

# **OCCUPATIONAL SAFETY AND HEALTH STANDARDS**

## **DOLE LABOR CODE OF THE PHILS. ARTICLE 162 Occupational Safety and Health Standards**

### **GENERAL PROVISION**

#### **Purpose and Scope:**

**The objective of this issuance is to protect every working man against the dangers of injury, sickness or death through safe and healthful working conditions.**

**This Standards shall apply to all places of employment except as otherwise provided in this Standards.**

#### **DEFINITIONS:**

For purposes of this Standards and except as otherwise indicated, the following shall mean:

- (1) “Employer”** includes any person acting directly or indirectly in the interest of an employer, in relation to an employee, and shall include government-owned or controlled corporations and institutions, as well as non-profit private institutions or organizations.
- (2) “Employee”** shall mean any person hired, permitted or suffered to work by an employer.
- (3) “Industrial Enterprises”** shall mean any workplace, permanent or temporary, including any building or collection of buildings, shed, structure, yard or any other place, where permanently or temporarily one or more persons are employed in any manufacturing of goods or products processing and any other activity similar and incidental thereto.

- (4) **“Agricultural Enterprise”** shall include forestry and logging operations, farming in all its branches, and among other things, includes cultivation and tillage of the soil, dairying, the production, cultivation, growing and harvesting of any agricultural and horticultural commodities, the raising of livestock and poultry, and any practice performed by a farmer on a farm as an incident to or in conjunction with such farming operations, but does not include the manufacturing or processing of sugar, coconut, abaca, tobacco, pineapple or other farm products.
- (5) **“Dry Dock”** shall include premises where work is performed on shore or on board ships in which ships or vessels are constructed, repaired, refitted, finished or broken up and housed.
- (6) **“Health”** shall connote a sound state of the body and mind of the worker which enables him to perform his job normally, in a state of well-being.
- (7) **“Safe or Safety”** shall refer to the physical or environmental conditions or work or employment which substantially comply with the provisions of this Standards.
- (8) **“Work Accident”** shall mean an unplanned or unexpected occurrence that may or may not result in personal injury, property damage, work stoppage or interference or any combination thereof which arises out of and in the course of employment.
- (9) **“Work Injury”** shall mean any injury or occupational illness suffered by a person which arises out of or in the course of his employment.
- (10) **“Occupational Illness”** shall mean any illness caused by environmental factors, the exposure to which is characterized or peculiar to a particular process, trade or occupation and to which an employee or worker is not ordinarily subjected to or exposed outside of or away from such employment.
- (11) **“Recognized Hazards”** are those which do not require technical or testing devices to detect.

- (12) **“Workplace”** means the office, premises or work site, where the workers are habitually employed and shall include the office or place where the workers, who have no fixed or definite work site, regularly report for assignment in the course of their employment.
- (13) **“Approved”** shall mean acceptable to the Secretary in writing after proper examination showing compliance with prescribed Standards.
- (14) **“Code” shall mean the Labor Code P.D. 442 as amended.**
- (15) **“Department”** shall mean the Department of Labor and Employment.
- (16) **“Secretary”** shall mean the Secretary of Labor and Employment.
- (17) **“Bureau”** shall mean the Bureau of Working Conditions.
- (18) **“Director”** shall mean the Director of the Bureau of Working Conditions.
- (19) **“Standards”** shall mean the Occupational Safety and Health Standards.
- (20) **“Enforcement Officer”** shall mean the industrial safety engineer, the labor regulation officer, or any duly authorized representatives of the Secretary to enforce this Standards.
- (21) **“Authorized Representative”** shall mean and include chartered cities, municipalities, employees or officials of other government agencies empowered by the Secretary of Labor and Employment to enforce the provisions of this Standards.

**Department of Labor and Employment:**

- (1) The Department of Labor and Employment shall administer and enforce the provisions of this Standards.

- (2) Every employer shall give to the Secretary or his duly authorized representative access to its premises and records for the purpose of determining compliance with the provisions of this Standards.
- (3) Every establishments or place of employment shall be inspected at least once a year to determine compliance with the provisions of this Standards. Special inspection visits, however, may be authorized by the Regional Labor Office or as authorized under **Rule 1980** of this Standard, to investigate accidents, occupational illnesses or dangerous occurrences, especially those resulting in permanent total disability or death. Inspection or follow-up inspections may be conducted upon request of an employer, worker or a labor union of the establishment.
- (4) The enforcement officer shall determine reasonable periods of compliance with recommendations depending on the gravity of the hazards needing corrections or the period needed to come into compliance with the order.

#### **Application to Other Places of Employment:**

When a condition of employment in workplaces not specifically covered by this Standards is the subject of complaints, the provision of this Standard shall apply.

#### **Application to Transportation:**

Establishments engaged in land, sea and air transportation are not covered except their garages, dry docks, port hangars, maintenance and repair shops.

#### **Application to Mines:**

The activities of a lessee regarding safety of mining installations, surface or underground, within the mining claim or lease, including mine safety, mineral conservation and problem of pollution in establishments or workplaces falling under "Mining Industry" as classified by the National Economic and Development Authority are not covered by this Standards.

### **Application to Chartered Cities and Municipalities:**

The Department of Labor and Employment shall be solely responsible for the administration and enforcement of this Standards in all places of employment except as provided in Rule 1980 of this Standards.

### **Special Inspection, Investigation and Review:**

- (1) Any worker or representative of workers or any concerned person who believes that a violation of any provision of this Standards threatens physical harm or imposes imminent danger to life, may request an inspection by giving full particulars or details regarding such violation or danger to the Regional Labor Office or duly authorized representative. If upon appraisal of such notification, the Regional Office or its duly authorized representative finds reasonable ground to believe that a violation has really been committed or danger exists, a special inspection or investigation shall be conducted immediately. The complainant shall be notified in writing of the outcome of such investigation or inspection, immediately upon its completion.
- (2) The Secretary of Labor and Employment on his own initiative or on complaint of the workers, shall review any failure or refusal of the Regional Labor Office or duly authorized representative to order compliance or issue recommendation with respect to such complaint or reported violation.

### **Duties of Employers, Workers and other Persons:**

- (1) Each employer covered by the provisions of this Standards shall:
  - a. furnish his workers a place of employment free from hazardous conditions that are causing or are likely to cause death, illness or physical harm to his workers;
  - b. give complete job safety instructions to all his workers, especially to those entering the job for the first time, including those relating to the familiarization with their work environment,

hazards to which the workers are exposed to and steps taken in case of emergency;

- c. Comply with the requirements of this Standards; and
  - d. Use only approved devices and equipment in his workplace.
- (2) Every worker shall cooperate with the employer in carrying out the provisions of this Standards. He shall report to his supervisor any work hazard that may be discovered in his workplace.
  - (3) Every worker shall make proper use of all safeguards and safety devices furnished in accordance with the provisions of this Standards for his protection and that of others, and shall follow all instructions given by the employer in compliance with the provisions of this Standards.
  - (4) It shall be the duty of any person, including any builder or contractor or enforcement agent, who visits, builds, renovates, or installs devices, or conducts business in any establishment or workplace, to comply with the provisions of this Standards and all regulations of the employer issued hereunder as well as with other subsequent issuance's of the Secretary.

### **Confidentiality of Trade Secrets:**

All information reported to or otherwise obtained by the enforcement officer in connection with any inspection or proceedings under this Standards, which contains or might reveal a trade secret, shall be considered except that such information may be revealed in any proceeding where it is required or necessary. The Secretary, the Regional Director or duly authorized representative, shall issue appropriate orders to protect the confidentiality of trade secrets.

## **OTHER SAFETY RULES**

### **Promulgation of Rules:**

Safety and health rules may be promulgated, amended, modified, or revoked in the following manner:

- (1) The Bureau, on the basis of information submitted in writing by interested parties or on the basis of information available to it, upon

determination that a Rule should be promulgated or amended in order to serve the objectives of the Code, shall draft a proposed Rule. Conformably with the principle of tripartism, the Bureau may ask the advise and assistance of individuals and organizations, private or public agencies, particularly recognized workers' and employers' organizations, having special knowledge of the proposal under consideration.

- (2) The Bureau shall prepare the proposal taking into consideration suggestions and recommendations available.
- (3) The Directors shall forward the proposal to the Secretary for approval. The Secretary shall within thirty (30) days from receipt thereof act on the proposal. If rejected, same shall be returned to the Bureau with his reasons. After a reconsideration of the returned proposal, the Director shall resubmit his proposal in the manner herein out-lined.
- (4) After approval of the proposal by the Secretary.

#### **Special Rules:**

#### **Work Conditions or Practices Not Covered by Standards:**

Any specific rule applicable to a condition, practice, means, methods, operations or processes shall also apply to other similar work situations for which no specific rule has been established.

#### **Abatement of Imminent Danger:**

- (1) **An imminent danger is a condition or practice that could reasonably be expected to cause death or serious physical harm before abatement under the enforcement procedures be accomplished.**
- (2) When an enforcement officer, finds that an imminent danger exists in a workplace, he shall inform the affected employer and workers of the danger and shall recommend to the Regional Director the issuance of an Order for stoppage of operation or other appropriate action for the abatement of the danger. Pending the issuance of the Order the employer shall take appropriate measures to protect the workers.
- (3) Upon receipt of such recommendation, the Regional Director shall immediately determine whether the danger exists and is of such a

nature as to warrant the issuance of a Stoppage Order or other appropriate actions to minimize the danger.

- (4) The Orders shall require specific measures that are necessary to avoid, correct or remove such imminent danger and to prohibit the presence of any worker in such location where such danger exists, except those whose presence are necessary to avoid, correct or removes such danger or to maintain a continuous process or operation. Where stoppage of operation is ordered, the Order shall allow such correction, removal or avoidance of danger only where the same can be accomplished in a safe and orderly manner.
- (5) Immediately after the issuance of a Stoppage Order, the Regional Director shall furnish the Secretary, through the Director, within forty-eight (48) hours a copy of the Order and all pertinent papers relating thereto, together with a detailed description of the work conditions sought to be corrected, the safety and health rule violated by the employer, and the corrective measures imposed. The Secretary shall review the Order issued by the Regional Director and within a period of not more than five (5) working days, issue a final Order either lifting or sustaining the Order of the Regional Director.
- (6) The Order shall remain in effect until danger is removed or corrected.

### **Suspension of Rules:**

- (1) The Secretary may issue to an employer-applicant a temporary order suspending the affectivity date of a Rule or any part of this Standards for the following reasons:
  - a. the unavailability of professional or technical personnel or of materials and equipment needed to comply with the rule;
  - b. necessary construction or alteration of the prescribed facilities cannot be completed on the affectivity date of the rule;
  - c. the employer is participating in experiments or studies approved or conducted by the Bureau designed to demonstrate new techniques to safeguard the safety and health of workers.
- (2) In such a case, the employer-application shall establish:

- a. the reason why he is applying for a suspension order, specifying the rule or portion he seeks suspension of;
  - b. that he is taking all available and necessary steps to safeguard his workers against the hazards covered by the rule, and that he is prescribing necessary measures, methods, operations and practices which he must adopt and use while the suspension is in effect;
  - c. that he has an effective program for coming into compliance with the rule as quickly as possible, specifying a given date for compliance;
  - d. that he has informed his workers of the application and a copy of the application and reasons thereof have been given to the workers or their duly authorized representative.
- (3) The application shall be submitted to the Regional Director or duly authorized representative, as the case may be, who after hearing the workers or their duly authorized representative shall evaluate and recommend action to the Secretary, through the Director. He may issue an interim order to be effective until the suspension order is issued by the Secretary.
  - (4) The suspension order, including the interim order, shall prescribe the practices, means, methods, operations, or processes which the employer must use and adopt while the order is in effect and while the program for coming into compliance with the rule is being implemented.
  - (5) The suspension order shall not be in effect longer than the period needed by the employer to come into compliance with the rules, or one year, whichever is shorter, renewable for another year, subject to revocation or shortening of the period by the Secretary, if such is warranted.

**Variation Order:**

- (1) If there shall be practical difficulty or unnecessary hardship in complying with the requirements of any rule or provision of this Standards, the Secretary, upon the recommendation of the Director, may issue an order allowing a variation in complying with such requirements, provided that the purpose of such rule or provision is substantially served and the safety and health of the workers remain ensured. The employer affected by such rule or provision may

request in writing the Secretary, thru the Regional Labor Office, to authorize such a variation stating the grounds for the request and the measures to be taken or already being taken.

- (2) An application for a variation shall contain:
  - a. a specification of the rule or provision or portion thereof from which the employer is seeking a variation.
  - b. an attestation from technically qualified person that the employer is unable to comply with the rule and detailed reasons thereof;
  - c. a detailed statement of the measure he will take or is already taking to protect the workers against the hazards covered by the rule or provision; and
  - d. a certification that the workers have been informed and a copy of the application has been furnished the workers or their duly authorized representative.
- (3) A variation order shall stipulate the conditions under which the variation is permitted and shall be applicable and effective only to the particular employer and operations covered by the Order. A variation order shall remain in effect until revoked by the Secretary.

### **Hazardous Workplaces:**

For purpose of this Standards, the following are considered "hazardous workplaces:"

- a. Where the nature of work exposes the workers to dangerous environmental elements, contaminants or work conditions including ionizing radiation, chemicals, fire, flammable substances, noxious components and the like;
- b. Where the workers are engaged in construction work, logging, fire fighting, mining, quarrying, blasting, stevedoring, dock work, deep sea fishing and mechanized farming;
- c. Where the workers are engaged in the manufacture or handling of explosives and other pyrotechnic products;
- d. Where the workers use or are exposed to power driven or explosive powder actuated tools;

- e. Where the workers are exposed to biologic agents such as bacteria, fungi, viruses, protozoa's, nematodes, and other parasites.

## **REGISTRATION**

### **General Provisions:**

Every employer as defined in Rule 1002 (1) shall register his business with the Regional Labor Office or authorized representative having jurisdiction thereof to form part of a data-bank of all covered establishments.

### **Remittable Unit:**

The establishment regardless of size of economic activity, whether small, medium or large scale in one single location, shall be one remittable unit.

### **Period of Registration:**

- (1) Existing establishments shall be registered within sixty (60) days after the affectivity of this Standards.
- (2) New establishments shall register within thirty (30) days before operation.

### **Registration:**

- (1) Registration shall be made in form **DOLE-BWC-IP-3** in three copies and to be submitted to the Regional Labor Office or authorized representatives.
- (2) Registration shall be free of charge and valid for the lifetime of the establishment except when any of the following conditions exists, in which case, re-registration as if it were a new establishment is required:
  - a. Change in business name,
  - b. Change in location,
  - c. Change in ownership, or
  - d. Re-opening after previous closing.
- (3) Registration shall include a layout plan of the place of work floor by floor, in a scale of 1:100 meters white or blue print showing all the

physical features of the workplace including storage, exists, aisles, machinery, clinic, emergency devices and location.

