



**MINISTERIAL REGULATION ON THE
PRESCRIBING OF STANDARD FOR ADMINISTRATION
AND MANAGEMENT OF OCCUPATIONAL SAFETY,
HEALTH AND ENVIRONMENT IN RELATION
TO HEAT, LIGHT AND NOISE B.E. 2549 (2006)**



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By virtue of Section 6 and Section 103 of the Labour Protection Act B.E. 2541 (1998), which is the law that contains certain provisions in relation to the restriction of rights and freedom of the individual which are permitted under Section 29 together with Section 31, Section 35, Section 48, and Section 50 of the Constitution of the Kingdom of Thailand, the Minister of Labour and Social Welfare hereby issues the Ministerial Regulation as follows:

Clause 1 This Ministerial Regulation shall come into force upon the expiration of the period of one hundred and eighty days of its publication in the Government Gazette.

Clause 2 In this Ministerial Regulation:

“Wet Bulb Globe Temperature - WBGT” means



(1) The temperature measured in degree Celsius outside a building without sunlight; or inside the building having the heat level of 0.7 time of the temperature read from the naturally wet bulb globe thermometer plus 0.3 time of the temperature value read from Globe Thermometer, or

(2) The temperature that is measured in degree Celsius outside the building with the sunlight having the heat level of 0.7 time of the temperature read from the naturally wet bulb globe thermometer plus 0.2 time of the temperature value which is read from globe thermometer, and plus 0.1 time of the temperature value read from dry bulb globe thermometer.

“Heat level” means the Wet Bulb Globe Temperature in the employee’s working area where the measurement of average value is made in the duration of two hours having highest wet bulb globe temperature of normal working condition.

“Working Condition” means the environment as it appears in the employee’s working premises including various conditions in the working areas, machinery, buildings, location, air ventilation, heat, light, noise, and as well as conditions and working



characteristics of an employee.

“Light Work” means the nature of work which uses less force or energy, and metabolizes foods in the body at the rate of not exceeding 200 kilocalories per hour; i.e., book writing work, typing work, recording of data, sewing; sedentary inspection of products, assembly of small pieces of work, control of machinery by foot, standing control of work, or other works comparable to the mentioned work.

“Medium work” means the nature of work which uses medium force or energy that brings about metabolism of food in the body exceeding 200 kilocalories per hour to 350 kilocalories per hour, i.e., lifting, towing, pulling, and pushing works, or removing of things using medium force; nailing, filing works; truck and tractor driving works, or other works comparable to the mentioned work.

“Heavy work” means the nature of work that uses greater force or energy that brings about metabolism of the food in the body exceeding 350 kilocalories per hour, i.e., work using shovel or digging hoe, wood-sawing work, hard-wood boring work; pounding work with large heavy hammer; lifting work,



or removing heavy object up to the high place or slope, or other works which is comparable to the mentioned work.

CHAPTER 1

HEAT

Clause 3 The employer shall control and maintain the heat level within the workplace in which employees are working not to exceed the standard as follows:

(1) Work being performed by an employee, which is characterized as a light work, shall have the average heat level of not exceeding 34 degrees Celsius of the wet bulb globe temperature.

(2) Work being performed by an employee characterized as a medium work shall have the average heat level of not exceeding 32 degrees Celsius of the wet bulb globe temperature.

(3) Work being performed by an employee characterized as a heavy work shall have the average heat level of not exceeding 30 degrees Celsius of the wet bulb globe temperature.



Clause 4 In case the heat level inside the workplace exceeds the standard as defined in Clause 3, the employer shall improve or correct the working conditions engineering-wise as to ensure that the heat level shall not exceed the defined standard. If such improvement or the correction of the working conditions to keep with the mentioned standard is not successful, the employer shall post a warning notice to inform the employees to realize that in such area it may be hazardous to employee's health; and the employer shall arrange for the employees to wear personal protective equipment as defined in Chapter 4 throughout working hours.

CHAPTER 2

LIGHT

Clause 5 The employer shall provide the intensity of light at the workplace as follows:

(1) Not lower than the standard as prescribed in Table 1 annexed to this Ministerial Regulation for general area within the workplace, i.e., corridor, toilet, dormitory.

