hygiene or any environmental monitoring for the protection of workers safety health and welfare and for safeguarding life and property within the immediate environs, and for establishing compliance with Acceptable Exposure Limit Values set under Schedule V.

(2) The Chief Factory Inspector may make rules requiring every employer to -

- (a) assess the exposure of workers to hazardous chemicals;
- (b) monitor and record the exposure of workers to hazardous chemicals;
- (c) keep the records of the air monitoring of the work environment, and of workers for a prescribed period;
- (d) cause medical examination of the employees before they are employed, at regular intervals during the employment and after termination of their employment.

(3) The Chief Factory Inspector may, where he is of the opinion that workers are manufacturing, processing, handling or using chemicals that may be injurious to their health and safety, make other rules requiring -

- (a) the application of occupational hygiene methods and procedures for the periodic evaluation and assessment of the work practices and environment;
- (b) the provision of medical examination for persons employed or those seeking employment or prohibiting the employment of persons not certified as fit for such



employment;

- (c) the prohibition of, or restriction to the handling and use of certain chemicals and processes;
- (d) limitation of access to certain areas or workplaces of any class of persons deemed vulnerable to certain chemicals or processes;
- (e) that a suitable health surveillance be made available for workers who have been exposed to agents after exposure has ceased;
- (f) access by a worker or his representative at the place of work to the results of exposure, measurements and anonymous collective results of the biological tests indicating exposure where such tests are provided for;
- (g) access by each worker concerned, to the results of his own biological tests indicating exposure;
- (h) information to workers or their representatives at the place of work where the limit values referred to in Schedule V are exceeded and of the causes thereof and the means taken or to be taken in order to rectify the situation;
- (i) provision and access to workers or their representatives at the place of work to appropriate information including material data sheets to improve their knowledge of the dangers to which they are exposed to;
- (j) that no workers contract be terminated on medical grounds without full consultation with the Chief Factory Inspector and the worker, and in the case of temporary suspension on medical grounds from the exposing job, the worker be provided with another job

where he will not be exposed to the offending chemical or any chemical substance that may promote or aggravate the effects of the offending chemical;

- (k) that removal from exposure apply in regard to other medical conditions deemed to create an unusual risk for exposure to these chemicals such as in the case of expectant and nursing mothers or young persons; or
- (l) that where termination, temporary suspension or removal is effected, adequate compensation shall be afforded in accordance with the Workmens Compensation and any laws governing termination of contracts.

### **Training and information of workers**

16. (1) An employer shall take appropriate measures to ensure that workers in the place of work receive sufficient and appropriate training on a continuous basis in light of all available information, in particular in the form of appropriate information and instructions concerning:

- (i) potential risks to health and safety due to chemicals they handle including additional risks due to other factors that may promote such risks;
- (ii) precautions and technical measures to be observed to prevent exposure to chemical substances and the precautions the employer is taking to safeguard safety, health and welfare during manufacture, handling, use, storage, disposal and transportation within the factory;
- (iii) hygiene requirements and provisions to be observed by every worker;
- (iv) the proper use and maintenance of protective equipment and clothing;
- (v) measures, precautions and steps to be taken by workers

### Material safety data sheets

14. (1) An employer shall ensure that he has the material safety data sheet for every hazardous chemical handled or used, or any chemical substance that may adversely affect the safety and health of workers upon exposure.
- (2) The material safety data sheet referred to in sub-regulation (1) shall include the information outlined in Schedule I.
- (3) The Minister may, after consultation with NACOSH, amend Schedule I by notice in the Gazette.
- (4) Where workers handle or use chemicals which constitute danger or in any other way adversely affect their health and safety, an employer shall prepare a material safety data sheet for each and every individual chemical or mixture, and make it available to the workers within their work-station.
- (5) An employer shall also ensure that the workers understand the contents of the chemical safety data sheet prepared pursuant to subsection 4.
- (6) The Chief Factory Inspector may require that the material safety data sheets be written in Sesotho and English.
- (7) The chemical or common name used to identify the chemical or mixture on the material safety data sheet shall be the same as that used on the label.
- (8) Where the composition or information on ingredients needed for the purpose of hazard evaluation is regarded by any supplier, manufacturer or employer to constitute confidential information, such information may be omitted from the chemical safety data sheet, but shall be disclosed when requested for by Chief Factory Inspector in writing.
- (9) The Chief Factory Inspector shall bear the confidentiality of any information coming his way by virtue of his position and use it only for the purposes of protecting the health and safety of workers in the particular place of work.



