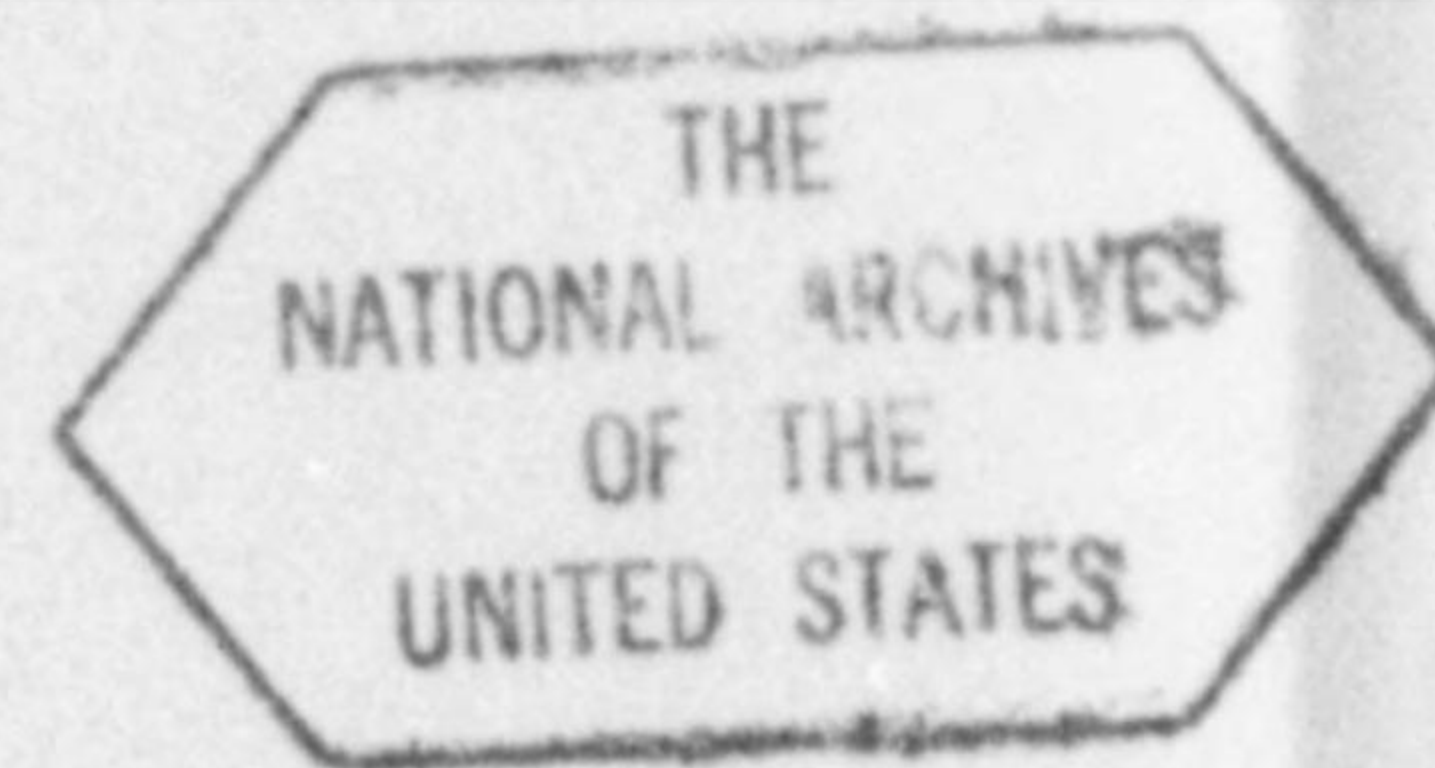


775 OK3

GHQ/SCAP Records(RG 331)
Description of contents



- (1) Box no. 2744
- (2) Folder title/number: (9)
2201 - 2208
- (3) Date: ? - Dec. 1948

(4) Subject :

Classification	Type of record
750, 760	e, t

(5) Item description and comment :
Documents Concerning Labor and Health in the
United States

(6) Reproduction : Yes No

(7) Film no. _____ Sheet no. _____

File #2201

ROLE OF THE LABOR STANDARDS INSPECTOR IN THE UNITED STATES

A. OPPORTUNITY OF THE INSPECTOR

(Prepared by Military Government Section, Headquarters Eighth Army,
28 December 1948)

One of the significant developments in present-day American industrial life is the growing recognition of the State labor department inspector as an asset to the community. His value to the worker has been recognized from the beginning of the inspection system. Now it is realized that in serving the working people the inspector also serves the social and economic interests of the community, and particularly industry.