- (4) The registration form may be reprinted or reproduced and the back page may be used for other information.

## **TRAINING OF PERSONNEL IN OCCUPATIONAL SAFETY AND HEALTH**

### **Training Programs:**

- (1) The Bureau, either directly or through accredited organizations, shall conduct continuing programs to increase the supply and competence of personnel qualified to carry out the provisions of this Standards.
- (2) The Bureau shall prescribe training programs which shall, in consultation with the UP Institute of Public Health, World Health Organization and other technical societies, contain provisions requiring the incorporation into the training programs of the latest trends, practices and technology in occupational safety and health.

### **Accreditation:**

The Secretary may issue accreditation or authority to recognized organizations or groups of persons to conduct occupational safety and health training.

### **Criteria for Training:**

- (1) A Bureau-prescribed course of study shall be used or followed by accredited organizations. Any deviation from the prescribed training course must be with the previous approval of the Bureau.
- (2) Provisions for a adequate training facilities for the holding of training including laboratory facilities, library, training rooms and equipment.
- (3) Training staff must be composed of persons recognized by the Bureau, duly trained by and certified to as competent by the Bureau or accredited training organizations.

### **Audit Systems:**

- (1) A regular audit shall be done by the Bureau to determine compliance with the above criteria, the system and method of training, and the quality and effectiveness of the training staff.
- (2) Upon recommendation of the Director, the Secretary may cancel the accreditation if the provisions of this Rule are not complied with.

### **Training and Personnel Complement:**

- (1) The training course prescribed by the Bureau under this rule shall be a requisite for the appointment of the safety man in place of employment.
- (2) At least the following number of supervisors or technical personnel shall take the required training and shall be appointed safety man, full time or part-time depending on the number of workers employed, and the type of workplace whether hazardous or non-hazardous under Rule 1013 of this Standards.

#### **a. Hazardous Workplace:**

##### **Number of Workers**

200 and below	-	One (1) part-time safety man
Over 200 to 1000	-	One (1) full-time safety man
For every 1000 Workers	-	One (1) full-time safety man

#### **b. Non-hazardous Workplace:**

##### **Number of Workers**

Less than 1000	-	One (1) part-time safety man
For every 1000	-	One (1) full-time safety man

- (3) **Duties of the Safety Man:** The duties of the safety man are specified under Rule 1040 of this Standards. A part-time safety man shall be allotted at least **four (4) hours per week to perform the duties as safety man.**
- (4) The employment of a full-time safety man may not be required if the employer enters into a written contract with a qualified

consultant or consulting organization whose duties and responsibilities shall include the following, among others:

- a. to assist, advise or guide the employer in complying with the provisions of this Standards, including the development of health and safety programs;
- b. to make at least a quarterly appraisal of programs and safety performance of the establishment, including the activities of the safety committee;
- c. to be present during scheduled safety inspection by authorized government agents and during regular safety committee meetings; and
- d. in the performance of these activities, to be in the establishment at least six (6) hours a week. The employment of a consultant, however, will not excuse the employer from the required training of his supervisors or technical personnel.

#### **Qualifications of a Safety Consultant:**

- (1) A qualified safety consultant shall mean one who has been a safety and health practitioner for at least five (5) years and has taken the necessary training prescribed by the Bureau.
- (2) Safety practitioners with at least ten (10) years of experience in all fields of occupational safety and health may not be required to undergo the required training provided they secure from the Bureau a certification attesting to their competence to qualify as consultants.
- (3) All safety consultants or consulting organizations, shall be accredited by the Bureau, and registered with the Regional Office concerned.

#### **Prohibition in the Practice of Occupational Safety and Health:**

No person or organization may be allowed hired or otherwise employed in the practice of occupational safety and health unless the requirement of this Rule are complied with.

## **HEALTH AND SAFETY COMMITTEE**

### **General Requirements:**

In every place of employment, a health and safety committee shall be organized within sixty (60) days after this Standards takes effect and for new establishments within one (1) month from the date the business starts operating. In both cases the Health and Safety Committee shall reorganize every January of the following year.

### **Types and Composition of Health and Safety Committee:**

#### **Type A:**

In every workplace having a total of over four hundred (400) workers the following shall compose the Health and Safety Committee:

- Chairman - The manager or his authorized representative who must be a top operating official.
- Members - Two department heads  
Four workers (must be union members, if organized)  
- The company physician
- Secretary - The safety man

#### **Type B:**

In every workplace having a total of over two hundred (200) to four hundred (400) workers, the following shall compose the Health and Safety Committee:

- Chairman - The manager or his authorized representative who must be a top operating official.
- Members - One supervisor  
Three workers (must be union members, if organized)  
The company physician or the company nurse
- Secretary - The safety man

**Type C:**

In every workplace with one hundred (100) two hundred (200) workers, the following shall compose the Health and Safety Committee:

- |           |   |   |
|-----------|---|---|
| Chairman  | - | Manager or his authorized representative            |
| Members   | - | One foreman   |
|           | - | Three workers (must be union members, if organized) |
|           | - | The nurse   |
| Secretary | - | The part-time safety man                            |

**Type D:**

In every workplace with less than one hundred (100) workers, the following shall compose the Health and Safety Committee:

- |           |   |   |
|-----------|---|---|
| Chairman  | - | Manager   |
| Members   | - | One foreman   |
|           | - | Three workers (must be union members, if organized) |
|           | - | The nurse/first-aid                                 |
| Secretary | - | The part-time safety man                            |

In this workplace, the line type as defined in 1048.02 may be organized.

**Type E: Joint Committee**

When two or more establishment are housed under one building, the health and safety committee organized in each workplace shall form themselves into a Joint Coordinating Committee to plan and implement programs and activities concerning all the establishments.

The Joint Coordinating Committee shall be composed of the following:

- |           |   |   |
|-----------|---|---|
| Chairman  | - | The Chairman of the establishment committee   |
| Members   | - | Two supervisors from two different Establishments   |
|           | - | Two workers from two different establishments   |
|           | - | (Union members, if organized)   |
| Secretary | - | Appointed by the Chairman (in high-rise, the Secretary shall be the building administrator) |

### **Membership of Committee:**

The membership as provided are minimum requirements and nothing shall prohibit increases in the number of members as may be found necessary.

Where the workers are not organized, they shall be selected by a simple majority of votes of the workers.

### **Duties of the Health and Safety Committee:**

#### **Health and Safety Committee:**

The Health and Safety Committee is the planning and policy making group in all matters pertaining to safety and health. The principal duties of the Health and Safety Committee are:

- (1) Plans and develops accident prevention programs for the establishment.
- (2) Directs the accident prevention efforts of the establishment in accordance with the safety programs safety performance and government regulations in order to prevent accidents from occurring in the workplace.
- (3) Conducts safety meetings at least once a month.
- (4) Reviews reports of inspection, accident investigations and implementation of program.
- (5) Submits reports to the manager on its meetings and activities.

- (6) Provides necessary assistance to government inspecting authorities in the proper conduct of their activities such as the enforcement of the provisions of this Standards.
- (7) Initiates and supervises safety training for employees.
- (8) Develops and maintains a disaster contingency plan and organizes such emergency service units as may be necessary to handle disaster situations pursuant to the emergency preparedness manual for establishments of the Office of Civil Defense.

#### **Terms of Office of Members:**

#### **Health and Safety Committee:**

In order to provide an opportunity for other workers to become member and participate in safety program planning, a periodic change in membership is encouraged. For this purpose, the term of office of the department hear in the committee may be one (1) year. The term of office of the worker members in Type A and Type B may be for two (2) years each; in Type C, D and E Committees, may all be one (1) year. The chairman, physician or nurse and the safety man shall be permanent members of the committee.

#### **Joint Committee:**

The term of Office of the Chairman and the Members shall be one (1) year. Membership in the Joint Committee shall be rotated among members of the health and safety committees in other establishments.

#### **Duties of the Employers:**

Health and Safety committees play very important roles in eliminating work hazards. Developing workers' interest and participation in the planning and development of safety program is the responsibility of the employer. The employer must exercise the leadership necessary and provide support to make the program work. The principal duties of the employer are:

- (1) Establishes and adopts in writing administrative policies on safety in conformity with the provisions of this Standards outlining therein his responsibility and authority delegated.
- (2) Reports to the enforcing authority in two (2) copies of the policies adopted and the health and safety organization established to carry out the program on safety and health within one month after the organization or reorganization of the health and safety committee.
- (3) Reports to the enforcing authority having jurisdiction at least once in every three (3) months, counting from January, the health and safety program of the organization outlining the activities undertaken including its safety performance, health and safety committee meetings and its recommendations and measures taken to implement such recommendations.
- (4) Acts on recommended measures by the health and safety committee by adopting the elements of the health and safety program in the production process or workplace to inform the committee of his reasons.

#### **Duties of the Workers:**

- (1) Works in accordance with accepted safety practices and standards established by the employer in compliance with the provisions of this Standards.
- (2) Reports unsafe conditions and practices to the supervisor by making suggestions for correction or removal of accident hazards.
- (3) Serves as members of the Health and Safety Committee.
- (4) Cooperates actively with the Health and Safety Committee.
- (5) Assists government agencies in the conduct of health and safety inspection or other programs.

#### **Duties of the Safety Man:**

The principal function of the Safety Man is to act as the employers' principal assistant and consultant in the application of programs to remove the hazards from the workplace and to correct unsafe work practices. For this purpose, the Safety Man has the following duties:

- (1) Serves as Secretary to the Health and Safety Committee. As such, he shall:
  - a. Prepare minutes of meetings;
  - b. Report status of recommendations made;
  - c. Notify members of the meetings; and
  - d. submit to the employer a report of the activities of the committee, including recommendations made.
- (2) Acts in an advisory capacity on all matters pertaining to health and safety for the guidance of the employer and the workers.
- (3) Conducts investigation of accidents as member of the Health and Safety Committee and submits his separate report and analysis of accidents to the employer.
- (4) Coordinates all health and safety training programs for the employees and employer.
- (5) Conducts health and safety inspection as member of the committee.
- (6) Maintains or helps in the maintenance of an efficient accident record system and coordinates actions taken by supervisors to eliminate accident causes.
- (7) Provides assistance to government agencies in the conduct of safety and health inspection, accident investigation or any other related programs.
- (8) For purposes of effectiveness in a workplace where full-time safety man is required, he shall report directly to the employer.

#### **Other Types of Health and Safety Organizations:**

Subject to the approval of the Secretary or his duly authorized representative, the employer may establish in his place of employment the line or staff type of organization.

**Line Type:**

A form of organization where the general manager or head of the establishment directs the health and safety programs and assumes overall responsibility for the safety in the establishment. He in turn delegates the application of health and safety programs to plant personnel occupying line positions.

**Staff Type:**

Staff safety organization or safety engineer type consists of a line organization with specialized personnel employed to advise and assist management in all matters of safety. Said personnel are responsible to the top executive exercising staff functions, serve all departments in an advisory capacity and supervise the application of the health and safety program in the workplace.

## NOTIFICATION AND KEEPING OF RECORDS OF ACCIDENTS AND/OR OCCUPATIONAL ILLNESSES

### Definitions:

For the purpose of this Rule, the following terms are hereby defined:

- (1) *"Medical Treatment Injury"* shall mean an injury which does not result in a disabling injury but which requires first-aid and medical treatment of any kind.
- (2) *"Disabling Injury"* shall mean a work injury which results in death, permanent total disability, permanent partial disability or temporary total disability.
- (3) *"Death"* shall mean any fatality resulting from a work injury regardless of the time intervening between injury and death.
- (4) *"Permanent Total Disability"* shall mean any injury or sickness other than death which permanently and totally incapacitates an employee from engaging in any gainful occupation or which results in the loss or the complete loss of use of any of the following in one accident:
  - a. Both eyes;
  - b. one eye and one hand, or arm, or leg or foot;
  - c. any two of the following not in the same limb, hand, arm, foot, leg;
  - d. Permanent complete paralysis of two limbs;
  - e. Brain injury resulting in incurable imbecility or insanity.
- (5) *"Permanent Partial Disability"* shall mean any injury other than death or permanent total disability which results in the loss or loss of use of any member or part of a member of the body regardless of any pre-existing disability of the injured member or impaired body function.
- (6) *"Temporary Total Disability"* shall mean any injury or illness which does not result in death or permanent total or permanent partial disability but which results in disability from work for a day or more.
- (7) *"Regularly Established Job"* shall mean the occupation or job description of the activities performed by an employee at the time of the accident and shall not mean one which has been established especially to accommodate an injured employee, either for therapeutic reason or to avoid counting the case as disability.

- (8) *“Day of Disability”* shall mean any day in which an employee is unable, because of injury or illness, to perform effectively throughout a full shift the essential functions of a regularly established job which is open and available to him.
- (9) *“Total Days Lost”* shall mean the combined total, for all injuries or illnesses of:
  - a. all days of disability resulting from temporary total injuries or illnesses; and/or
  - b. all scheduled charges assigned to fatal, permanent total and permanent partial injuries or illnesses.
- (10) *“Schedule Charges”* shall mean the specific charge (in full days) assigned to a permanent partial, permanent total, or fatal injury or illness
- (11) *“Employee”* for the purpose of counting injuries or illnesses or calculating exposures shall be defined in Rule 1002 (2) and shall include working owners and officers.
- (12) *“Exposure”* shall mean the total number of employee-hours worked by all employees of the reporting establishment or unit.
- (13) *“Disability Injury Frequency Rate”* is the number of disabling injuries per 1,000,000 employee-hours of exposure rounded to the nearest two (2) decimal places.
- (14) *“Disability Injury Severity Rate”* is the number of days lost per 1,000,000 employee-hours of exposure rounded to the nearest whole number.

**Special Provision:**

Reports made by the employer shall be exclusively for the information of the Regional Labor Office or duly authorized representative in securing data to be used in connection with the performance of its accident and illness prevention duties and activities and is a requirement distinct from that of the Employee's Compensation Commission or any other law. These reports shall not be admissible as evidence in any action or judicial proceedings in respect to such injury, illness or death on account of which report is made and shall not be made public or subject to public inspection except for prosecution for violations under this Rule.

The definitions and standard used here are independent of those established by the Employee's Compensation Commission.