### Work place and health surveillance

15. (1) The Chief Factory Inspector or his authorised agent may, at any time he thinks is appropriate, carry out in the place of work and within its environs, measurements of occupational hygiene or any environmental monitoring for the protection of workers safety health and welfare and for safeguarding life and property within the immediate environs, and for establishing compliance with Acceptable Exposure Limit Values set under Schedule V.

(2) The Chief Factory Inspector may make rules requiring every employer to -

- (a) assess the exposure of workers to hazardous chemicals;
- (b) monitor and record the exposure of workers to hazardous chemicals;
- (c) keep the records of the air monitoring of the work environment, and of workers for a prescribed period;
- (d) cause medical examination of the employees before they are employed, at regular intervals during the employment and after termination of their employment.

(3) The Chief Factory Inspector may, where he is of the opinion that workers are manufacturing, processing, handling or using chemicals that may be injurious to their health and safety, make other rules requiring -

- (a) the application of occupational hygiene methods and procedures for the periodic evaluation and assessment of the work practices and environment;
- (b) the provision of medical examination for persons employed or those seeking employment or prohibiting the employment of persons not certified as fit for such

employment;

- (c) the prohibition of, or restriction to the handling and use of certain chemicals and processes;
- (d) limitation of access to certain areas or workplaces of any class of persons deemed vulnerable to certain chemicals or processes;
- (e) that a suitable health surveillance be made available for workers who have been exposed to agents after exposure has ceased;
- (f) access by a worker or his representative at the place of work to the results of exposure, measurements and anonymous collective results of the biological tests indicating exposure where such tests are provided for;
- (g) access by each worker concerned, to the results of his own biological tests indicating exposure;
- (h) information to workers or their representatives at the place of work where the limit values referred to in Schedule V are exceeded and of the causes thereof and the means taken or to be taken in order to rectify the situation;
- (i) provision and access to workers or their representatives at the place of work to appropriate information including material data sheets to improve their knowledge of the dangers to which they are exposed to;
- (j) that no workers contract be terminated on medical grounds without full consultation with the Chief Factory Inspector and the worker, and in the case of temporary suspension on medical grounds from the exposing job, the worker be provided with another job

to prevent accidents, including their rescue in case of emergency;

- (vi) the practices and procedures to be followed for the safe use of chemicals at work, including the use of information provided on the labels and chemical data sheets; and
- (vii) any other training and information necessary for safeguarding the safety and health of workers at the place of work;

(2) The training referred to in sub-regulation (1) shall -

- (i) be adapted to take account of new or changed risks;
- (ii) be repeated periodically; and
- (iii) cover workers both upon recruitment and prior to taking up new duties.

(3) An employer shall take appropriate measures to ensure that only workers who have received adequate and appropriate training have access to areas where there is serious or specific danger due to chemicals.

(4) The training of workers shall take place during normal working hours.

(5) Workers shall not be charged for the training that they undergo.

### **Personal Protection**

17. An employer shall -

- (a) where protection against exposure to chemical substances cannot be achieved through the application of measures specified in these Regulations, provide suitable personal protection appliances that will adequately protect workers against the risks they are



exposed to;

- (b) ensure that the personal protective appliances are used at all times wherever there is risk of exposure to chemicals and that they are properly maintained; and
- (c) ensure that workers receive training on the proper use and care of personal protective appliances issued to them.