The inspector carries on his duties not with personal authority, but with the authority of the State as specified by the laws and rules that the State has laid down. He must exercise that authority within the limits of the law and with common sense and good will.

A good inspector is primarily a salesman of ways and means for making more secure the safety, the comfort, and the general welfare of the worker. He can do far more than enforce the letter of the law. He can use his specialized knowledge, his tact, and his skill to enlist the interest of the employer in improved methods and in putting them into effect without compulsion. If the inspector sees in his job only the duty of the policeman to detect an employer in the act of violating the law and to cause his arrest, he has not caught the spirit of his profession; he has not realized that he is a professional person.

To be effective an inspector must be thoroughly familiar with the State labor law and with all rules and regulations. He must also be able to explain why laws applying to hours, minimum wage, child labor, home work, and safety have had to be passed in the public interest. The inspector can give a real service to workers quite aside from actual law enforcement by explaining either to individuals or to groups the purpose and the method of application of labor

laws and regulations. He can obtain their suggestions as to necessary changes in the law or as the new laws that will bring about better working conditions. He can make clear the part his department plays in enforcing the labor laws, and he can point out methods by which workers either as individuals or in groups can cooperate in bringing about better enforcement.

The inspector must be able to give the employer an equally clear picture of the law and of what constitutes compliance with the law. The employer is a citizen and a taxpayer, and he shares in benefits to the community which grow out of well-administered labor laws. An informed inspector can point out the advantages which the employer derives from sound labor standards, since he secures more efficient work from employees who work reasonable hours and are paid fair wages and who are given clean and safe working places.

An inspector who takes advantage of his position to render such educational service is far more than an enforcing officer of the law; he is making an important contribution to his State and is establishing the value and importance of his department in the estimation of the public.

It lies within the power of the inspector to protect the interests of all workers, whether employment is in a modern, efficient place of business or whether it is in an establishment where an employer, left to his own free will, would take little interest in the safeguards which must be thrown around employment.

Accident-prevention work and the prevention of occupational disease is being carried on intensively by many of the larger employers throughout the country. Such employers are able to employ safety engineers and to develop safety programs that afford great protection to the workers. The opportunity that lies in the hands of the inspector is to use his special skill to afford the same protection to the thousands of small work places in which the employer may be willing to cooperate in providing safeguards but does not know how, or may have the attitude.

"I pay for compensation in case of accident; why should I bother about anything else?" He can be shown that because he and thousands of other employers like him do not make every effort to safeguard their workers against accident and occupational disease, the insurance rates are higher than they need be, and that he is paying that increased cost. He can be shown that costs of production increase when an injured worker has to be replaced by a new worker. He can be convinced of the greater cooperation that can be expected from his workers if he shows a real and practical interest in their welfare. The inspector's mechanical skill can be used to suggest the most efficient and least expensive method of installing safety devices. He can constantly make available to plant managers the new ideas, the new methods, the new devices of which he has knowledge in the interest of protecting workers.

Whether the inspector is responsible for the enforcement of a law dealing with hours of work, or with minimum wage or with child labor or with safety and health, or with a combination of several of these laws, his opportunity for service to both workers and employers is a broad one and by no means limited to the bare application of a State law.

B. GENERAL CONDUCT OF INSPECTORS

The inspector is, in many instances, the only official of the labor department who comes into personal contact with either the employer or the worker. In their eyes the inspector is the labor department, and their opinion of and respect for the department will depend upon their opinion of and respect for the inspector.