### **Report Requirements:**

- (1) All work accidents or occupational illnesses in places of employment, resulting in disabling condition or dangerous occurrence as defined in 1053.2 shall be reported by the employer to the Regional Labor Office or duly authorized representative in duplicate and a copy furnished the employee or his duly authorized representative using form **DOLE/BWC/HSD-IP-6**. The formal report shall be submitted by the employer on or before the 20<sup>th</sup> day of the month following the date of occurrence of the accident or when the illness is established and an investigation report in the prescribed form shall be submitted by the Regional Office or duly authorized representative on or before the 30<sup>th</sup> day of the same month. In case of temporary total disability where the injured or ill employee has not reported back to duty on the closing date of reporting, an estimate of the probable days of disability shall be made and entered in the report and corrected after the return of the injured, In all computations, this estimates shall be used. After the return of the injured, the corrected days of absence shall be used.
- (2) Where the accident or illness results in death or permanent total disability, the employer, in addition to the written report required under sub-paragraph (1) above, shall initially notify the Regional Labor Office or duly authorized representative within twenty four (24) hours after occurrence using the fastest available means of communication.
- (3) All deaths and permanent total disabilities shall be investigated by the Regional Office or duly authorized representative within forty eight (48) hours after receipt of the initial report of the employer, prepared in duplicate using the prescribed form **DOLE/BWC/OHSD-IP-6a**.
- (1) Any dangerous occurrence as specified in sub-paragraph (2) hereunder, which may or may not cause serious bodily harm to workers employed or seriously damage the premises of employment shall be investigated and reported by the employer upon occurrence to the Regional Labor Office or duly authorized representative having jurisdiction in duplicate using the prescribed form **DOLE/BWC/OHSD-IP-6**.

- (2) The following are dangerous occurrences which shall be investigated and reported:
- a. Explosion of boilers used for heating or power.
  - b. Explosion of a receiver or storage container, with pressure greater than atmospheric, of any gas or gases (including air) or any liquid resulting from the compression of such gases or liquid.
  - c. Bursting of a revolving wheel, grindstone or grinding wheel operated by mechanical power.
  - d. Collapse of a crane, derrick, winch, hoist or other appliances used in raising or lowering persons or goods or any part thereof, the over-turning of a crane, except the breakage of chain or rope sling.
  - e. Explosion or fire causing damage to the structure of any room or place in which persons are employed or to any machine contained therein resulting in the complete suspension of ordinary work in such room or place, or stoppage of machinery or plant for not less than twenty four (24) hours, and
  - f. Electrical short circuit or failure of electrical machinery, plant or apparatus, attended by explosion or fire causing structural damage thereto and involving its stoppage and misuse for not less than 24 hours.

### **Keeping of Records:**

- (1) The employer shall maintain and keep an accident or illness record which shall be open at all times for inspection to authorized personnel containing the following minimum data:
- a. Date of accident or illness;
  - b. Name of injured or ill employee, sex and age;
  - c. Occupation of injured or ill employee at the time of accident or illness;
  - d. Assigned causes of accident or illness;
  - e. Extent and nature of disability;
  - f. Period of disability (actual and/or charged);

- g. Whether accident involved damaged to material, equipment or machinery, kind and extent of damage, including estimated or actual cost; and
  - h. Record of initial notice and/or report to the Regional Labor Office or authorized representative.
- (2) The employer shall accomplish an Annual Work Accident/Illness Exposure Data Report in duplicate using the prescribed form **DOLE/BWC/HSD-IP-6b**, which shall be submitted to the Bureau copy furnished the Regional Labor Office or duly authorized representative having jurisdiction on or before the 30<sup>th</sup> day of the month following the end of each calendar year.

**Evaluation of Disability:  
Charges:**

- (1) Death resulting from accident shall be assigned a time charge of 6,000 days.
- (2) Permanent total disability resulting from work accident shall be assigned a time charge of 6,000 days.
- (3) Permanent Partial disability either traumatic or surgical, resulting from work accident shall be assigned the time charge as provided in Table 6 on Time Charges. These charges shall be used whether the actual number of days lost is greater or less than the scheduled charges or even if no actual days are lost at all.
- (4) For each finger or toe, use only one charge for the highest valued bone involved. For computations of more than one finger or toe, total the separate charges for each finger or toe.
- (5) Charged due to permanent impairment of functions shall be a percentage of the scheduled charges corresponding to the percentage of permanent reduction of functions of the member or part involved as determined by the physician authorized by the employer to treat the injury or illness.
- (6) Loss of hearing is considered a permanent partial disability only in the event of industrial impairment of hearing from traumatic injury, industrial noise exposure or occupational illness.
- (7) The charge due to permanent impairment of vision shall be a percentage of the scheduled charge corresponding to the percentage

of permanent impairment of vision as determined by the physician authorized by the employer to treat the injury or illness.

- (8) For permanent impairment affecting more than one part of the body, the total charge shall be the sum of the scheduled charges for the individual body parts. If the total exceeds 6,000 days, the charge shall be 6,000 days.
- (9) Where an employee suffers from both permanent partial disability and a temporary total disability in one accident, the greater days lost shall be used and shall determine the injury classification.
- (10) The charge for any permanent partial disability other than those identified in the scheduled of time charges shall be a percentage of 6,000 days as a determined by the physician authorized by the employer to treat the injury or illness.
- (11) The charge for a temporary total disability shall be the total number of calendar days of disability resulting from the injury or illness as defined in Rule (8), provided that:
  - a. The day of injury or illness and the day on which the employee was able to return to full-time employment shall not be counted as days of disability but all intervening period or calendar days subsequent to the day of injury or illness shall be counted as days of disability;
  - b. Time lost on a work day or on a non-workday subsequent to the day of injury or illness ascribed solely to the unavailability of medicinal attention or necessary diagnostic aids shall be considered disability time, unless in the opinion of the physician authorized to treat the injured or ill employee, the person will be able to work on all those days subsequent to the day of the injury;
  - c. If the physician, authorized by the employer to treat the injured or ill employee, is of the opinion that the employee is actually capable of working a full normal shift of a regularly established job but has prescribed certain therapeutic treatments, the employee may be excused from work for such treatments without counting the excused time as disability time.
  - d. If the physician, authorized by the employer to treat the injured or ill employee, is of the opinion that the employee was actually capable of working a full normal shift of a regularly

established job, but because of transportation problems associated with his injury, the employee arrives late at his place of work or leaves the workplace before the established quitting time, such lost time may be excused and not counted as disability time. However, the excused time shall not materially reduce his working time, and that it is clearly evident that his failure to work the full shift hours was the result of a valid transportation problem and not a deviation from the “regularly established job”.

- e. If the injured or ill employee receives medical treatment for his injury, the determination of the nature of his injury and his ability to work shall rest with the physician authorized by the employer to treat the injured or ill employee. If the employee rejects medical attention offered by the employer, the determination may be made by the employer based upon the best information available to him if the employer fails to provide medical attention, the employee’s determination shall be controlling.

### **Measurement of Performance:**

### **Exposure to Industrial Injuries:**

Exposure to work injuries shall be measured by the total number of hours of employment of all employees in each establishment or reporting unit. The exposure of a central administrative office or central sales office of a multi-establishment-concern shall not be included in the experience of any one establishment, nor prorated among the establishments, but shall be included in the over-all experience of the multi-establishment.

### **Determination of Employee-Hours of Exposure:**

Employee-hours or exposure for calculating work injury rates are intended to be actual hours worked. When actual hours are not available, estimated hours may be used. Employee-hours shall be calculated as follows:

- (1) *Actual Exposure Hours* - Employees hours of exposure shall be, if possible, taken from the payroll or time clock records and shall include only the actual straight time hours worked and actual overtime hours worked.

- (2) *Estimated Exposure Hours* - When actual employee-hours of exposure are not available estimated hours may be used. Such estimated hours should be obtained by multiplying the total employee days worked for the period by the average number of hours worked per day. If the hours worked per day vary among departments, a separate estimate should be made for each department, and these estimates added to obtained the total hours. Estimates for overtime hours shall be included.

If the employee-hours are estimated, indicate the basis on which estimates are made.

- (3) *Hours not Worked* - Employee-hours paid for but not worked, either actual or estimated, such as time taken for vacation, sickness, barangay duty, court duty, holidays, funerals, etc., shall not be included in the total hours worked. The final figure shall represent as nearly as possible hours actually worked.
- (4) *Employee Living in Company-Property* - In calculating hours of exposure for employees living in company property, only those hours during which employees were actually on duty shall be counted.
- (5) *Employee with Undefined Hours of Work* - Traveling salesman, executives and others whose working hours are defined property, only those hours eight hours day shall be assumed in computing exposure hours.
- (6) All stand-by hours of employees, including seamen aboard vessels, who are restricted to the confines of the employer's premises, shall be counted as well as all work injuries occurring during such hours.

### **Measures of Injury/Illness Experience:**

- (1) *Disabling Injury/Illness Frequency Rates* - The disabling injury/illness frequency rate is based upon the total number of deaths, permanent total, permanent partial, and temporary total disabilities which occur during the period covered by the rate. The rate relates those injuries/illnesses to the employee-hours worked during the period and expresses the number of such injuries/illnesses in terms of a million man-hour unit by the use of the formula:

$$\text{Disabling Injury/Illness Frequency Rate (FR)} = \frac{\text{Number of disabling injury/illness} \times 1,000,000}{\text{Employee-hours of exposure}}$$

The frequency rate shall be rounded to the nearest two decimal places.

- (2) *Disabling Injury/Illness Severity Rate* - The disabling injury/illness severity rate is based on the total of all scheduled charges for all deaths, permanent total and permanent partial disabilities, plus the total actual days of the disabilities of all temporary total disabilities which occur during the period covered by the rate. The rate relates these days to the total employee-hours worked during the period and expresses the loss in terms of million man-hour unit by the use of the formula

$$\begin{array}{lcl} \text{Disabling Injury/Illness} & & \text{total days lost x 1,000,000} \\ \text{Severity Rate (SR)} & = & \text{employee-hours of exposure} \end{array}$$

The severity rate shall be rounded to the nearest whole number.

- (3) *Average Days Charged per Disabling Injury* - The average days charged per disabling injury/illness expresses the relationship between the total days charged and the number of disabling injuries/illness. The average may be calculated by the use of the formula:

$$\begin{array}{lcl} \text{Average days charged per} & = & \frac{\text{Total Day Lost}}{\text{total number of disabling}} \\ \text{Disabling injury/illness} & & \text{Injuries/illness} \end{array}$$

Or

$$\begin{array}{lcl} \text{Average days charge per} & = & \frac{\text{injury severity rate}}{\text{injury/illness frequent rate}} \\ \text{Disabling injury/illness} & & \end{array}$$

## **PREMISES OF ESTABLISHMENTS**

### **General Provisions:**

- (1) **Building premises shall have adequate fire, emergency or danger sign and safety instructions of standard colors and sizes visible at all times, in accordance with table II, "Standard colors of signs for safety instruction and warnings in building premises". (Appendix)**
- (2) Other visible signs that may be needed to direct the driver or motorized vehicle such as STOP, YIELD, and DO NOT ENTER, properly positioned within the compound of the establishment shall be used to increase safety especially during the night.
- (3) Handicapped employees should be restricted only to designated workplace. As far as practicable and feasible they should be provided with facilities for safe and convenient movement with the establishment.
- (4) Good housekeeping shall be maintained at all times through cleanliness of building, yards, machines, equipment, regular waste disposal, and orderly arrangement of processes, operations, storage and filing of materials.
- (5) Personal Facilities: Adequate comfort rooms and lavatories separate for male and female workers; Adequate dressing rooms for female workers and locker rooms for male workers shall be provided, in accordance with article 132, Chapter I, Title III Book III of the Labor Code of the Philippines. The number of comfort facilities for a given number of workers shall conform with the requirement of the Department of Health.

### **Construction and Maintenance:**

- (1) All buildings, permanent or temporary, shall be structurally safe and sound to prevent their collapse.
- (2) Roof shall be of sufficient strength to withstand normal load, typhoons and strong winds in addition to normal weather conditions and where required to carry suspended loads.

- (3) Foundations and floors shall be of sufficient strength to sustain safely the loads for which they are designed and under no condition shall they be overloaded.
- (4) Plans for proposed new construction and alterations or substantial repairs of buildings shall be submitted to the Building Official for examination and approval.

**Space Requirement:**

- (1) Workrooms shall be at least 2.7 meters (8 ft. 10 in.) In height from the floor to the ceiling. Where the rooms are air-conditioned and the process allows free movement; existing heights of not less than 2.4 meters (7 ft. 10 in.) May be allowed.
- (2) The maximum number of persons employed in a workroom are shall not exceed one person per 11.5 cubic meters (400 cu. Ft.). In calculating the area, no deductions shall be made for benches or other furniture's, machinery, or materials but heights exceeding 3 meter (9 ft. 10 in.) Shall not be included.
- (3) Adequate spaces shall be provided between machinery or equipment to allow normal operation, maintenance or repair and free flow of materials under process or in finished form Passageways between machinery or equipment shall not be less than 60 cm. (24 in.)

**Walkway Surface:****Stumbling Hazards:**

- (1) The parts of floors over which any person is liable to walk shall be sufficiently even to afford safe walking and safe trucking of materials.
- (2) Such parts of floors shall be free from holes and splinters, improperly fitted gutters or conduits, protruding nails and bolts, projecting valves or pipes, or other projections or obstructions which create stumbling hazards.

### **Slipping Hazards:**

- (1) Floors, stair-treads and landings shall not be slippery under any condition, or made of any material which will become slippery through wear.
- (2) Stairways, ramps, elevator platform and similar places where slipping may be especially hazardous shall be provided with non-slip walkway surface.

### **Floor and Wall Opening:**

#### **Ladder way Opening:**

Ladder way floor openings shall be guarded on all exposed sides, except at the entrance to the opening, by permanent railings and toe boards. The passage through the railings shall be provided with a barrier or gate so arranged that a person cannot walk directly through the opening.

### **Stairway Openings:**

- (1) Stairway floor opening shall be guarded on all exposed sides by permanent railings and toe boards, except the entrance to the stairway.
- (2) For infrequently used stairways where traffic across the opening prevents the use of permanent railings, the guards shall consist of flush-hinged covers of adequate strength equipped with railings attached there to so as to leave only one side exposed when the covers are open. When the openings are not in use, the covers shall be closed or the exposed sides guarded.
- (3) Hatchway, chute, pit and trap door openings shall be guarded by:
  - a. Removable railings with toe boards on not more than two sides and permanent railings with toe boards on all other exposed sides, or
  - b. Flush-hinged covers as prescribed for stairway floor openings.

### **Manholes and Other Openings:**

- (1) Manhole floor openings shall be guarded by manhole covers of adequate strength which need not be hinged.
- (2) Other floor openings into which persons can accidentally walk shall be guarded either by permanent railings and toe boards on all exposed sides or by hinged-floor opening covers of adequate strength.
- (3) When covers for type (1) or (2) above are not in place, the opening shall be constantly attended to by someone or protected by portable enclosing railings.
- (4) Floor opening into which persons cannot accidentally walk on account of fixed machinery, equipment or wall, shall be guarded by covers having no openings more than 2.5 cm. (1 in.) in width securely held in place.
- (5) All wall openings less than 1 meter (3.3 ft.) from the floor, having a height of at least 75 cm. And a width of at least 45 cm. (18 in.) from which there is a drop of capable of withstanding a load of at least 100 kgs. (220 lbs.) applied in any direction at any point of the top rail or corresponding members except vertically upward.
- (6) All other wall openings, irrespective of their width shall, if their lower edge is either 8 cm. (3.2 in.) or less above floor level on the rear side and 2 meters (6.6 ft.) or more above ground or floor level on the far side, be guarded by:
  - a. A toe board across the bottom of the opening, or
  - b. An enclosing screen either solid or of grills or slat work with opening not more than 2.5 cm. (1 in.) in width capable of withstanding a load of at least 50 kgs. (110 lbs.) Applied horizontally at any point.