### **Personal Hygiene**

18. (1) Without prejudice to the provisions of the Labour Code, every employer shall, in the case of all activities for which there is a risk of contamination by chemical substances, ensure that appropriate measures are taken to ensure that -

- (i) workers do not eat, drink or smoke in working areas where there is a risk of contamination by chemicals, and no food, drink or tobacco is taken into or left in such areas;
- (ii) workers are provided with appropriate protective clothing or other appropriate special clothing;
- (iii) separate storage facilities are provided for working or protective clothing and for clothes not worn during working hours; and
- (iv) workers are provided with appropriate and adequate washing and toilet facilities.

(2) An employer shall provide appropriate means to ensure that the protective clothing supplied to the worker is maintained in a clean state.

### **First aid and fire safety**

19. (1) An employer shall -

- (a) provide adequate First Aid facilities;

- (b) provide means to prevent and fight fires and evacuation procedures for workers which shall be adapted to the nature of the activities and the size of the place of work and also take into account other persons present.
- (c) in addition to other measures, designate the workers required to assist in carrying out these measures; and
- (d) ensure that the training and equipment is adequate for the number of workers referred in to paragraph (c), taking into account the size or the specific hazards in the place of work;

(2) The Chief Inspector of Factories may, where necessary, draw standards for the guidance in the provision of First Aid and fire safety in places of work where hazardous chemicals are used.

#### **Duties of workers**

20. (1) A worker shall -

- (a) co-operate with his employer in the implementation of the provisions of these Regulations, and comply with the procedures and practices relating to safety in the use of chemicals at work;
- (b) take all reasonable steps to eliminate or minimize risk to himself and to others from the use of chemicals at work, in particular by the proper use of personal protective equipment and clothing;
- (c) report all accidents and dangerous occurrences related to the handling of chemical substances to the supervisor or member of safety and health committee or safety officer;
- (d) take reasonable steps to eliminate or minimize risk to

himself and to others from the use of chemicals at work.

(2) A worker's obligation in the safe use of chemicals in the place of work shall not affect the principal responsibility of the employer.

**Reporting of accidents, dangerous occurrences and diseases**

21. (1) Notwithstanding the provisions of sections 14(1) and (2) of the Workmens Compensation Act 1977 and section 101 of the Labour Code, where an incident in any place of work results from the handling or use of chemical substances that -

- (a) cause loss of life to any worker or person at the place of work; or
- (b) disable any worker or person for more than three consecutive days; or
- (c) are classified as dangerous,

an employer shall, within twenty-four hours of the occurrence notify the Chief Factory Inspector and in the case of a fatal accident within twenty-four hours of its occurrence.

(2) Where, after notification of an accident causing disablement is given in terms of sub-regulation (1), the death of the disabled worker or person occurs, an employer shall, in writing, notify the Chief Factory Inspector of the death of the worker or in the case of and other person, the occupant of the premises shall make the notice.

(3) Every medical practitioner who diagnoses any of the diseases specified under the Schedule I to the Workmens Compensation Act or any other occupational disease arising from exposure to chemical substances in the place of work, shall send to the Chief Inspector of Factories a notice stating the name and full address of the patient and the disease from which, in the opinion of the practitioner, the patient is suffering from and the name and address of the place of work in which he is employed or was last employed.



prescribed in Schedule V.

(2) An employer shall take adequate measures, including technical and administrative measures, to ensure that no worker in the work place is exposed to any chemical substance beyond the laid down acceptable exposure limit values for any of the chemical substances.

(3) NACOSH may, periodically and based on the best information available to the members including scientific and technical data, recommend the updating, altering, adding, deleting or any necessary changes to Schedule V to the Minister for purposes of safeguarding the safety and health of workers in places of work.

### **Research and related activities**

25. (1) The Chief Factory Inspector shall conduct, directly or in collaboration with other persons or bodies research, experiments and demonstrations relating to the use of chemicals at work or related areas including studies in all fields connected therewith or relating to innovative methods, techniques and approaches to dealing with problems of chemicals safety.