An inspector can command respect only if his full time and interest are known to be devoted to his official job. If he attempts to carry on another occupation or business, it is apparent that he cannot give his full attention to his official work. Added to that, he is open to the charge that he may attempt to use his official connection for his personal advantage.

Under all circumstances inspectors should conduct themselves in a courteous manner and exercise tact and judgment in dealing with all persons with whom they come in contact. Since the strength of a labor department lies in its ability to secure compliance with the law through cooperation and education wherever possible, the importance of the right approach on the part of the inspector is very clear. In dealing with workers, the inspector must win their confidence, make them understand that their interests are those of his department and that he may be considered trust-worthy to receive information given in confidence.

The inspector must realize the confidential nature of the information to which he has access. The importance of not disclosing information secured during an inspection cannot be overemphasized. In some States, such disclosure is forbidden by statute. In investigating occupational hazards the inspector must have access to complete information in regard to industrial processes and to accident reports; in enforcing wage-and-hour regulations he must have access to time cards and pay-roll records. Where it is necessary to secure information which involves secret formulas, methods, or machine construction, the employer should be assured that such information likewise must not be disclosed. Where wage-and-hour data are collected for statistical purposes, the inspector should explain that the data will be presented in such a way that individual establishments cannot be identified. An inspector should never discuss with an employer violations that have been found in inspecting the establishment of another employer.

Not infrequently an employer offers an inspector a gratuity, either in the form of a material gift or of some special service for which no charge will be made. In order to relieve inspectors of embarrassment in such a situation, many departments have a rule that no inspector may accept gratuities from employers or their representatives. This rule avoids the necessity for any discussion on the part of the inspector; he can then say that he is following the instructions

of his superior officers. Regardless of the employer's intent in such a situation, and whether or not the department has made an official ruling on the matter, there can be only one safe procedure for the inspector to follow for his own protection and for the protection of the department, and that is for him to refuse, tactfully, but finally.

C. SUPERVISION OF INSPECTORS

Close cooperation between inspectors and their supervisors plays an important part in the successful operation of the labor department. The supervisor is dependent upon the completeness and accuracy of the inspector's work. The inspector should feel free to report fully and frankly, and he should be assured that if he does so he will have the support of his supervisor. No department of labor can be sound unless it has the absolute loyalty of its staff. Constructive suggestions as to policy or methods are welcomed by supervisors in a department, but inspectors when on field duty should never express disagreement with any provision of the law or rules and regulations nor with the rulings made by other members of the department.

Close cooperation between the supervisor and his inspectors and a feeling of mutual confidence and respect will insure to the department that unified effort which is essential to its operation.

D. INITIAL AND CONTINUED TRAINING OF INSPECTORS

The value of training both at the beginning of service and continuously thereafter is clearly recognized. At one time initial training was thought to be accomplished if a new inspector was put under the guidance of an experienced inspector for a very limited period, during which he observed while inspections were made. He would then inspect under the observation of the older inspectors, and finally independently. Often a new inspector would not even be informed as to existing labor laws and regulations for whose enforcement he was responsible.

The present conception of a beginner's training for inspection service may be illustrated by a course recently given by a State department of labor for a new group of home-work inspectors. The course consisted of talks by the bureau and division heads in the department of labor, field work with experienced investigators and inspectors, and attendance at hearings. In addition, the investigators were required to report on certain required reading. In the course of instruction the new inspector was given a picture of the general scope of the labor law and organization of the labor department. In addition to his own specialized field, the inspector was given an understanding of the administration of laws covering safety and health, workmen's compensation, child labor, women's hours, day of rest, unemployment insurance, minimum wage. He learned of the history of the efforts to secure labor legislation. Through field work with inspectors of his own particular division and with inspectors of other divisions he was given a feeling of the proper approach in enforcement. He was instructed in the general policies of the department and in its administrative set-up, and familiarized with the names and functions of its staff members.

Such a course would have to be adapted to meet the needs of different types of inspection, but the important thing is that the inspector receive a broad knowledge of the whole field of labor law as well as a specialized knowledge of his own subject. He will have more interest in his work, and he can present his own subject more effectively with such a background.