### **Construction of Railings:**

- (1) All railings shall be permanently constructed of wood, pipe, structural metal or other material of sufficient strength.
- (2) Standard railings shall be at least 1 meter (3.3 ft.) from the floor level to the upper surface of the top rail.

- (3) Standard railing shall have posts not more than 2 meters (6.6 ft.) apart and in intermediate rail half-way between the top rail and the floor.
- (4) The dimensions of railings and posts anchorage and framing of members shall be such that the completed structure shall be capable of withstanding a load of at least 100 kgs. (220 lbs.) applied from any direction to any point of the top rail.
- (5) Railings of the following types of construction shall be deemed to satisfy tests requirements.
  - a. for wood railings - top rails and posts of at least 5 cm. X 10 cm. (2 in. X 4 in.) stock and intermediate rails of at least 5 cm. X 5 cm. (2 in. X 2 in.) Or by 2 cm. X 10 cm. (1 in. X 4 in.) stock, all such railings shall be smooth and free from large or loose knots, protruding nails or bolts, splinters, fins, slivers, or cracks.
  - b. for pipe railings - top rails and posts of metal pipes of at least 30 mm. (1 in.) Diameter.
  - c. For structural metal railings - top rails and posts of angle iron of at least 38 mm. X 38 mm. X 5 mm. (1.5 in. X 1.5 in. X 0.2 in.) and intermediate rails of angle iron of at least 32 mm. X 32 mm. X 3 mm. (1.3 in. X 1.3 in. X 0.12 in.).
- (6) Railings shall be of sound materials free from defects and all sharp corners rounded and smoothed.

#### **Construction of Toe boards:**

- (1) Toe boards shall be at least 15 cm. (6 in.) In height.
- (2) Toe boards may be made of wood, iron, steel or other equivalent material.
- (3) Toe boards shall be securely fastened in place, with not more than 6 mm. (0.3 in.) Clearance above the floor level.

**Stairs:****Strength:**

All stairs, platform, and landings shall be of sufficient strength to sustain safely a live load of not less than 490 kg/m<sup>2</sup> (100 lbs/ft<sup>2</sup>) with a factor of safety of four (4).

**Width:**

Stairs, except service stairs, i.e., stairs giving access to oiling platforms, shall not be less than 1.10 meters (3 ft. 7 in.) in width, clear of all obstructions, except handrails, and shall in no case be less than 90 cm. (35 in.) Without the handrails.

**Pitch:**

- (1) Except for service stairs, the pitch of stairways be between 30 degrees to 38 degrees from the horizontal but shall not less than 20 degrees or more the 45 degrees.
- (2) Where the pitch is less than 20 degrees, a ramp shall be installed, and where it is more than 45 degrees, fixed ladder shall be provided.

**Height:**

No stairway shall have a height of more than 3.6 meters (12 ft.) Between landings.

**Headroom:**

Headroom shall be provided at all points in the stair well. The vertical clearance shall not be less than 2.0 meters (6 ft. 7 in.) from the top of the tread in line with the face of the riser.

**Treads and Risers:**

- (1) Except for the service stairs, treads shall not be less the 25 cm. (9 in.) in width exclusive of nosing and projections, and the riser shall not be more than 20 cm. (8 in.) And not less than that provided in 1065.03 (1)

- (2) There shall no variation in the width of the treads and the height of the risers in any flight. The top and bottom of any flight of stairs shall be clearly distinguished.

### **Railings:**

- (1) All stairs having four or more risers shall be equipped with stair railings on any open side.
- (2) Enclosed stairways less than 1.12 meters (3 ft.) - 8 in.) width shall be equipped with at least one handrail preferably on the right side descending.
- (3) Stairways 1.12 meter (3 ft. - 8 in.) more in width shall equipped with one stair railing on each open side and one handrail on each enclosed side.
- (4) Stairs railings shall be constructed in a permanent and sufficient manner of wood, pipe, structural metal or other materials of a adequate strength.
- (5) The height of the stair railings from the upper surface of the top rail to the surface of the tread in line with the face of the riser at the forward edge of the tread shall not be more than 90 cm. (35 in.) Or less than 80 cm. (31 in.).
- (6) Handrails shall be continuous throughout a flight of stairs and at landings without obstruction other than those intended to prevent persons from sliding.
- (7) If made of wood, handrails shall be at least 5 cm. X 5 cm. (2 in. X 2 in.) in cross section, and if of metal pipe, at least 2.54 cm. (1 in.) And not more than 6.75 cm. (2 ½ in.) In diameter.
- (8) Handrails mounted directly on walls or partitions shall be fixed by means of brackets attached to the lower side of the rail so as not to interfere with the smoothness of the top and side surface of the rails.
- (9) Brackets shall be spaced not more than 2 meters (6 ft. - 6 in.) apart and shall be of sufficient length to provide a clearance of at least 4 cm. (1.5 In.) between the rails and the wall or any obstruction on the wall.

- (10) The completed structure shall be capable of withstanding a load of at least 100 kgs. (220 lbs.) applied in any direction at any point of the trail.
- (11) The clear width of service stairs, such as stairs in engine and boiler rooms or of stairs leading to service platforms around machinery, shall be at least 56 cm. (22 in.)
- (12) The pitch of service stairs shall not be more than 60 degrees and the width of the treads shall not be less than 15 cm. (6 in.)
- (13) Ramps used by persons for ascent or descent from one level to another shall be limited to a rise of not more than 1 in 10 and shall conform to all construction requirements applying to stairways.
- (14) Ramps subjected to heavy stresses from trucking or handling materials shall be provided with additional strength by the use of heavier stock, closer spacing of posts bracing or otherwise designed with a factor of safety of four (4).

### **Window Openings:**

Window openings at stair landings, where the opening is more than 30 cm. (12 in.) in width and the sill is less than 1 m. 90 cm. (6 ft.) above the landing, shall be guarded securely by bars, slats, or grills to prevent persons from falling through.

### **Fixed Ladders:**

- (1) All metal parts of fittings of ladders shall be made of steel, wrought iron, malleable cast iron or other materials of equivalent strength.
- (2) Fixed ladders shall be installed in the following manner.
  - a. The perpendicular distance from the center line of the rungs to the nearest fixed object on the climbing side of the ladder is at least 90 cm. (35 in.) for a pitch of 75 degrees and 75 cm. (30 in.) For a pitch of 90 degrees.
  - b. The distance from the back of the rungs to the nearest fixed object is at least 15 cm. (6 in.)

- c. Except in the case of ladders equipped with cages, baskets, or equivalent guards, a clearance of 20 cm. (8 in.) from either side of the ladder to a fixed object shall be provided.
  - d. No fixed ladders shall be installed with a pitch over 90 degrees.
- (3) Fixed ladders used to ascend heights exceeding 9 meters (30 ft.).
- a. Shall be provided with landing platform for each 6 meters (20 ft.) Or fraction thereof;
  - b. The sections of the ladder shall be staggered; and
  - c. If (a) or (b) is not practical, ladders equipped with cages, baskets, or equivalent guards shall be provided.

#### **Overhead Walks, Runways and Platforms:**

- (1) Walks, runaways, working platforms or open sided floors 2 cm. (6.6 ft.) or more above the floor or ground level, except platforms used for motor or similar equivalent which do not afford standing space for persons, shall be guarded on all open sides by standards railings and toe boards.
- (2) Runways used for filling tank cars or for oiling purpose may have the railing on one side omitted if necessary but the hazards of falling shall be reduced by the use of runways not less than 56 cm. (22 in.) In width.
- (3) All runways of platforms constructed over conveyors or machinery shall be guarded on all open sides by standards railings and toe boards.

#### **Yards:**

##### **Surface:**

- (1) Plant yards shall be properly drained and graded to facilitate safe access to buildings and safe handling of materials and equipment.

- (2) Properly covered or enclosed drain pools and catch basins shall be provided where necessary.
- (3) Ditches, pits, and other hazardous openings shall be provided with adequate covers, enclosed or surrounded by sufficient guards.
- (4) Walkways, roadways, and railroad tracks shall be carefully laid out in a manner to avoid dangerous grade crossings.

**Walkways:**

- (1) Safe walkways shall be constructed along the shortest line between important points.
- (2) Walkways shall not be located under the eaves of buildings where they may become slippery.
- (3) Where it is necessary for pedestrians to cross railroad tracks or vehicular roadways, bridges or underpasses shall be provided, and the track or roadway should be fenced to prevent direct crossing at such points.
- (4) Walking along railroad tracks by unauthorized persons shall not be allowed.
- (5) Railings shall be installed along walkways, on bridges on steep slopes, at slippery places and at places where pedestrians are liable to injury by passing vehicles.

**Roadways:**

- (1) Roadways for automobiles, tractors, or other vehicles shall be soundly constructed with good wearing surfaces.
- (2) Roadways shall be of adequate width, and where used by two-way traffic shall be at least twice the width of the widest vehicle normally used plus 1.25 m. (4 ft.). Sufficient clearance from overhead structures shall be provided.
- (3) Where the installation of grade or level crossing cannot be avoided such crossing shall be protected.
- (4) Adequate railings or walls shall be provided along bridges, slopes and sharp curves.

**Gates:**

- (1) Where the premises are surrounded by fencing, separate entrance and exit gates shall be provided for pedestrian, vehicular and railroad traffic.
- (2) Gates for pedestrian traffic shall be located at a safe distance from those for vehicular and railroad traffic, shall be of sufficient width to permit the free passage of employees during rush hours, and, if possible shall be located not to cross vehicular or railroad traffic.

**Parking of Vehicles:**

Regulations covering the use of driveways for entry and exit, speed limits, space allotments and methods of parking shall be provided and strictly enforce where parking space is provided for automobiles of the employee.

**Air Supply:**

- (1) Clean fresh air shall be supplied to enclosed workplaces at an average rate of not less than 20 to 40 cubic meters (700 to 1400 cu. Ft.) an hour per worker, or at such a rate as to effect a complete change of air a number of times per hour varying from four (4) for sedentary workers to eight (8) for active workers.
- (2) Where an adequate supply of fresh air cannot be obtained by natural ventilation or where it is difficult to get the desired amount of air at the center of the workrooms without creating uncomfortable drafts near the inlets, mechanical ventilation shall be provided.

**Cleanliness:**

- (1) Dusts, gases, vapors, or mists generated and released in work processes shall be removed at the points of origin and not permitted to permeate the atmosphere of the workrooms.
- (2) Internal combustion engines fueled by gasoline, diesel or liquefied petroleum gas (LPG), installed in workrooms shall be located such that exhaust gases are prevented from permeating the atmosphere of the workrooms.

**Air Movement:**

The air movement in enclosed workplaces shall be arranged such that the workers are not subjected to objectionable drafts. The air velocity shall not exceed 15 meters (50 ft.) per minute during the rainy season and 45 meters (150 ft.) Per minute during the summer season.

**Temperature and Humidity:**

- (1) A temperature suitable for the type of work performed shall be maintained in enclosed workplaces and such temperature shall be increased or decreased and the degree of humidity varied in accordance with the kind of work.
- (2) All employees shall be protected either by insulation of the equipment or by other suitable means against radiation and excessive temperature due to steam and hot water pipes or other heated machinery or equipment.
- (3) In workplaces involving exposure of workers to unduly high or low temperature passage rooms shall be provided so that the workers can gradually adjust themselves to the prevailing temperature.

**FIRE PROTECTION AND CONTROL****General Provisions:**

- (1) All buildings for occupancy used shall be located in areas provided for by applicable zoning regulations of the locality.
- (2) Specific standards in design and construction, occupancy and use of buildings and facilities shall be those prescribed by the Building Code of the Philippines.
- (3) Fires tests of building materials and fire protection equipment used in any place of employment shall be those provided for the Fire Code of the Philippines.
- (4) Standards for the design and installation of indoor, outdoor general storage, sprinkler system and fire protection system shall be those provided for by Chapter 9 of the Philippine Society of Mechanical Engineers (PSME) Code.

## **Definitions:**

When used in this Rule, the following, unless otherwise indicated, shall mean:

- (1) *“Fire-Rating”* - the time duration that a material shall withstand a standard fire exposure test.
- (2) *“Flash Point”* - the minimum temperature in degrees at which material will give off flammable vapor.
- (3) *“Wood-frame Construction”* - a construction in which wooden framework forms the structural support for enclosure walls, floors, and doors.
- (4) *“Slow-burning Construction”* - construction consisting of substantial masonry walls and heavy timber interior.
- (5) *“Fire-resistant Construction”* - construction in which all walls, partitions, floors, stairs, roofs, window frames and sashes, doors and other interior finish, consists of fire-resistant materials designed to withstand, without collapse during burning of the contents of the building for a specified time.

## **Building Construction and Facilities:**

### **Types of Building Constructions:**

- (1) The height of buildings used as places of employment shall be as provided in Table 45a.
- (2) Existing buildings not in conformity with Table 45a shall be given five years to comply with the Standards.
- (3) The number of stories provided in Table 45a may be increased by two if approved automatic sprinkler protection is provided. This provision may be applicable to existing buildings if the discrepancy is only in the number of stories.

### **Segregation:**

Process involving serious explosion and flash-fire hazards shall be located in segregated buildings and only a minimum number of workers required in the process shall be allowed inside at any given time.

### **Exits:**

- (1) At least two exits shall be provided in every floor e basement of every workplace capable of clearing the work area in five (5) minutes.
- (2) Additional exits shall be provided if the travel distance from any occupied space in a high hazard occupancy exceeds twenty-three (23) meters.
- (3) In moderate or low-hazard occupancy, the travel distance shall not be more than thirty-one (31) meters for industrial establishments, sixty-one (61) meters for business establishments and thirty and one-half (30.5) meters for mercantile and commercial establishments.
- (4) If approved automatic-sprinkler protection is installed, the travel distance in high-hazard occupancy may be increased to twenty-five (25) meters and for moderate or low-hazard occupancy may be increased to forty-six (46) meters.
- (5) The width of the exits shall be computed by dividing the total occupants of a floor or a storey (maximum allowable) by sixty (60) in industrial and commercial establishments by forty-five (45) in service establishments, and by seventy-five (75) in places of assembly and the quotient multiplied by fifty-five (55) to get the width of the exit in centimeters.
- (6) On every floor, except the ground floor, one of the exits shall lead to an inside stairway or a smoke-proof tower, while the other exits shall lead to inside stairways, smoke-proof towers or horizontal exits.
- (7) Slide escapes may be considered as exits in buildings housing high hazard occupancies but these shall not constitute more than twenty-five (25) percent of the total number of the required means of egress.