(2) The Chief Factory Inspector shall develop specific plans for such research, demonstration, and experiments as is necessary to produce criteria, including criteria for identifying toxic substances, and if necessary for formulation of acceptable exposure limit values under these Regulations, and may, on the basis of such research, demonstration, and experiments, or any other information available to him, develop and publish such criteria necessary for the purposes of these Regulations.

(3) The Chief Factory Inspector may, develop criteria dealing with toxic chemicals and substances which will describe acceptable exposure limit values that are safe for various periods of employment, including, but not limited to the exposure level at which no employee will suffer impaired health or functional capacities or diminished life expectancy as a result of his work experience.

(4) The Chief Factory Inspector shall conduct special research, experiments, and demonstrations relating to occupational safety and health as

are necessary to explore new problems including those created by new technology in the use of chemicals at work which may require ameliorative action beyond that which is otherwise provided for in these Regulations and any research into any other factors relating to the field of safety in the use of chemicals.

(5) In order to develop needed information, regarding potentially toxic chemicals, the Chief Factory Inspector may, in consultation with NACOSH, advise the Minister, to prescribe regulations requiring employers to -

- (a) measure, record, and make reports on the exposure of employees to substances which may endanger their health or safety of employees and may by such regulations establish such programmes of medical examinations and tests as may be necessary for determining the incidence of occupational illnesses and susceptibility of employees to such illnesses;
- (b) submit to his office information necessary for maintaining an inventory of chemicals used in the place of work.

#### **Ban on Chemical substances**

26. (1) For the purpose of protecting the workers against serious health and safety risks, the Chief Factory Inspector may, at a place of work, ban totally or temporarily the handling and use of certain chemicals, substances, or certain work activities which he has reason to believe may cause serious health problems to workers, where precautions taken are not sufficient to ensure satisfactory level of safety and health protection for workers.

(2) The ban shall not lead to the use of substitute chemical substances or work activities which may involve equal or greater health and safety risks to workers.

(3) For the purposes of these Regulations, a total ban on the manufacture, production, processing, handling, use, storage or transportation and any other connected activity is imposed on the chemicals listed under Schedule IV.

### **Exemption from the banning of chemicals**

27. An employer may, where -
- (a) he is of the opinion that sufficient precautions have been taken for worker protection,
  - (b) the chemicals are present in a substance or a preparation in the form of impurities or by-products, or as constituents of waste products, provided that their individual concentration therein is less than 0.1% w/w; or
  - (c) the chemical is to be used for scientific research and testing including analysis, or work activities aimed at eliminating the substance present in form of by-products or waste products, or for the production of the banned substances for use as intermediates, request for exemption from the banning of the chemical substances.

### **Appeals**

28. Appeals against the decision of the Chief Factory Inspector on matters pertaining to these Regulations may be made to the Minister in accordance with the procedures laid down under the Labour Code Order 1992.

### **Offences and Penalties**

29. A person who contravenes the provisions of these Regulations commits an offence and is liable on conviction to a fine not exceeding M600 for each contravention or imprisonment for a period not exceeding six months or both.



## SCHEDULE I

### MATERIAL SAFETY DATA SHEETS (Regulation 14)

Material safety data sheets on hazardous chemicals shall contain the following information -

- Chemical name, and its synonyms
- Trade name(s)
- Hazard(s)
- Address of supplier or manufacturer
- Description
- Uses
- Exposure effects
- Chemical and physical properties
- Fire and explosion hazards
- First Aid measures
- Stability and chemical reactivity
- Suitable means for storage, and handling
- Accidental release measures
- Exposure control and personal protection
- Workplace monitoring methods
- Clean-up and disposal considerations
- Relevant ecological information
- Transport information

Other information including date of compiling data sheet

## **SCHEDULE II**

### **NOTIFICATION (Regulation 9)**

Notification to the Chief Factory Inspector shall contain the following information -

- Name and address (including physical address) of notifying company
- Telephone number
- Name and position of person notifying
- Date of notification
- Name, address and telephone number of company supplying chemical.