An inspector should be familiar with the functions and duties of the different branches of the labor department, and also with the cooperative relationship that exists between the department of labor and other State departments acting in the interest of workers. The cooperation of the department of education in the enforcement of child-labor laws, for example, and of the department of health in conditions that affect the health of the workers is of the greatest importance. If the enforcement of laws is divided among the work of several

divisions, there can be arrangements by which the violation of an hours law, discovered through a minimum wage inspection, can be reported to the hours division; violation of a child-labor law observed by a safety inspector, reported to the child-labor division. Report should be made to the proper agency of firms that are discovered by inspectors to be without accident compensation insurance or unemployment compensation when subject to these laws. Such cooperation between different divisions and departments will have the effect of increasing the value of each inspection service.

Continuous training is of the greatest importance. The inspector must be kept informed constantly of changes in laws or regulations; of changes in policy; of new industrial processes, involving new hazards; of new protective devices for the protection of workers. Various State plans actually in operation make it possible for the inspector to continue his formal training throughout his career. This training is usually carried on in the form of departmental or staff meetings, at which there can be an informal exchange of ideas and experience. Department bulletins are also very helpful. Some States carry on annual training courses, securing the cooperation of other agencies and institutions; others arrange for staff members to attend conferences directly concerned with their work. In one State members of the inspection staff are given leave with pay for fulltime attendance upon specialized courses in the field of industrial health.

E. QUALIFICATIONS OF INSPECTORS

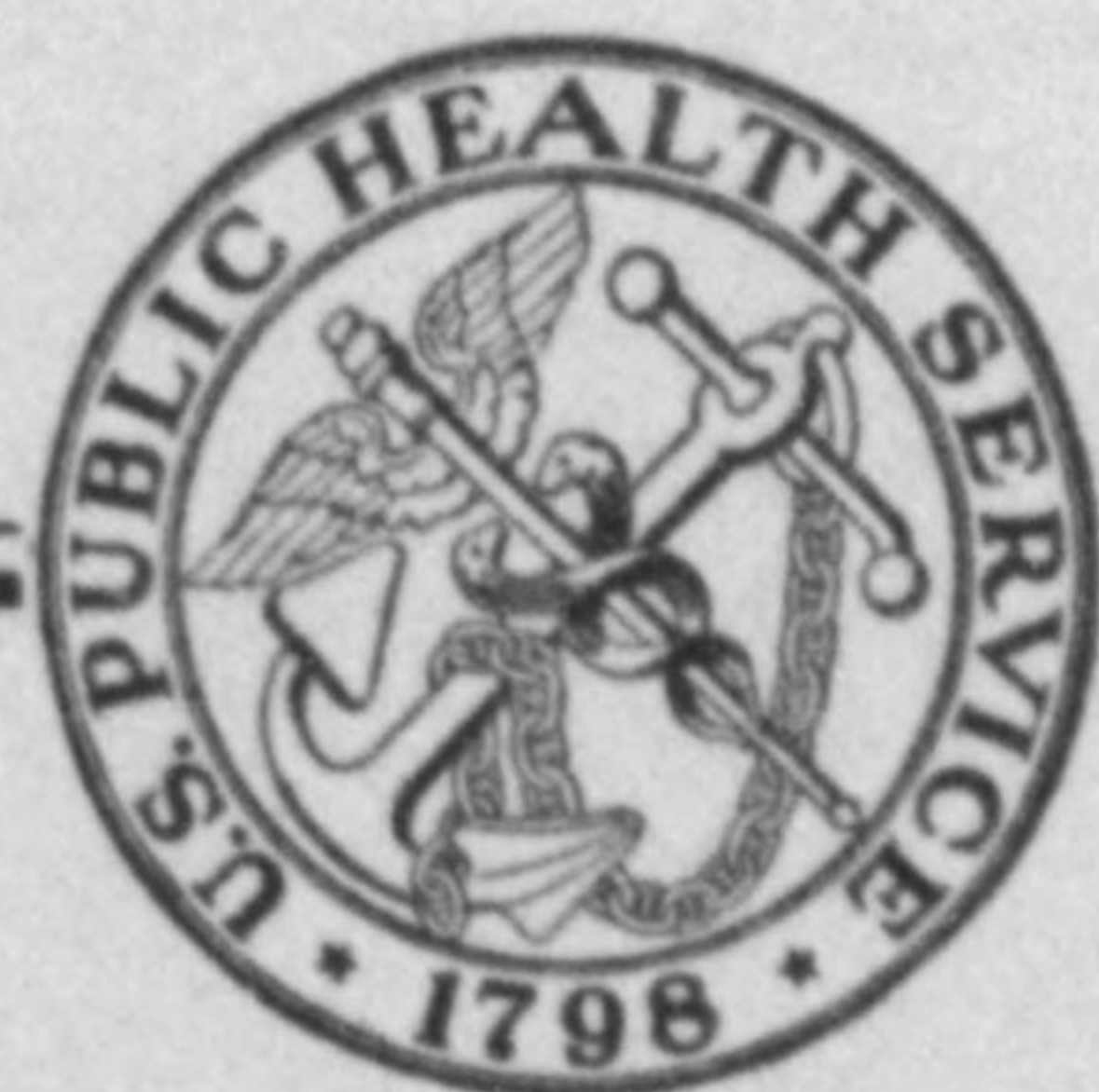
The technical qualifications for inspectors vary widely, of course, in different States and with the nature of the particular kind of inspection involved. Technical requirements may include (1) a certain standard of formal education or its equivalent, (2) a minimum number of years of practical industrial experience or training, and (3) a specified combination of minimum educational standard and industrial experience or training.