- (8) Safe, continuous and unobstructed passageways with a minimum width of at least one meter, but not less than the width of the exist, shall be provided and maintained.
- (9) No steps or stairs shall be used in horizontal exits. When there is a difference in level between cemented floor areas, ramps or inclines of not more than one to ten (1 to 10) slopes shall be installed.
- (10) The construction of the exits, including stairs and means of illumination, shall be in accordance with the provisions of the Building Code and the Electrical Code of the Philippines. In the absence of such provisions, the Fire Code of the Philippines shall apply.

**Stairways:**

- (1) Stairs, platform, stairways and landings in buildings of any type of construction over three (3) stories in height used as fire exits shall be constructed of incombustible materials.
- (2) Building over three (3) stories in height of non-fire resistant construction and with roofs having a slope of less than 1 in 4, at least one stairway shall extend through the roof.
- (3) All stairways used as fire exits shall lead directly to the street or through fire resistant passages with a width of at least equal to the aggregate width of all exits discharging through such passages.
- (4) All approaches to fire exits shall be cleared of any obstruction and properly marked to make the direction of egress clear.

**Fire Doors:**

- (1) Stairway enclosures, fire exits and partitions shall be provided with fire doors of the self-closing type and easily opened from either side towards the line of travel in leaving the building except the last floor which should open away from the exit.
- (2) Doors giving access to stairways shall not open directly on stairs, but shall open on landing leaving a path of travel equal to at least the width of the door at any point during its swing.

- (3) Doors swinging on both sides, vertical-sliding doors, rolling shutters and revolving doors shall not be allowed as exits.
- (4) Where for practical reasons swinging doors are not suitable, horizontal sliding doors may be used.
- (5) Door from stairways to the outside of the building shall have a width equal to at least the effective width of the stairs.
- (6) Door leading into or out of any building or floor shall not be locked or fastened during period of occupancy.

**Installation of Facilities:**

Installation of building facilities like hot water pipes, chimneys, or heat producing appliances shall be as provided in this Standards.

**Storage:**

- (1) Significant quantities of commodities with fire hazards greater than ordinary combustible commodities shall be separated from the main bulk by fire walls.
- (2) Commodities which may be hazardous when combined with each other shall be stored separately to prevent contact with each other.
- (3) Water absorbed during fire fighting operations shall be considered in the determination of safe floor loads.

**Fire-Fighting Facilities:****General Requirements:**

- (1) Portable installations, vehicles, except those for public utility, are subject to the provisions of this Standards.

**Water Supply:**

- (1) Where connection from a public water supply system is not available, an adequate private water supply reservoir capable of supplying all fire fighting systems for eight (8) hours shall be provided.

- (2) Supply system, including tanks or reservoir and pumps, shall be located and protected that their operation or use will not be impaired by a fire in the workplace.

#### **Hydrants:**

- (1) Hydrants shall be of the same types and sizes as those used by the local public fire department and located or protected that they will not be exposed to mechanical damage from vehicles.

#### **Hose:**

- (1) Hose couplings, outside hydrants or standing nipples shall be the same and size as those used by the local public fire department.
- (2) Hose shall be thoroughly drained and dried after use, and tested at frequent intervals or at least once every four (4) months.

#### **Portable Extinguisher:**

- (1) *General Requirement:*
  - a. all places of employment, including those where automatic-sprinkle protection system is installed, shall be provided with portable fire extinguishers for protection against incipient fires;
  - b. portable extinguishers shall be maintained in fully charged and operable condition and kept in their designated places at all times when not in use;
  - c. Approved fire extinguishers shall be used;
  - d. extinguishers shall be installed on hangers or brackets conspicuously located in unobstructed areas readily accessible in the event of fire;
  - e. extinguishers having group weight not exceeding 18 kilograms shall be installed so that the top is not more than 1.5 meter above the floor. Those exceeding 18 kgs., except wheeled types, shall be installed not more than 1 m. Above the floor;

- f. extinguisher shall be inspected monthly or at more frequent intervals when circumstances require to ensure they are in their designated places, to determine physical damages and that they are in good operable condition;
- g. at regular intervals of not more than one year, or when specifically indicated by an inspection, extinguishers shall be thoroughly examined, recharged or repaired; and
- h. on the place where extinguishers are located, the type and use of the extinguishers and instructions on its proper use shall be marked in visible and easily readable letters.

(2) *Selection of Extinguishers:*

Extinguishers shall be selected for the specific class or classes or hazards to be protected against in accordance with the following:

- a. Extinguishers for Class “A” hazards, such as wood, cloth, paper, rubber and other similar ordinary materials, shall be selected from foam, loaded stream, multi-purposed dry chemical and water types;
- b. Extinguishers for Class “B” hazards, fires in flammable liquids, gases and greases, shall be selected from carbon dioxide, dry chemical, foam, loaded stream and multi-purpose dry chemical;
- c. Extinguishers for Class “C” hazards, fires which involve energized electrical equipment where the electrical non-conductivity of the extinguishing media if of importance, shall be selected from carbon dioxide, dry chemicals, and multi-purpose dry chemicals;

When the electrical energy is disconnected. Class “C” fire may be treated as either Class “A” or Class “B”;

- d. Extinguishers for protection of Class “D” hazards fire in combustible metals, such as magnesium, titanium, zirconium, sodium and potassium, shall be of types approved for use on the specific combustible metal hazard. Only suitable dry powder extinguishers shall be used for metal fires;
- e. Toxic vaporizing extinguisher is not recommended for any type of fire;

- f. Extinguishers which need to be inverted to operate are not recommended for use;
- g. Soda acid fire extinguisher is not recommended for use.

(3) *Distribution of fire extinguishers:*

- a. Extinguisher for light hazards Class "A" fires, where the amount of combustible or flammable materials present are of such quantity that fires of small size may be expected in offices, schoolrooms, churches, assembly halls and other similar places shall be located that a person will not travel more than thirty (30) meters from any point to reach the nearest extinguisher. One (1) unit of five to six (5 to 6) quarts (1 ¼ to 1 ½ gal.) Foam extinguisher for every 250 sq. Meters (2,500 sq.) Ft.) of floor area or a greater fraction thereof shall be provided;
- b. Extinguishers for ordinary hazards Class "A" fires, where the amount of combustible or flammable material present are such that fires of moderate size may be expected in mercantile storage and displays auto showrooms, parking garages, light manufacturing, warehouses not classified as extra hazard, school shops and other similar places shall be provided and located that a person will not travel for more than fifteen (15) meters from any point to reach the nearest extinguishing capacity for every 125 sq. Meters of floor area or a greater fraction thereof;
- c. Extinguishers for extra hazards Class "B" fires, where the amount of combustible or flammable materials present is such that fires of severe magnitude may be expected in woodworking auto repair, air craft servicing, warehouses with high piled (5 meters or over) combustible processes, such as flammable liquid handling, painting and other similar areas shall be provided with a 2.7 kegs. Dry chemical for every sixty (60) sq. Meters of floor area or a greater fraction thereof;
- d. For deep-layer flammable liquid Class "B" fires in deep or quench tanks, at least one numerical unit of extinguisher potential shall be provided for every sixty (60) sq. meters of floor area or a greater fraction thereof. The travel distance to reach the nearest extinguishers shall not be more than fifteen (15) meters. Multiple smaller extinguishers shall not be used in lieu of larger units required;

- e. Extinguishers suitable for Class “B” fires are not acceptable in lieu of the required extinguishers for Class “A” fires unless it has also a Class “A” rating. An extinguisher carrying both Class “A” and “B” ratings may be accepted for area requirements under each individual letter classification and at the numerical rating for that class;
- f. Extinguishers with Class “C” rating shall be required where energized electrical equipment may be encountered. The size and location shall be on the basis of the anticipated Class “A” or “B” hazards;
- g. Extinguishers shall have a durable tag securely attached to show the maintenance and re-charge data and containing the signatures of persons performing the service;
- h. Extinguishers shall be properly marked to indicate the suitability of the extinguishers for particular class of fires;
- i. Extinguishers shall be hydrostatically tested before use and periodically tested at least once in every five (5) years or as may be required by the enforcing authority when inspection indicate the need for such examination;

#### **Flammable and Combustible Liquids:**

- (1) This requirement shall apply to liquids with a flash point of not more than 93.3 degree Celsius.
- (2) Liquids of flash points above 93.3 degree Celsius which may assume the characteristic of lower flash points liquids when heated shall be covered by this provision.

#### **Tank Storage:**

- (1) tank used for flammable and combustible liquids shall be built of steel.
- (2) Tank may be built of materials other than steel for underground installation or if required by the properties of the liquid stored be designed to specifications approved for the purpose.

- (3) Unlined concrete tanks may be used for storing flammable or combustible liquids having a gravity of 40 degrees or heavier.
- (4) Tanks located above ground or inside buildings shall be of non-combustible construction.

#### **Design and Fabrication:**

- (1) The design and specification used in the construction and installation of tanks shall be as provided under applicable regulations of the American Petroleum Institute and the ASME Boiler and Pressure Vessels Code, which are adopted for this purpose.
- (2) Plans for fabrication and fabrication processes shall be approved and supervised by the Bureau.

#### **Installation of Outside Tanks:**

- (1) Every above ground tank for the storage of flammable or combustible liquids, except those liquids operating at pressures not in excess of 2.5 psig. And equipped with emergency venting which will not permit the pressure to exceed 2.5 psig., shall be located in accordance with Table 45b.
- (2) Every above ground tank for the storage of flammable or combustible liquids, except those liquids with boil-over characteristics and unstable or combustible liquids operating at pressure exceeding 2.5 psig. and equipped with emergency venting which will permit pressure to exceed 2.5 psig. Shall be located in accordance with Table 45 c.
- (3) Every above ground tank for the storage of flammable or combustible liquids with boil-over characteristics shall be located in accordance with Table 45 d.
- (4) Every above ground tank for the storage of unstable liquid shall be located in accordance with Table 45e.
- (5) Reference distances for use in Table 45b-e shall be as provided in Table 45f.

- (6) The distance between two storage tanks shall not be less than three (3) ft., except two tanks of diverse ownership where the Regional Office or authorized representative may substitute the distances provided in Table 45b-e on the written request and consent of the owners.

#### **Drainage, Dikes and Walls of the Above Ground Tanks:**

- (1) The area surrounding a tank or group of tanks shall be provided with drainage to prevent the accidental discharge of liquid to adjoining property or reaching waterways. When the tanks under consideration do not constitute a hazard to adjoining property, the Regional Office or authorized representative may waive or suspend this provision.
- (2) To volumetric capacity of the drainage shall not be less than the amount of the full liquid content of the largest tank within the diked area.

#### **Installation of Tanks Inside of Buildings:**

Tanks shall not be installed inside buildings except service or supply tanks with a capacity of not more than six (6) gals.

#### **Installation of Underground Tanks:**

- (1) The distance from any part of tanks storing liquids having flash points below 37.77 degrees Celsius (100 degrees F) to the nearest wall of a building, basement or pit shall not be less than 30.50 cm. (1 ft.); and the property line, not less than 91.50 cm. (3 ft.).
- (2) The distance from any part of a tank storing liquids having flash points at or above 37.77 degrees C (100 degrees F) to the nearest wall of a building basement pit or property line shall not be less than 30.50 cm. (1 ft.).
- (3) Underground tanks shall be set on firm foundations and surrounded with at least six (6) inches of non-corrosive inert material well tamped in place. Tanks shall be covered with a minimum of two feet of earth or four inches reinforced concrete slab on top of one foot of earth.

- (4) Vent pipes shall terminate outside of buildings and higher than the fill opening. The size of the vent shall depend on the filling or withdrawal rate to prevent the pressure in tank to exceed, 2.5 psig.

#### **Service Stations:**

- (1) Tank used in automotive service stations shall be buried as provided in Rule 1945.06 but with at least six inches thick reinforced concrete slab over one foot off earth.
- (2) There shall be only a maximum of three tanks in one service station containing 6,000 gallons per tank and a total aggregate of 18,000 gallons.
- (3) Above ground tanks used in automotive stations shall be as provided in Rule 1945.05.
- (4) There shall be no smoking or open flames in the area and the motors of all equipment being fueled shall be shut off.

#### **Processing and Bulk Plants:**

All buildings, installations and operations in processing and bulk plants shall be as provided in Rule 1160 and the Philippine Electrical Code.

#### **Other Installations:**

All other tanks installed not in conformity with this Rule shall reduce their contents to comply with the distance requirements. Those to be installed shall be with the prior approval of the Department.

#### **Combustible Solids:**

#### **Nitrate Motion Picture Film:**

- (1) Nitrate picture film shall be stored or handled in buildings of fire-resistant construction.
- (2) All rooms where nitrate motion picture films are stored or handled, except motion picture projection rooms and films vaults, shall be

- separated from each other and from all other parts of the building by partition or suitable stability and fire-resistance. The partitions shall be continuous from the floor to ceiling and securely anchored to walls, floor and ceiling
- (3) Opening in partitions shall be protected by approved fire door of a type suitable for the purpose.
  - (4) Rooms in which nitrate motion picture films are handle through which workers pass shall be provided with a minimum aisle of 80 cm. (31.24) width.
  - (5) Explosion vents shall be provided in rooms or vaults used for storing and handling nitrate films.
  - (6) There shall be at least 3.25 sq. m. of floor area allotted to each worker in every room and not more than 15 persons shall work at any time in a room where nitrate film is handled.
  - (7) Tables and racks used in connection with the handling of film (joining, inspection and assembling tables) shall be non-combustible, or shall be of wood construction with no member less than 3.75 cm. And kept at least 10 cm. Away from any radiator or heating apparatus.
  - (8) In rooms where nitrate film is stored or handled, artificial illumination shall be restricted to incandescent or fluorescent electrical lights. Light fixture shall be firmly set in place and provided with guards to avoid mechanical injury.

### **Propylene Plastics:**

- (1) Buildings used in the fabrication of propylene plastics shall be of fire-resistant materials. However, building for factory use may be of non-fire-resistant construction but shall not exceed four stories or 17 meters in height.
- (2) All portions of buildings used in whole or in part for the fabrication or propylene plastics shall be provided with adequate aisle space and have at least two exits remote from each other.
- (3) No propylene plastic shall be stored within 1 meter from steam pipes, chimneys and other heating apparatus nor within 6 meters from any manufacturing operations. Heating equipment containing

ignition sources shall not be permitted in any room used for storage.