Chemical and physical properties

- Chemical name in IUPAC nomenclature
- CAS number
- Common name and if known trade names
- Empirical and structural formulae
- Degree of purity
- Nature of main impurities, including isomers and secondary products
- Percentage of main Impurities
- Physical form, bulk density, melting point, flash-point vapour pressure, significant or particularly hazardous thermal decomposition products, water solubility, solubility in liquid

solvents.

#### Biological Properties

- Acute oral or inhalation toxicity
- skin irritancy and dermal toxicity
- skin sensitization test
- eye irritancy
- short tests for carcinogenicity, mutagenicity and teratogenicity
- sub acute toxicity, biodegradability.

Recommendations for safe use and handling:

A tentative recommended exposure level for normal working

Recommendation for personal protective equipment

Suggested treatment for acute poisoning

Proposed labelling information



**SCHEDULE III**  
**LIST OF CHEMICAL SUBSTANCES (Regulations 5 and 12)**

Acrylonitrile

Asbestos

Arsenic and compounds

Benzene

Cadmium and compounds

Mercury and compounds

Nickel and compounds

Lead and compounds

Chlorinated hydrocarbons: chloroform paradichlorobenzene

Carbon tetrachloride

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**SCHEDULE IV**  
**LIST OF CHEMICALS AND CHEMICAL SUBSTANCES BANNED**  
(Regulation 27)

DDT	(CAS No 50 - 29 - 3)
Dimethylnitrosamine	(CAS No 62 - 75 - 9)
2-naphtylamine and its salts	(CAS No 91-59-8)
4-aminobiphenyl and its salts	(CAS No 92-67-7)
benzidine and its salts	(CAS No 92-87-5)
4-nitrodiphenyl	(CAS No 92-93-3)
Acetamidofluorene	(CAS No 53 - 96 - 3)
BIS (Chloromethyl) Ether	(CAS No 542 - 88 - 1)
Ethylenimine	(CAS No 151 - 56 - 4)

**SCHEDULE V**  
**ACCEPTABLE EXPOSURE LIMIT VALUE (Regulation 25)**

SUBSTANCE	PPM TWA mg/m <sup>3</sup>		CAS NO.
1. Acetic Acid	10	25	64-19-7
2. Acrolein	0.1	0.25	107-02-8
3. Acrylonitrile	2	4.3	107-13-1
4. Ammonia	25	17	7664-41-7
5. Aniline	2	7.8	62-53-3
6. Antimony Compounds		0.5	7440-36-0
7. Arsenic Compounds		0.05	7440-38-2
8. Arsine	0.05	0.2	7784-42-1
9. Asbesto	-	-	
10. Benzene	5	16	71-43-2
11. Boron Trifluoride	1	3	7637-07-2
12. Butylamine	5	15	109-73-9
13. Butyl Mercaptan	0.5	1.8	109-79-5
14. Cadmium Dust		0.1	7440-43-9
15. Calcium Carbonate (a)		10	1317-65-3
16. Calcium Cyanimide		0.5	156-62-7
17. Carbaryl		5	63-25-2
18. Carbon Disulphide	10	31	75-15-0
19. Carbon Monoxide	30	34	630-08-0
20. Carbon Tetrachloride	5	31	56-23-5



21. Carbonyl Fluoride	2	5.4	353-50-4
22. Chlorine	1	3	7782-50-5
23. Chloroform	10		67-66-3
24. Chloropicrin	0.1	0.05	76-06-2
25. Chromic Acid		0.05	
26. Chromium Metal	0.5		7440-47-3
27. Chloromium (IV) Compounds (asCr)		0.05	
28. Coal tar volatiles Pitch (as benzene solubles)		0.2	65996-93-2
29. Cyanides		5	151-50-8
30. Dianizinin		0.1	333-41-5
31. Diazomethane	0.2	0.34	334-88-3
32. Diazinin		0.1	333-41-5
33-. Diborone	0.1	0.11	19287-45-7
34. Dichlorvos (DDVP)	0.1	0.9	62-73-7
35. Epichlorohydrin	2	7.6	106-93-4
36. Ethylene Chlorohydrin	1	3.3	107-07-3
37. Ethylene Dibromide	20	-	106-93-4
38. Ethylene Imine	0.5	0.88	151-56-4
39. Ethylene Oxide	1	1.8	75-21-8
40. EPN		0.5	2104-64-5
41. Formic Acid	5	9.4	64-18-6
42. Hydrazine	0.1	0.013	302-01-2