There are certain basic qualifications which are agreed upon generally by labor-law administrators as being essential. They include integrity, intelligence and good judgment, application, and initiative. Tact is a quality, the lack of which may nullify the work of an inspector possessing all the other major qualifications. Good health and good address are requisites to this type of work.

File #2202

**OUTLINE OF
AN INDUSTRIAL HYGIENE
PROGRAM**

SUPPLEMENT No. 171
TO THE
PUBLIC HEALTH REPORTS



775 OK3

FEDERAL SECURITY AGENCY
UNITED STATES PUBLIC HEALTH SERVICE
THOMAS PARRAN, *Surgeon General*

DIVISION OF SANITARY REPORTS AND STATISTICS
E. R. COFFEY, *Assistant Surgeon General, Chief of Division*

+

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1943

For sale by the Superintendent of Documents, Washington, D. C.

Price 5 cents

OUTLINE OF AN INDUSTRIAL HYGIENE PROGRAM

Prepared by DIVISION OF INDUSTRIAL HYGIENE, National Institute of Health,
United States Public Health Service

The suggestions made in this outline are based on careful studies and the practical experience of physicians, engineers, and other industrial hygienists over the past 25 years.

The plan is practical.—Many of the largest and oldest industries in the United States adopted the measures recommended in this outline some years ago and have found them practical, beneficial, and economically sound. A good industrial hygiene program gets practical results by: (1) Decreasing illness, injuries, labor turn-over, spoilage of materials; (2) decreasing costs to the workers and the employer through reduction of wage losses, costs of illness, compensation costs, and insurance premiums; (3) improving health and efficiency of all personnel; and (4) promoting morale. In short, industrial hygiene will help you achieve maximum production in your plant.

The plan is flexible.—This outline presents the basic structure of an effective industrial hygiene program. No attempt is made to define the precise form the program should take. This can be adjusted to the particular needs of the plant, taking account of such factors as type of operations, number of workers, and existing facilities.

In planning for improved health and efficiency among the men and women in your plant, three general considerations must be kept in mind:

1. Conditions in the working environment (the plant).
2. Conditions in the living environment (the home and community).
3. Personal conditions (the health status of the individual and his ability to participate in the program).

To make your industrial hygiene program effective, you need four types of services:

1. Medical (physicians, dentists, nurses).
2. Engineering (industrial hygiene engineers, chemists).
3. Safety (safety engineers, first-aid crews, shop safety committees).
4. Welfare (trained welfare workers, or personnel managers, union shop stewards, welfare committees, recreation committees, etc.).