- (4) Smoking is prohibited in any establishment handling and storing propylene plastics and conspicuous "No Smoking" signs shall be posted in prominent places.
- (5) Fire fighting equipment of the right type and number shall be provided.

### **Magnesium:**

#### **A. Melting and Casting:**

- (1) Melting operation shall be done in buildings of non-combustible materials preferably with a high roof for adequate ventilation.
- (2) Pots and crucibles shall be inspected regularly and discarded as soon as there is any evidence of possible failure. Safety run-off containers shall be provided for melting pots and crucibles.
- (3) Ladles, skimmers and sludge pans must be thoroughly prettied and not before contacting molten metal.
- (4) Flame-resistant clothing, high foundry shoes, and adequate face protection shall be used by employees working in melting and casting operations.

#### **B. Rough Finishing and Castings:**

- (1) Provisions shall be made for the proper removal of dust produced by grinders and for the immediate quenching of sparks produced. Cuttings from band saws should be swept up at regular intervals to prevent excessive accumulation in the work area.
- (2) Work benches and other equipment shall be non-combustible materials. If wood table tops or other fixtures of wood or combustible materials are considered necessary, these shall be treated to render them fire retardant and free cracks or recesses in which magnesium dust can accumulate.
- (3) Operators shall wear caps and hard finished or fire-resistant outer clothing without pockets or cuffs.

#### **C. Heat Treating:**

- (1) Thermocouples used to operate the temperature devices shall be properly maintained to prevent overheating.
- (2) Furnace should be tested initially and at regular intervals to locate undesirable high temperature areas.
- (3) Furnace shall be properly and tightly constructed. Gas or oil-fired furnaces shall be provided with combustion safety controls. All furnaces shall have two sets of temperature controls operating independently, one maintaining the desired temperature and the other for high temperature limit control. The high temperature limit control shall be adjusted to operate at a temperature slightly above the controller. In case the latter fails, the limit switch shall cut off the power preventing ignition of the magnesium.
- (4) Magnesium to be put in a heat treating furnace should be carefully freed of magnesium turnings, chips and sawdust.
- (5) Magnesium billets, castings and wrought products must not be placed in a heat treating furnace with wood spacers or other materials below the normal heat treating ranges of magnesium.
- (6) Aluminum parts, sheets or separators must not be included in a furnace load of magnesium.
- (7) The heat treating temperature cycle recommended by the alloy manufacturer shall be strictly adhered to.
- (8) Molten salts containing nitrates shall not be used for heat treating magnesium alloys.

D. Machining Magnesium:

- (1) Tools used for machining shall not be allowed to ride on the metal without cutting.
- (2) When holes with depths greater than five times the drill diameter are being drilled in magnesium, a high helix drill (45) degrees shall be used to prevent the packing of chips causing resultant frictional heating and possible flash fire in the fine chips.
- (3) Machinery used for machining and drilling shall be provided with pans to catch the chips or turnings so installed that the pans can be readily withdrawn from under the machine in case of fire.

**Titanium:**

- (1) Buildings in which reaction chambers and furnaces are used in the processing of titanium, shall be fire-resistant or of non-combustible materials.
- (2) The main building shall have adequate ventilation and doors at more than one location shall be remote from each other. Dry rooms shall be of fire resistant materials.
- (3) Floors in furnace rooms and dry rooms shall be of noncombustible materials, preferably of concrete, brick or steel plates. Floors shall be slightly crowned or sloped to prevent accumulation of water in the vicinity of the reactors or furnaces and safety run-offs shall be provided to direct or contain any spills of molten metal into safe channels.

**B. Storage:**

- (1) Containers of titanium tetrachloride shall be stored in a cool, well ventilated dry place away from the areas of acute fire hazards. Containers shall be labeled plainly and stored carefully to avoid mechanical injury.

**C. Mechanical Equipment:**

- (1) Furnaces and reaction chambers shall be inspected and checked regularly to detect defects and leaks, No equipment found to be defective shall be used until the damaged parts are replaced or repaired and properly tested to ensure safe operation.
- (2) Furnaces setting must be kept dry and free iron scales.
- (3) Fuel supply lines shall have the control valves at an accessible location remote from the reactors.
- (4) Benches, stands, and tables used in furnaces rooms where special fire hazards exist shall be of noncombustible materials.

**D. Fire Prevention:**

- (1) The process that produces titanium sponge shall be carried out in enclosed oxygen-free containers.
- (2) An inert-gas dispensing system shall be installed for processing inert-gas requirement.

- (3) All pipes, fittings, and valves in the inner gas dispensing or distributing system shall be checked to ensure an uninterrupted flow of gas to the reactors.
- (4) All containers used to receive molten metal shall be thoroughly dried before using. All metals added to melting pots containing molten metal shall be thoroughly pre-dried.
- (5) Good housekeeping is essential. Supplies shall be stored in an orderly manner with properly maintained aisles to permit regular inspection and segregation of incompatible materials.
- (6) Ordinary combustible materials such as paper, wood, cartons and packing materials must not be stored or allowed to accumulate near furnaces or other ready sources of ignition.
- (7) Supplies or materials in the reactor building and dry rooms shall be limited to the amount needed for normal eight-hour operation.

E. Fire Protection:

- (1) Only extinguishers of the type developed especially for combustible metal fires shall be used for controlling and containing small titanium fires.
- (2) Portable fire extinguishers of appropriate size and type shall be provided at locations where the presence of ordinary combustibles constitute the principal hazard.
- (3) Where automatic sprinkler protection is provided, a deflecting shield or hood shall be provided for the furnaces, reactors or other places where hot or molten may be present.

F. Safety Precautions for Personnel:

- (1) Special clothing of the type worn by foundry workers, including high foundry man shoes, shall be worn by employees engaged in tapping operations at the furnaces in titanium sponge plants. Clothing shall be fire retardant, easily removable with snap fasteners and without cuffs or pockets. Caps, or hoods and standard type face protectors shall be worn by workers tapping furnaces. Persons working with titanium or transferring it into or out of the storage shall wear protective clothing designed to provide protection against skin contact and of the approved type of respirators and chemical goggles.

**G. Casting:**

- (1) All titanium furnace crucible molds shall be designed to avoid the contact of molten metal with water.
- (2) When titanium is being cast, provisions shall be made to retain spilled metal under vacuum or inert gas protection and contact with water shall be prevented.
- (3) As in other casting operations, molds shall be prettied and heated to remove volatile before molten metal is poured into them.

**H. Forging:**

- (1) Fire protection in forging areas may be of the type generally provided for fires in ordinary combustibles, electrical or oil fires.

**Zirconium:**

- (1) Good housekeeping shall be maintained. Periodic cleaning, collection of dust at the point of operation and removal of dust and fine scrap from the premises shall be considered important steps in any fire prevention program.
- (2) Machining operation shall be conducted under controlled conditions to prevent dust dispersion and excessive heating may lead to ignition of the zirconium.

**Electrical Installation:****General Requirements:**

All electrical installation shall be in accordance with the provisions of Rule 1210.

**Emergency Systems:**

Emergency lighting system shall be provided to automatically light emergency exits in case of failure of the main electrical power line.

**Alarm System and Fire Drills:****Sounding Devices:**

- (1) All buildings having two or more stories in height shall be equipped with fire alarm system and signals of distinctive quality and pitch clearly audible to all persons inside the building.
- (2) Hand-operated sending stations of fire alarm boxes shall be provided on every floor and located that the travel to reach a station is not more than thirty (30) meters for industrial and commercial establishments with moderate or low hazard occupancy.
- (3) Fire-alarm stations shall be conspicuous, readily accessible, and in the natural path of escape from fire.
- (4) Hand operated sending stations of fire alarm boxes shall be provided on every floor and located such that the travel to reach a station is not more than sixty-one (61) meters for business establishments with moderate or low hazard occupancy.

**Fire-fighting Drills:**

- (1) Every place of employment depending on the magnitude of potential fires and the availability of assistance from the public fire department shall organize a fire brigade to deal with fires and other related emergencies.
- (2) The members of the fire brigade shall be physically qualified for the job and properly trained on fire-fighting, use of hose, line, ventilation of buildings, salvage operations, rescue operations, first aid, and other related activities.

**Fire Exit Drills:**

- (1) Fire-exit drills shall be conducted at least twice every year to maintain an orderly evacuation of buildings, unless the local fire department requires a higher frequency of fire drills.
- (2) Fire exit drills shall only include evacuation of persons and shall not include salvage operation.

- (3) In buildings where the population is of a changing character, the fire-exit training of the regular employees shall include the proper procedure to direct other occupants to safety.
- (4) Occupants of each department, floor or portion of the building shall be designated a particular place to assemble outside of the building and in places that will not hamper fire-fighting.
- (5) When two or more establishments occupy a building, fire exit drills shall be planned as if there is only one (1) establishment.
- (6) The organization and the composition of a fire-exit drill committee shall be as provided by the requirements of the local fire department.
- (7) Fire brigade as required by the local department or the Fire Code shall be organized

**Table 45 a****Occupancy Hazards**

Type of Construction

	Low	Moderate	High
: Wood - Frame	: 3 stories	: 2 stories	: 1 storey
: Slow - Burning	: 7 stories	: 6 stories	: 4 stories
: Fire - Resistant	: No limit	: No limit	: 5 stories

## OCCUPATIONAL HEALTH SERVICES

### General Provisions:

- (1) Every employer shall establish in his place of employment occupational health services in accordance with the regulation and guidelines provided for under this rule.
- (2) The employer, the workers, and their representative, where they exist, shall cooperate and participate in the implementation of the organizational and other measures relating to occupational health services.

### Coverage:

- (1) This Rule shall apply to all establishments whether for profit or not, including the Government and any of its political subdivisions and government-owned or controlled corporations.
- (2) The Bureau of Dental Health Services of the Department of Health shall be responsible for the development and enforcement of dental standards.

### Definitions:

As used in this Rule, except where the context clearly indicates otherwise, the following terms shall mean as herein defined:

- (1) *“Occupational Health Services”* are services entrusted with essentially preventive functions and responsible for advising the employers, the workers, and their representatives, in the establishment/undertaking of the following:
  - a. The requirements for establishing and maintaining a safe and healthy working environment which will facilitate optimal physical and mental health in relation to work, and
  - b. The adaptation of work to the capabilities of workers in the light of their state of physical and mental health.

- (2) *“Occupational Health Personnel”* in an establishment/undertaking refers to the qualified first-aid, nurse, dentist, or physician, whose service/services have been engaged by the employer in order to provide occupational health services in the establishment/undertaking.
- (3) *“First Aid Treatment”* means adequate, immediate and necessary medical and/or dental attendance or remedy given in case of injury or sudden illness suffered by the workers, irrespective of whether or not such illness/injury is occupational in nature, before more extensive medical and/or dental treatment can be secured. It does not include following treatment for an injury or illness.
- (4) *“First Aider”* means any person trained and duly certified or qualified to administer first-aid by the Philippine National Red Cross or by any organization accredited by the same.
- (5) *“Occupational Health Practitioner”* refers to a physician, nurse, engineer, dentist or chemist duly licensed to practice his/her profession in the Philippines and possessing all of the additional qualifications required under Rule 1964.01.
- (6) *“Emergency Treatment Room”* means any enclosed area or room equipped with the necessary medical facilities and supplies, and located within the premises of the establishment where workers may be brought for examination and treatment of their injuries or illnesses in cases of emergency.
- (7) *“Emergency Clinic”* means an enclosed area, room or building, located within the premises of the establishment, and equipped with the necessary medical facilities and supplies, where workers may be brought for examination and treatment of their injuries or illnesses in case of emergency, where more elaborate instruments and equipment's (such as examining bed, oxygen tank) are made available for the workers, and where the services of a more competent medical staff are provided, who may handle or treat a few simple cases of injuries or illnesses needing short-term confinement, or may refer such cases to hospitals.

## **Occupational Health Services:**

- (1) Functions: Without prejudice to the responsibility of each employer for the health and safety of the workers in his employment, and with due regard to the necessity for the workers to participate in matters of occupational health and safety, occupational health services shall have the following functions as are adequate and appropriate to the occupational risks of the establishment/undertaking.
- a. Identification and assessment of the risks from health hazards in the workplace;
  - b. Surveillance of the factors in the working environment and working practices which may affect the worker's health, including sanitary installations, canteens, and housing where these facilities are provided by the employer;
  - c. Advice on planning and organization of work, including the design of the workplace, on the choice, maintenance, and condition of machinery and other equipment, and on substances used in work;
  - d. Participation in the development of programs for the improvement of working practices as well as testing and evaluation of health aspects of new equipment;
  - e. Advice on occupational health, safety and hygiene, and on ergonomics and individual and collective protective equipment;
  - f. Surveillance of worker's health in relation to work;
  - g. Promoting the adaptation of work to the workers;
  - h. Collaboration in providing information, training and education in the fields of occupational health and hygiene and ergonomics;
  - i. Organizing of first-aid and emergency treatment; and
  - j. Participation in analysis of occupational accidents and occupational diseases.

### **Organization and Preventive Services:**

- (1) Occupational health services maybe organized by:
  - a. The establishment/undertaking
  - b. Government authorities or official services recognized by the Bureau
  - c. Social security institution
  - d. Any other bodies authorized by the Bureau
  - e. A combination of any of the above.
- (2) Occupational health services organized as a service for a single small-scale establishment shall have an occupational health practitioner as one of its personnel, who shall conduct an inspection of the workplace:
  - a. at least once every two (2) months for hazardous small-scale establishments employing 1 to 50 workers;
  - b. at least once every month for hazardous small-scale establishments employing 51 to 99 workers;
  - c. at least once every six (6) months for non-hazardous establishments employing 1 to 99 workers.
- (3) Occupational health services organized as a service for a single, non-hazardous medium-scale establishment employing 100 to 199 workers, shall have an occupational health practitioner as one of its personnel who shall conduct an inspection of the workplace at least once every three (3) months.
- (4) Occupational health services organized as a service for a single, hazardous medium-scale establishment employing 100 to 199 workers shall have a part-time occupational health physician as one of its personnel, who shall perform the duties of an occupational health physician as provided for under Rule 1965.02
- (5) For hazardous and non-hazardous large-scale establishments employing 200 workers and more occupational health services shall be organized as a service solely for a health physician, in accordance with the provisions of Rule 1963, as one of its personnel. Such occupational health physician shall perform the

duties of an occupational health physician as provided for under Rule 1965.02

- (6) When an occupational health service is organized as a service common to a number of establishments/undertakings, the following regulations shall be followed:
  - a. for small-scale industries, the total number of establishments shall not exceed ten (10).
  - b. For medium-scale industries, the total number of establishments shall not exceed four (4).

#### **Hazardous Workplace:**

For purposes of this Rule, the Bureau shall, with the approval of the Secretary, add from time to time to the list of hazardous workplaces provided in Rule 1010.