(2) Not lower than the standard as prescribed in



Table 2 annexed to this Ministerial Regulation for the area utilized in the production process, and in which the employee is working.

(3) Not lower than the standard as prescribed in Table 3 annexed to this Ministerial Regulation for the area in which the employee works by focusing the eyesight on a specific spot, or fixing the eyesight in place in the course of working.

(4) Not lower than the comparative standard as prescribed in Table 4 annexed to this Ministerial Regulation for the area in which the employee works by focusing the eyesight on a specific spot, or fixing the eyesight in place in the course of working, and in the case that the intensity of light standard at the place at which the employee works is not prescribed in the Table 3.

(5) Not lower than the standard as prescribed in Table 5 annexed to this Ministerial Regulation for surrounding area of which the employee works by focusing the eyesight on a specific spot.

Clause 6 An employer shall use or provide a curtain, a light-filter film, or other appropriate or adequate measures to prevent direct light or reflective



light from the intense light source or the sun direct to the employee's eyes in the course working. In case protection is impossible, the employee shall be provided with personal protective equipment as prescribed in Chapter 4 throughout working hours.

Clause 7 In case an employee has to work in a dark, opaque place, or a place of limited space, such as in a cave, tunnel, or a place characterized by such description; the employer shall arrange for the employee to wear a safety hat equipped with lighting device, or provide other lighting devices suitable for the condition and the nature of work in accordance with the standard as prescribed in Chapter 4 throughout working hours.

CHAPTER 3

NOISE

Clause 8 An employer shall control the Time Weighted Average - TWA of noise level received by an employee not to exceed the standard as prescribed in Table 6 annexed to this Ministerial Regulation.

The criteria and method of measuring the noise level and the calculation of noise exposure shall be in accordance with the Announcement issued by the



Director-General.

Clause 9 In the area of the workplace having an impact or an impulse noise level exceeding one hundred and forty decibel A, or the accumulated volume of the impact or impulse noise exceeding the standard as prescribed in Table 6 annexed to this Ministerial Regulation, the employer shall instruct the employee to stop working until the noise level is improved or remedied.

The criteria and method of measuring the impact or impulse noise level shall be in accordance with the Announcement issued by the Director-General.

Clause 10 Within the workplace having a working condition with the noise level to which the employees is exposed exceeding the standard as prescribed in either Clause 8 or Clause 9, the employer shall be required to improve or remedy the sources of the noise, or passage of the noise, or to manage to have the noise level to which the employee is exposed not to exceed the prescribed standard.

In case the improvement or remedy pursuant to the preceding paragraph is still not possible, the employer shall arrange for the employees to wear



personal protective equipment as defined in Chapter 4 throughout working hours to reduce the noise level to not exceeding the standard as prescribed in Clause 8 or Clause 9.

Clause 11 In the area having the noise level exceeding the standard as prescribed in either Clause 8 or Clause 9, the employer shall provide a clearly visible warning sign requiring the employees to wear personal protective equipment

Clause 12 In case the working condition of the workplace has noise level, to which an employee is exposed by average throughout eight working hours, from eighty five decibel A upward, the employer shall introduce a project for hearing preservation in the workplace according to the criteria and method as prescribed by the Director-General

CHAPTER 4

PERSONAL PROTECTIVE EQUIPMENT

Clause 13 Personal protective equipment shall be of standard as follows:

- (1) Clothes, socks and gloves for heat protection



shall be made of light-weighted material capable of heat resistance from the thermal source to prevent the body temperature from exceeding 38 degrees Celsius.

(2) Safety hat shall be in accordance with the industrial product standard. The safety hat equipped with lighting accessories shall have a gadget that projects the light forwards with light intensity within three meters range of not less than twenty Lux, attached to the hat.

(3) Safety glasses shall be made of material capable of reducing the glare of light to a level that is not harmful to the eyesight. The frame of the glasses shall be of light weight with the soft shield.

(4) Face shield shall be made of colored material capable of reducing the glare of light to a level not harmful to the eyesight; the frame of the shield shall be of light weight and is not easily flammable.