All of these services and the people associated with them work together to keep the men and women in your plant healthy and on the job. Your plant may have other departments and other persons interested in the workers' health; if so, they should be brought into the program.

THE MEDICAL SERVICE

Personnel:

1. *Physicians:* One or more well-qualified physicians to provide full-time service in the plant. The chief physician is the medical director. *Small plants* (500 employees or less) may combine to employ one or more physicians or to secure the services of a group of physicians in the community on a rotating service plan.
2. *Nurses:* One or more full-time or part-time registered nurses who work under the supervision of the physician.
3. *Other assistants,* such as dentists, technicians, clerks, whether on a part-time or full-time basis as determined by the medical director.

The Dispensary:

Each plant should have a dispensary. Size, arrangement, and equipment will vary according to the plant, but the following conditions should be checked:

1. *Space:* Is there room enough for:
 - a. Emergency treatment of the injured and sick?
 - b. Privacy in making physical examinations?
 - c. Laboratory tests (blood tests, urinalysis, etc.)?
 - d. Records and supplies?
2. *Location:* Is it located properly:
 - a. In the quietest part of the establishment?
 - b. Is it airy, light, and spotlessly clean?
 - c. Are there chairs for patients waiting for the doctor or nurse?
3. *Beds:* For sick or injured workers?
4. *Stretchers:*
 - a. Number and location depend on size of plant and type of operations.
 - b. Shop safety committees or first-aid crews may be assigned charge of stretchers.
5. *Ambulance service:*
 - a. Operated by the medical service
 - b. . . . or arranged for by it through outside hospitals.
6. *Equipment and supplies:*

Both medical and surgical, at all times well kept and sufficient for the plant's emergency needs.

Duties of the Medical Service:

1. Emergency medical care of all employees who are injured or become ill on the job, whatever the cause.
2. Continued treatment of employees suffering from occupational diseases or accidents.
3. Regular inspection of health and accident hazards in the shops, in cooperation with the safety department, engineering department, or other units, for the prevention of occupational disabilities.
4. Annual periodic examination of all employees and executives with a view to helping them improve and maintain health through the discovery and correction of ailments which they may not be aware of but which later may impair their health seriously.
5. Monthly physical examination, including laboratory tests, of workers who are exposed to poisonous materials on their jobs. Workers with unusual responsibilities, such as crane-men and hoistmen, should be examined every 6 months.
6. To maintain and analyze sickness records in order to know how, when, and where lost time due to disability occurs in the plant; to tabulate these records monthly, according to cause, nature, and duration of disabilities, and department or occupation of the patient.
7. To cooperate with the personnel department, employment office, or other responsible unit, in the proper job-placement of new workers, through the preplacement examination (see below), and at the same time to give new workers the guidance mentioned in No. 4 above.
8. To make sure that employees returning to work after an absence due to illness or injury are capable of working safely and efficiently.
9. To promote and take part in a health education program for employees and their families.
10. To make detailed plans for handling large numbers of seriously injured workers in the event of disaster, such as an explosion, fire, air raid, or other enemy action. Plans should include:
 - a. Transportation and first-aid care of the injured.
 - b. Transferral of the seriously injured to hospitals where operating rooms, blood plasma, and blood donors are available.
 - c. Coordination of these plans with the safety department, guards, police, road patrols, and fire departments. (See Medical Division Bulletin No. 4, U. S. Office of Civilian Defense, Washington, D. C.)

11. To cooperate with, and if desirable supervise, all other services in the plant which relate to the health of the workers, such as the food service, the welfare service, safety program, and recreation committees.

THE ENGINEERING AND SAFETY SERVICE

The Engineering and Safety Service is responsible for the detection and removal or control of environmental conditions in the plant which endanger health and safety. This requires a thorough and expert familiarity with:

1. Industrial engineering in general.
2. The sanitary, mechanical, and chemical causes of occupational accidents and diseases.
3. The engineering, chemical, or other physical means of preventing occupational accidents and diseases.
4. The processes, materials, machinery, and tools in every operation in the individual plant.