#### **Emergency Health Services:**

##### **Medicines and Facilities:**

- (1) Every employer covered by this Rule shall keep in his workplace at least the minimum quantity of medicines, medical supplies and equipment's and medical facilities listed in Table 9 (appendix) on medicines. Supplies and facilities, for the use of the workers employed in the establishment/undertaking.
- (2) The medicines, medical supplies and facilities prescribed in table 9 maybe substituted with other comparable medicines and/or facilities as prescribed by the occupational health physician of the workplace.
- (3) The medicines, medical supplies and facilities prescribed in table 9 shall be kept inside the treatment room/medical clinic required under Rule 1963.02, and shall be replaced with the same quantity immediately after use or consumption.

#### **Emergency Medical and Dental Services:**

Every employer covered by this rule shall provide his employees/workers medical and dental services and facilities in the following cases and manner:

(1) For hazardous workplace:

- a. in small-scale industries where the number of workers is from 1 to 50, the employer shall provide the services of a full-time first abider who maybe one of the workers in the workplace and who has immediate access to the first-aid medicines prescribed in Rule 1963.01
- b. in small-scale industries where the number of workers is from 51 to 99, the employer shall provide the services of a part-time occupational health nurse who shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week. Where there are more than one work shift in a day: the nurse shall stay in the workplace during the shift which has the biggest number of workers. The employer shall also provide the services of a full-time first-abider and shall maintain in his place of employment an emergency treatment room for his workers.
- c. In medium-scale industries where the number of workers is from 100 to 199, the employer shall provide the services of a part-time occupational health physician and a part-time dentist each of whom shall stay in the premises of the workplace at least four (4) hours a day, three (3) times a week, and each one working on alternate days with the other, where there are more than one work shift in a day, the physician and the dentist shall stay in the workplace during the shift which has the biggest number of workers. In addition, the services of a full-time occupational health nurse and a full-time first-abider shall be provided. The employer shall maintain in his place of employment an emergency treatment room for his workers.
- d. in large-scale industries where the number of workers is from 200 to 600, the employer shall provide the services of a part-time occupational health physician and a part-time dentist each of whom shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week, and each working in alternate periods with the other, where there are more than one work shift in a day, the physician and the dentist shall stay at the workplace during the shift which has the biggest number of workers. The services of a full-time occupational health nurse and a full-time first-abider shall also be provided. The employer shall maintain in his place of employment an emergency medical clinic for his workers.

- e. in large-scale industries, where the number of workers is from 601 to 2,000, the employer shall provide the services of a full-time occupational health physician who shall stay in the premises of the workplace eight (8) hours a day, six (6) times a week, or two (2) part-time occupational health physician each working four (4) hours a day, six (6) times a week in alternate periods with the other. The services of a full-time dentist shall also provide. The physician and the dentist shall stay at the workplace during the shift which has the biggest number of workers. The services of a full-time occupational health nurse and a full-time first-aiders shall be provided for every work shift. The employer shall maintain in his place of employment an emergency medical and dental clinic for his workers.
  
- f. in large-scale industries where the number of workers is more than 2000, the employer shall provide the services of a full-time occupational health physician and a full-time dentist, each of whom shall stay in the premises of the workplace eight (8) hours a day, six (6) times a week during the work shift which has the biggest number of workers. In addition, the employer shall provide the services of one (1) part-time occupational health physician for each of the work shifts who shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week. The services of a full-time occupational health nurse and a full-time first-aiders shall also be provided for every work shift. The employer shall maintain in his place of employment an emergency hospital having a bed capacity of one (1) bed for every one hundred (100) workers and a dental clinic.
  
- g. every employer of industries/establishments having factories/plants using or producing pesticides under toxicity categories I and III of the World Health Organization (WHO) toxicity classification standards shall provide for his workers the following:
  - (i) a medical clinic within 100 meters of working area in the formulating/manufacturing plant.
  - (ii) the services of a competent full-time occupational health physician who shall stay in the medical clinic provided for above, at least eight (8) hours a day during the work shift has the biggest number of workers:

- (iii) a bathroom with shower and eyewash facilities within or beside the medical clinic provided for above, and
- (iv) an examining table with capacity to allow trendelenberg position.

(2) For non-hazardous workplaces:

- a. in small-scale industries where the number of workers is from 1 to 99, the employer shall provide the services of full-time first-aiders who maybe one of the workers in the workplace and who has immediate access to the first-aid medicines prescribed under Rule 1963.01. Where the number of workers is from 51 to 99, an emergency treatment room shall be provided.
- b. in medium-scale industries where the number of workers is from 100 to 199, the employer shall provide the services of a part-time occupational health nurse who shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week. Where there are more than one week shift in a day, the nurse shall stay in the workplace during the shift which has the biggest number of workers. The employer shall also provide the services of a full-time first-aiders and shall maintain in his place of employment an emergency treatment room for his workers.
- c. in large-scale industries where the number of workers is from 200 to 600, the employer shall provide the services of a part-time occupational health physician and a part-time dentist each of whom shall stay in the premises of the workplace at least four (4) hours a day, three (3) times a week on alternate days with the other. Where there are more than one work shift in a day, the physician and the dentist shall stay in the workplace during the shift which has the biggest number of workers. In addition, the services of a full-time occupational health nurse and a full-time first-aiders shall be provided. The employer shall maintain in his place of employment an emergency treatment room for his workers.
- d. in large-scale industries where the number of workers is from 601 to 2000, the employer shall provide the services of a part-time occupational health physician and a part-time dentist each of whom shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week working in alternate periods with the other. Where there are more than

one work shift in a day, the physician and the dentist shall stay in the workplace during the shift which has the biggest number of workers. The employer shall also provide the services of a full-time occupational health nurse and a full-time first-aid, and maintain in his place of employment an emergency clinic for his workers.

- e. in large-scale industries where the number of workers is more than 2000, the employer shall provide the services of a full-time occupational health physician and a full-time dentist, each of whom shall stay in the premises of the workplace eight (8) hours a day, six (6) times a week during the work shift which has the biggest number of workers. In addition, the employer shall provide the services of one part-time occupational health physician for each of the other work shift who shall stay in the premises of the workplace at least four (4) hours a day, six (6) times a week. The employer shall also provide the services of a full-time occupational health nurse for every work shift. The employer shall provide the services of a full-time first-aid and shall maintain in his place of employment an emergency medical and dental clinic for his workers.
- (3) For both hazardous and non-hazardous workplaces:
- a. where there are more than one (1) work shift in a day, the employer shall, in addition to the requirements of this rule, provide the services of a full-time first-aid for every work shift.
  - b. where only a treatment room is provided by the employer under this rule, he shall, in addition, provide for his workers in case of emergency, access to the nearest medical/dental clinic or to a medical/dental clinic located not more than five (5) kilometers away from the workplace. Such access shall be in the form of providing the necessary transportation facilities and a written agreement with the medical/dental clinic to attend to such emergencies brought to them.
  - c. the physician/dentist required to stay in the workplace during the work shift having the biggest number of workers shall be subject to call at anytime during the other shifts to attend to emergencies.

### **Emergency Hospital:**

- (1) An employer may not establish an emergency hospital or dental clinic in his workplace as required in these regulations where there is a hospital or dental clinic which is located not more than five (5) kilometers away from the workplace, if situated in any urban area, or which can be reached in twenty-five (25) minutes of travel, if situated in a rural area, and the employer has facilities readily available for transporting workers a to the hospital or clinic in case of emergency. For purpose of this Rule, the employer shall enter into a written contract with the hospital or dental clinic for the use of such clinic/hospital in the treatment of workers in case of emergency. However, this shall not excuse the employer from maintaining in his place of employment an emergency treatment room for his workers.

#### **Contracts for Occupational Health Services:**

- (1) Contracts for occupational health practitioner services entered into by employer shall only be with occupational health practitioners and/or occupational health clinics accredited by the bureau, or with an agency/institution/organization duly authorized or recognized by the bureau.
- (2) No occupational health practitioner, whether acting singly or as a part of a group/association, shall enter into a contract for occupational health practitioner services with more than ten (10) establishments.
- (3) No part-time occupational health physician/nurse shall enter into contract for occupational health services with more than four (4) establishments.
- (4) When a full-time occupational health physician/nurse who is also a qualified occupational health practitioners, has entered into a contract for occupational health services with one (1) establishment, he/she shall not engage himself/herself, with or without a written contract, for the same services with any other establishment.
- (5) Under no circumstances shall an employer enter into a retainer ship contract for health services in place of the occupational health services provided for under Rule 1960.
- (6) The employer shall furnish the Bureau and the Regional Labor Office concerned a copy each of the contract for Occupational Health Services.

## **Training and Qualifications:**

### **Qualifications:**

- (1) A first-aid responder must be able to read and write and must have completed a course in first-aid conducted by the Philippine National Red Cross or any organization accredited by the same.
- (2) A nurse must have passed the examination given by the Board of Examiners for nurses and duly licensed to practice nursing in the Philippines with at least fifty (50) hours of Basic training in occupational nursing conducted by the Bureau/Regional Office concerned, the College of Public Health of the University of the Philippines, or by any institution/organization accredited by the former.
- (3) A physician, whether part-time or full-time, must have passed the examination given by the Board of Examiners for Physicians, is licensed to practice medicine in the Philippines, and a graduate of Basic training course in occupational medicine conducted by the Bureau, the College of Public Health of the University of the Philippines, or by any institutions/organization duly accredited by the former.
- (4) A physician engaged by the employer of a hazardous establishment employing more than 2,000 workers, to be its full-time occupational health physician must have, in addition to the qualifications required under Rule 1964.01 (3), a diploma or master's degree in occupational health or industrial health or its equivalent or completed a residency training program in occupational medicine, must be duly certified by the Bureau, and must have registered with the Regional Labor Office.
- (5) A dentist, whether part-time or full-time, must have passed the examination given by the Board of Examiners for Dentists, is licensed to practice dentistry in the Philippines, and has completed a basic training course in occupational dentistry conducted by the Bureau of Dental Health Services of the Department of Health or any organization duly accredited by the same.
- (6) An occupational health practitioner, as defined under Rule 1961.02, must have all of the following qualifications:

- a. a graduate of an advanced training course in occupational health and safety conducted by the bureau, the College of Public Health of the University of the Philippines, or any institutions/organization duly authorized/accredited or recognized by the former;
- b. must have had at least five (5) years experience in the field of, or practice of occupational health and safety;
- c. Must be duly certified/accredited by the Bureau;
- d. Must have registered with the Regional Office concerned.

### **Opportunity for Training:**

- (1) Nurse, physicians and dentist who do not possess the special training qualifications provided for in Rule 19643.01 shall, within six (6) months from the date of employment, comply with this requirement.
- (2) All employers without the required trained first-aiders on the date of effectivity of this Standards shall, within six (6) months have the required number of his workers undergo the prescribed training in first-aid.

### **Refresh Training:**

The occupational health personnel and the first-aiders of every establishment shall undergo a minimum of eight (8) hours refresher training course in their respective fields at least once a year.

### **Duties of Employers:**

It shall be the duty of every employer to:

- (1) Establish in his workplace occupational health services to provide a healthful place of work;
- (2) Adopt and implement a comprehensive health program for his workers;

- (3) Enter into a contract with hospitals or dental clinics, if these are not available in his workplace; and
- (4) Maintain a health record of his programs and activities and submit an annual medical report, using form **DOLE/BWC/HSD/OH-47**, to the Regional Labor Office concerned, copy furnished the Bureau of Working Conditions on or before the last day of March of the year following the covered period.

### **Duties of the Occupational Health Physician:**

The Occupational Health Physician, whether part-time or full-time, who shall be responsible for promotional and maintaining the and well-being of the workers, shall have the following duties and functions:

- (1) Organize, administer and maintain an occupational health service program integrating therein an occupational safety program;
- (2) Continually monitor the work environment for health hazards through periodic inspection of the workplace;
- (3) Prevent diseases or injury in the workplace by establishing proper medical supervision over substances used, processes, and work environment;
- (4) Conserve the health of the workers through physical examinations, proper advice for placement and health education;
- (5) Provide medical and surgical care to restore health and earning capacity of injured workers;
- (6) Maintain and analyze records of all medical cases and to prepare and submit to the employer annual medical reports, using form **DOLE/BWC/OH-47**, as required by this Standards;
- (7) Conduct studies on occupational health within his means and resources;
- (8) Act as adviser to management and labor on all health matters;
- (9) And report directly to top management in order to be effective.

### **Duties of the Dentist:**

The duties of the dentist in the workplace shall be in accordance with the Standards prescribed by the Bureau of Dental Health Services, Department of Health.

### **Duties of the Occupational Health Nurse:**

The duties and functions of the Occupational Health Nurse are:

- (1) In the absence of a physician, to organize and administer a health service program integrating occupational safety, otherwise, these activities of the nurse shall be in accordance with the physician;
- (2) Provide nursing care to injured or ill workers;
- (3) Participate in health maintenance examination. If a physician is not available, to perform work activities which are within the scope allowed by the nursing profession, and if more extensive examinations are needed, to refer the same to a physician;
- (4) Participate in the maintenance of occupational health and safety by giving suggestions in the improvement of working environment affecting the health and well-being of the workers; and
- (5) Maintain a reporting and records and records system, and, if a physician is not available, prepare and submit an annual medical report, using form **DOLE/BWC/HSD/OH-47**, to the employer, as required by this Standards.

### **Duties of the First-Aider:**

The duties of the First-Aider are to:

- (1) Give immediate temporary treatment in case of injury or illness, before the service of a physician becomes available. If the case needs a physician, the first-abider shall immediately call or refer the injured to one;
- (2) Participate in the maintenance of occupational safety and health programs, if a member of the Safety Committee; and
- (3) Maintain medical services and facilities.

### **Duties of the Occupational Health Practitioner:**

The duties of the occupational health practitioner are to:

- (1) Advise the employers, the workers and their representatives in the workplace the necessary requirements in establishing and maintaining a safe and healthful working environment which will facilitate optimal physical and mental health for workers;
- (2) Conduct periodic inspection of the workplace as required under Rule 1961.04;
- (3) Act as adviser to the employer, workers and their representatives in matters concerning the organization, administrative and maintenance of an occupational health program; and
- (4) Maintain a reporting and records system and prepare and submit an annual medical report for the employer, using form **DOLE/BWC/HSD/OH-47**, as required by this Standards.

#### **Occupational Health Program:**

The employer shall organize and maintain an occupational health program to achieve the following objective:

- (1) Assess the worker's physical, emotional and psychological assets as well as his liabilities in order to facilitate his proper placement and ensure the suitability of individuals according to their physical capacities, mental abilities and emotional make-up in work which they can perform with an acceptable degree of efficiency without endangering their own health and safety and that of their co-workers;
- (2) Protect employees against health hazards in their working environment in order to prevent occupational as well as non-occupational diseases;
- (3) Provision for first-aid, emergency services and treatment depending on the nature of the industry;
- (4) Assure adequate medical care of ill and injured workers;
- (5) Encourage personal health maintenance and physical fitness and proper nutrition practices; and
- (6) Provide guidance, information and services for family planning programs.