(5) Ear plugs shall be made of plastic, rubber, or other soft and non-irritant material to be plugged into both ears, and is capable of reducing the noise to not less than fifteen decibel A.

(6) Ear muffs shall be made of plastic, rubber, or other soft and non-irritant material used to cover both ears and is capable of reducing the noise level to not



less than twenty five decibel A.

Clause 14 The employer shall manage to have methods of selecting and using personal protective equipment by providing a training on the methods of using and maintaining of personal protective equipment, as well as the usage rules which shall be prepared systematically, and open at all times during working hours for inspection by a labour inspector.

CHAPTER 5

MEASUREMENT AND ANALYSIS OF WORKING CONDITIONS

Clause 15 An employer shall conduct measurement and analysis of working conditions in relation to heat, light or noise within the workplace.

The criteria and method of the operation pursuant to the preceding paragraph, a period of time, and a category of business to be carried out, shall be in accordance with the Announcement issued by the Director-General.

Clause 16 An employer shall arrange a report on the conduct of measurement and analysis of working conditions pursuant to Clause 15. The report shall



be certified either by a degree safety officer in professional level; or a degree person who holds not lower than Bachelor Degree in Occupational Health, or equivalent degree. The employer shall then keep the mentioned report at the workplace for inspection by a labour inspector at all times during working hours; and its duplicate copy shall be forwarded to the Director-General, or to a person authorized by the Director-General within 30 days from the date on which the measurement is conducted.

Clause 17 Any person who wishes to apply for registration as a certifier of the measurement and analysis of working conditions report shall submit an application form together with the attachment of copies of related documents to the Director-General, or to a person authorized by the Director-General.

In Bangkok Metropolis, application for registration as the certifier pursuant to preceding paragraph shall be filed at the Department of Labour Protection and Welfare, the Ministry of Labour, or any other place as prescribed by the Director-General. For other provinces, the application shall be filed at the Office of the Provincial Labour Protection and Welfare.



The application for registration as a report certifier pursuant to paragraph one shall be in accordance with the format as prescribed in the Announcement by the Director-General.

Clause 18 Upon receiving the application submitted pursuant to Clause 17, the competent officer shall verify the correctness before presenting it to the Director-General or to the person authorized by the Director-General for registering as an auditor certifier of a Measurement and Analysis of Working Conditions Report.

In case the person having been registered as a report certifier pursuant to Clause 16 violates or does not comply with this Ministerial Regulation, the Director-General or the person authorized by the Director-General shall have the power to withdraw such person from the Register.

Clause 19 For the submission of the application for registration pursuant to Clause 17, the fee rates shall be as follows:

(1) Fee for the application form 20 Baht per copy



- (2) Fee for registration 3,000 Baht per year
- (3) Fee for the Certificate of registration 10 Baht per copy

CHAPTER 6

HEALTH CHECK UP AND REPORT ON RESULTS OF THE HEALTH CHECK UP

Clause 20 An employer shall arrange health check up for employees who work in the working conditions that may be harmful by heat, light or noise, according to the criteria and method as prescribed in the Announcement by the Director-General.

Clause 21 An employer shall keep, at the workplace, the health check up report pursuant to Clause 20, and according to the form as prescribed in the Announcement by the Director-General for at least five years for inspection by a labour inspector.

Clause 22 In the event of, and under the working condition that may be harmful from heat, light and noise, physical abnormality or illness from work of an employee is detected, the employer shall arrange immediate medical treatment for the affected employee,



inspect and investigate the causes of such abnormality or illness, as well as forward the results of health check up of the abnormal or ill employee; the provision of medical treatment and the preventative remedies, to a labour inspector by using the format as prescribed in the Announcement by the Director-General within thirty days after the acknowledgement date of such abnormality or illness.

If any employee has medical evidence issued by a government hospital or a hospital recognized by the government reporting that an employee is not able to work in the same duty, the employer shall change the job for such employee as to be deemed appropriate to health and safety of the employee.

Given on this 16th day of February B.E. 2549 (2006)

(Somsak Thepsuthin)

Minister of Labour