43. Hydrogen Bromide	3	9.9	10035-10-6
44. Hydrogen Chloride	5	7.5	7647-01-0
45. Hydrogen Cyanide	10	11	74-90-8
46. Hydrogen Fluoride	3	2.6	7664-39-3
47. Hydrogen Peroxide	1	1.4	7722-84-1
48. Hydrogen Selenide	0.05	0.16	7783-07-5
49. Hydrogen Sulphide	10	14	7783-06-4
50. Iodine	0.1	1	7553-56-2
51. Isocyanates Fume		0.025	
52. Lead inorganic dusts fumes (as Pb)		0.15	7439-92-1
53. Magenta		32mg/plate	632-99-5
54. Mercury, aryl & inorganic Compounds (as Hg)		0.1	7439-97-6
55. Mercury vapour (as Hg)		0.05	7439-97-7
56. Methyl Bromide	5	19	74-83-9
57. Methyl Chloride	50	103	74-87-3
58. Methyl Isocyanate		0.02	624-83-9
59. 4,4' Methylene Bis	0.	0.22	101-14-4
60. Methyl Mercaptain	0.5	0.98	74-93-1
61. Naphthalene	10	52	91-20-3
62. Naphtylamine	-	-	91-59-8
63. Nickle & Compounds (as Ni)	-	0.1	7440-02-0
64. Nicotene		0.5	54-11-5

65. Nitric Acid	2	5.2	7697-37-2
66. Nitric Oxide	25	31	10102-43-9
67. Nitrobenzene	1	5	98-95-3
68. Nitrogen dioxide	3	5.6	10102-44-0
69. Nitrogen Trifluoride	10	29	7783-54-2
70. Nitroglycerin	0.05	0.46	55-63-0
71. Nitromethane	20	50	75-52-5
72. Nitrotoluene	2	11	88-72-2
73. Ozone	0.1	0.2	10028-15-6
74. Paraquat		0.1	4685-14-7
75. Paradichlorobezene	75		106-46-7
76. Perchloro Methyl Mercaptan	0.1	0.8	594-42-3
77. Phosgene	0.1	0.4	75-44-5
78. Phosphine	0.3	0.4	7803-51-2
79. Phosphoric Acid		1	7664-38-2
80. Phosphorus Oxychloride	0.1	0.63	10025-87-3
81. Phosphorus Penta Chloride	0.1	1	10026-13-8
82. Phosphorus Trichloride	0.2	1.1	7719-12-2
83. Phosphorus (Yellow)		0.1	7723-14-0
84. Potassium Hydroxide		2	1310-58-3
85. Propylene Imine	2	5	75-55-8
86. Propylene Oxide	20	48	75-56-9



87. Sodium Hydroxide	2	1310-73-2
88. Styrene	50	100-42-5
89. Sulphur Dioxide	2 5.2	7446-09-5
90. TEPP	0.004 0.047	107-49-3
91. Sulphuric Acid	1	7664-93-9
92. Tetra Chloromethane	1 6.9	79-34-5
93. Thallium & Salts	0.1	7440-28-0
94. Toluene (h)	100	108-88-3
95. Welding fumes (not otherwise classified)	5	-
96. Wood dust (hardwoods)	1	-
97. Wood dust (softwoods)	5	-
98. Xylems	80 350	1330-20-7
99. Zinc Chloride (fume)	1	7646-85-7
100. Zinc Oxide (dust)	10	1314-13-2

**CLEMENT SELLO MACHAKELA**  
**MINISTER RESPONSIBLE FOR EMPLOYMENT AND LABOUR**

### NOTE

<sup>1</sup>. Order No. 24 of 1992