**The Health Program shall include the following activities:**

- (1) Maintenance of a healthful work environment by requiring occupational health personnel to conduct regular appraisal of sanitation conditions, periodic inspection of premises, including all facilities therein, and evaluate the working environment in order to detect and appraise occupational health hazards and environmental conditions affecting comfort and job efficiency;
- (2) Health Examinations:
  - a) Entrance;
  - b) Periodic;
  - c) Special examination;
  - d) Transfer examination;
  - e) Separation examination;
- (3) Diagnosis and treatment of all injuries and occupational and non-occupational diseases;
- (4) Immunization programs; and
- (5) Accurate and complete medical records of each workers starting from his first examination or treatment, which must be under the exclusive custody and control of the occupational health personnel. Such records shall be made available to the worker or his duly authorized representative and shall be used for discriminatory purpose or in any other manner prejudicial to his interest.
- (6) Health Education and Counseling in which the occupational health and safety personnel shall cooperate with supervisors in imparting appropriate health and safety information to employees, such as health hazards and proper precautions, habits of cleanliness, orderliness, safe work practices, use and maintenance of available personal protective clothing and devices, and the use of available health services and facilities; and
- (7) Nutrition program which shall be under the dietitian and supervised by a physician if the latter is present.

**Physical Examination:**

- (1) All workers, irrespective of age and sex, shall undergo physical examination:
  - a. Before entering employment for the first time;
  - b. periodically, or at such intervals as may be necessary on account of the conditions or risks involved in the work;
  - c. When transferred or separated from employment; and
  - d. When injured or ill.
- (2) All examinations shall:
  - a. Be complete and thorough;
  - b. Be rendered free of charge to the workers; and
  - c. include x-ray or special laboratory examinations when necessary due to the peculiar nature of the employment.
- (3) The results of these physical examinations shall be recorded carefully and legibly on appropriate forms by the health service personnel charged with such responsibility.
- (4) Records of physical examinations and all information obtained by the health personnel shall be considered strictly confidential.

**Pre-employment/Pre-placement Physical Examinations:**

- (1) Pre-employment Physical examination shall be conducted:
  - a. to determine the physical condition of the prospective employee at the time of hiring; and
  - b. to prevent the placement of a worker on a job where, through some physical or mental defects, he may be dangerous to his fellow workers or to property.
- (2) Pre-employment physical examination shall:
  - a. be a general clinical examination including special laboratory examinations when necessary due to the peculiar nature of the worker's prospective employment;
  - b. Include chest x-ray examinations. Under the following circumstances, x-ray examinations shall be rendered free of charge.

- i. where the employer or establishment is required by these Rules to engage the services of an Occupational Health physician and where there are x-ray facilities in the establishment;
  - ii. where the employer does not maintain such facilities, x-ray examinations shall be conducted by;
    - aa. Government clinics or hospitals;
    - bb. The occupational health physicians; and
    - cc. private clinics or hospitals when applicants are referred to them.
  - iii. in all other instances, the applicant shall pay the cost of the examination.
- (3) At the completion of the examination, the applicant shall be rated as follows:

CLASS A - Physical fit for any work

CLASS B - Physical under-developed or with correctable defects, (error of refraction, dental caries, defective hearing, and other similar defects) but otherwise fit to work.

CLASS C - Employable but owing to certain impairments or conditions, (Heart disease, hypertension, anatomical defects) requires special placement or limited duty in a specified or selected assignment requiring follow-up treatment/periodic evaluation.

CLASS D - Unfit or unsafe for any type of employment (active PTB, advance heart disease with threatened failure, malignant hypertension, and other similar illnesses).

### **During Employment:**

#### **Periodic Annual Medical Examinations:**

Periodic annual medical examinations shall be conducted in order to follow-up previous findings, to allow early detection of occupational and non-occupational diseases, and determine the effect of exposure of employees to health hazards. These examinations:

- (1) Shall be as complete and as thorough as the pre-employment examinations and include general clinical examinations.
- (2) Shall include all special examinations and/or investigations deemed necessary for the diagnosis of these diseases which will be free of charge in case the workers are exposed to occupational health hazards.
- (3) Shall include, whenever feasible, a chest x-ray examination at least once a year which shall be rendered free of charge to the workers.
- (4) Shall be as frequent as the nature of employment may warrant taking into consideration the special hazards involved and their relative importance.
- (5) Shall include regular biochemical monitoring which shall be conducted free of charge for workers exposed to toxic substances/pesticides classified under toxicity categories I and II of the World Health Organization (WHO) toxicity classification standards.
- (6) Shall have an interval of not longer than one year between two (2) consecutive periodic physical examinations.

In occupations where there is a risk to the health of the worker either due to toxic substances they handle or of the environment in which they work, only person who are pronounced medically fit shall be employed.

When occupational disease have detected in workers and continued employment might jeopardize their health, their employment shall be discounted until after their complete or satisfactory recovery. If circumstances permit, such workers shall meanwhile be given some other job consistent with their state of health and which shall not impede or retard their recovery.

### **Transfer Examinations:**

Applicants examined for employment and accepted for specific work or job shall not be transferred to another work or job until they have been examined by the physician and certified that the transfer is medically advisable.

**Other Special Examinations:**

Special examinations may be required where there is undue exposure to health hazards, such as lead, mercury, hydrogen sulfide, sulfur dioxide, nitro glycol, and other similar substances.

**Return to Work Examinations:**

A return to work examination shall be conducted:

- (1) to detect if illness of the worker is still contagious;
- (2) to determine whether the workers is fit to return to work, and
- (3) After prolonged absence for health reasons, for the purpose of determining its possible occupational causes.

**Separation from Employment Examination:**

An employee leaving the employment of the company shall, if necessary, be examined by the occupational health physician:

- (1) to determine if the employee is suffering from any occupational disease;
- (2) to determine whether he is suffering from any injury or illness which has not completely healed; and
- (3) To determine whether he has sustained an injury.

## **AUTHORITY OF LOCAL GOVERNMENT**

### **General Provisions:**

- (1) The Department shall be solely responsible for the administration and enforcement of occupational safety and health laws in all workplace. However, local governments may be authorized by the Secretary to enforce this Standards within their respective jurisdictions where they have adequate facilities and personnel for the purpose as determined by and subject to national standards prescribed by the Department.
- (2) The Department or such other duly authorized engineers and other national government agents, as the Secretary may designate, shall enforce the requirements of the Electrical Engineering Law pertaining to the installation, operations, tending and maintenance of electric generating plans and pass upon applications for electrical construction or installation within their respective jurisdiction in all cases which are not acted upon by the Board of Power and Waterworks, the Department of National Defense, and the Bureau of Customs, and shall issue the corresponding permits if the plans and/or specifications submitted are in conformity with the provisions of this Standards.

### **Types of Inspection:**

For the purpose of this Standards, inspection activities shall be divided into Technical Safety Inspection and General Safety Inspection.

- (1) Technical Safety Inspection - shall refer to inspection for the purpose of safety determination of boilers, pressure vessels, internal combustion engines, electrical installations, elevators, hoisting equipment and other mechanical equipment.
- (2) General Safety Inspection - shall refer to inspection of the work environment, including the location and operation of machinery other than those covered by technical safety inspections, adequacy of work space, ventilation, lighting, conditions of work environment, handling, storage or work procedures, protection facilities and other safety and health hazards in workplace.

### **Authority to Chartered Cities:**

The Department may delegate enforcement of this Standards to chartered cities, subject to the conditions provided herein, the authority to conduct technical safety inspection in workplace within their respective jurisdictions, together with the undertaking of other related activities.

### **City Service Plan:**

Chartered cities that desire to assume responsibility for technical safety inspection as defined above shall submit a request to the Secretary, through the Regional Labor Office concerned with the following requirements:

- (1) A plan containing:
  - a. Copy of the city ordinance or other appropriate authority enabling the city to establish and operate a safety service adequate for the purpose of technical safety inspection;
  - b. A description of the safety service as organized, including its organizational structure, statement of function, name and qualifications of each personnel, tools and equipment available, and where the service shall be organizationally attached;
  - c. An undertaking that the safety standards established by the Department including rules, standards and orders shall be complied with in the conduct of the activities of the service;
  - d. The number of establishments to be covered by inspection activities of the service; and
  - e. An undertaking that the reports required by said standards, rules and orders shall be submitted to the Department.

### **(2) Personnel:**

Every safety service shall, for the purpose of technical safety inspection as provided herein, have at least one professional mechanical or electrical engineer for the first five hundred (500) inspection able units and one registered mechanical or electrical engineer or master electrician for every other five hundred (500)

inspection able units depending on the safety service applied for, with the necessary clerical support personnel.

(3) Tools, Equipment and Other Facilities:

Every city safety service authorized to conduct technical safety inspection shall be equipped with the following:

- a. Slide rule
- b. Collapsible steel tape
- c. Engineering Scale
- d. Flashlight
- e. Boiler testing hammer
- f. Depth gauge, micrometer, inside and outside caliper
- g. Inspector's test pressure gauge
- h. Sealing pliers
- i. Hook-on volt ammeter
- j. Mugger tester
- k. Safety goggle
- l. Tachometer
- m. Hard hat
- n. Safety shoes

The Department may add to this list of tools or equipment as the nature of the work may require.

**Processing and Approval of Request:**

The Bureau shall conduct the necessary investigations to determine the capability of the city-applicant to conduct technical safety inspection in their respective jurisdictions. The city concerned shall make available all the facilities and the cooperation necessary for the proper conduct of such investigations. The request for authority shall be given due course if the Secretary is satisfied upon the completion of such investigation that the city safety service is adequate for the purpose of technical safety inspections, subject to such conditions as the Secretary may prescribe, otherwise the applicant shall be informed on how it can meet the prescribed requirements.

### **Effectivity of Authority:**

- (1) The authority delegated to chartered cities shall take effect upon approval by the Secretary of the plan after all the necessary administrative arrangements have been completed and the Secretary, after proper investigation, is satisfied that the under-takings contained in the Plan have been complied with.
- (2) The authority delegated shall specify the technical areas and related activities for which it is granted.

### **Duration of Authority:**

The authority delegated to chartered cities by the Secretary shall be effectively until otherwise withdraw an by him, after proper investigation, on grounds of failure of the city safety service to undertake its work in accordance with this Rule, the Plan as approved, and the appropriate standards, rules and regulations established by the Department

### **Evaluation of Performance:**

For the purpose of Rule 1982.04 hereof, the Secretary or his authorized representative shall from time to time verify compliance by the city safety service with the issuance therein stated, including spot-checking of tools and equipment used in the safety services, inspection able units and establishments.

### **Assistance to City Safety Service:**

The Department shall render assistance to any City Safety Service upon request in all matters affecting the performance of its safety functions.

### **Authority of Municipalities:**

A municipality which desires to assume authority to conduct technical safety inspection shall follow the procedure prescribed in 1982.01. The Secretary shall evaluate, reject or withdraw such plan in the same manner provided by this Rule.

**Authority of Other Government Agencies:**

The Secretary may authorize other government agencies to conduct technical safety inspection as may be necessary in the attainment of the objectives of such agencies and the demands of national development. The application for authority shall be as required in this Rule.

**Application of these Standards to Existing Plans and Authorities:**

All plans and authorities granted prior to the approval of this Standards shall remain in full force for one year from the date this Standards takes effect. After said period, such plans and authorities shall be revised to conform with the provisions of this Standards.

**Duplication of Inspection:**

- (1) Where a delegation of authority has been granted, the Secretary shall not conduct similar inspection activities in the area covered by the delegation unless the authority is revoked or for audit purposes; and
- (2) In the case of mobile inspection able units, such as portable boilers, pressure vessels, and other similar units, the necessary annual inspection shall be conducted and the inspection fee paid only once a year regardless of the subsequent location of such inspection able unit within the fee year.

## **FINAL PROVISION**

### **False Statement or Representation:**

Upon the affectivity of this Standards, it shall be unlawful for any person to make any statement, report or representation, as may be required for the effective implementation of the provisions of this Standards, knowing such statement, report or representation to be false in any material respect.

### **Separability:**

If any provision of this Standards or the application of such provision to any person or circumstance shall be declared invalid, the remainder of this Standards and the application of such provision to other persons or circumstances shall not be affected thereby.

### **Resolution of Conflicts and Overlapping Jurisdictions:**

In case any Rule in this Standards conflicts, duplicates or overlaps with regulations or rules prepared and implemented by other government agencies, such conflict, duplication or overlapping shall be resolved by coordination or any other means of cooperation among such agencies.

### **Repeal of Prior Safety Orders:**

All occupational safety and health rules, standards, orders or parts thereof which are inconsistent with this Standards are hereby repealed.

### **Penal Provisions:**

All violations of the provisions of this Standards shall be subject to the applicable penalties provided for in the Labor Code, PD 442 as amended.

### **Affectivity:**

This Standards shall take effect fifteen (15) days after its approval.

## DEPARTMENT ORDER NO. 20

By virtue of the powers vested in the Secretary of Labor and Employment under Article 162, Book IV of the Labor Code of the Philippines, the following amendments to the Occupational Safety and Health Standards are hereby promulgated:

- Rule 1000 - General Provisions
- Rule 1010 - Other Safety Rules
- Rule 1020 - Registration
- Rule 1030 - Training of Personnel in Occupational Safety and Health
- Rule 1030 - Health and Safety Committee
- Rule 1060 - Premises of Establishments
- Rule 1070 - Occupational Health and Environmental Control
- Rule 1080 - Personal Protective Equipment and Devices
- Rule 1090 - Hazardous Materials
- Rule 1100 - Gas and Electric Welding and Cutting Operations
- Rule 1150 - Materials Handling and Storage
- Rule 1160 - Boiler
- Rule 1200 - Machine Guarding
- Rule 1220 - Elevators and Related Equipment
- Rule 1230 - Identification of Piping System
- Rule 1940 - Fire Protection and Control
- Rule 1950 - Pesticides and Fertilizers
- Rule 1960 - Occupational Health Services
- Rule 1970 - Fees

### Appendix:

- Table 3.1 - Materials for "U" Guards
- Table 11 - Standard Colors of Signs for Safety Instructions and Warnings in Building Premises
- Table 25-a - Size of Letters for Various Diameter of Pipes
- Table 25-b - Identification of Piping by Color or Color Bands
- Table 25-c - Lettered Legend for Positive Identification
- Table 25-d - Color of Legend Letters
- Figure 20 - Legend Placement – Width of Color Bands
- Table 47 - Tables of Medicines, Medical Supplies, and Facilities