Personnel:

1. *The industrial hygiene engineer* brings to his job the knowledge outlined in (1), (2), and (3) above, and he obtains the knowledge of (4) in a careful survey of the plant, backed up by a battery of tests already developed for this purpose. Many plants have no personnel with engineering background; many others have general plant engineers, chemical engineers, electrical engineers; many have trained safety engineers. But very few have industrial hygiene engineers with the combined "know how" for the control of both occupational diseases and occupational accidents, including practical experience in the maintenance of production. Since this is true, and since it is seldom necessary for a plant to have the full-time services of an industrial hygiene engineer, it is suggested that plants utilize the services of governmental industrial hygiene bureaus (Federal, State, and local) to obtain impartial surveys and expert consultation. The engineers from these bureaus can make detailed surveys, work out the steps to be taken, and instruct plant engineers as to their application. Assign one responsible person, preferably an engineer, to work with the governmental industrial hygiene engineer.
2. *Safety engineers* are trained to identify conditions or practices that might result in accidental injuries to workers. They also conduct safety education programs and organize and direct safety committees.

3. *The safety committees.*—There should be separate shop safety committees, under a central safety committee, in large plants. The plant physician should be a member of the central safety committee. Safety committees investigate accidents, make recommendations for accident prevention, formulate safety rules and regulations for the plant, and see that recommendations and rules are complied with.
4. Every plant should have at least one first-aid or stretcher crew, composed of interested employees. The crew may be trained by the medical service, a trained safety engineer, or a first-aid teacher with a Red Cross certificate. The first-aid crew works under the supervision of the medical service and the safety committee.

Engineering Control:

In every modern industry there are one or more conditions peculiar to the particular processes and operations which are potential threats to the health and safety of the workers. These are called occupational hazards; most of them can be eliminated or reduced to harmless limits by engineering methods. Further protection of the worker must sometimes be provided by supplying approved devices and clothing. The most important occupational hazards are:

1. Exposure to poisonous fumes, dust, and gases, which may result in serious acute or chronic illness.
2. Excessive noise.
3. Poor illumination (insufficient lights; glare).
4. Excessive heat, cold, or humidity.
5. Contact with chemicals and other substances which produce skin diseases.
6. Operations which may result in accidental injuries, as burns, cuts, crushing, wounds, etc.
7. Overcrowding in the workroom.
8. Poor ventilation in the workroom.
9. Poor housekeeping.

The Industrial Hygiene Survey:

Has your plant had a recent survey? If not, arrange for one to be made. It includes:

1. An appraisal of occupational hazards and unsafe practices.
2. Occupational analysis, noting the hazardous materials or conditions to which each worker is exposed.
3. Scientific tests to determine whether a potential hazard is real.
4. Rating of the hazards and of the preventive measures already in operation.
5. Interpretation of the findings and recommendations for improvement.

6. Follow-up to make sure that recommended changes have accomplished the purpose for which they were made.

Control Methods:

Good housekeeping is rule 1-A for the control of occupational hazards. This is everybody's job. It means simply maintaining an orderly, workmanlike shop, indoors and out. Check the housekeeping in your plant. Make someone in each shop at each operation responsible. The safety committees may be the groups you will choose. Pay special attention to the following:

1. *Tools* kept in their assigned place.
2. *Workbenches* orderly.
3. *Materials* brought to operators and stacked in orderly fashion.
4. *Floors* kept free of trash, spilled oil, and other waste.
5. *Aisles*, stairways, halls kept free of obstructions.
6. *Containers* kept closed except when in actual use.
7. *Windows* clean.
8. *Lights* clean and bulbs renewed promptly.
9. *Safety* equipment kept in assigned places, repaired and cleaned regularly.
10. *Plant exterior*, yards, storehouses, garages, etc., also well-kept.
11. *Dustless* cleaning of floors and equipment, such as wet sweeping, vacuum cleaning.

Control of Poisonous Fumes, Gases, or Dusts:

This is a job for experts. Industrial hygiene engineers must design specific measures for each hazardous operation. In general, these measures involve various types of ventilation; personal protective equipment and clothing for the workers; alterations in processes, materials used, or location of the operation.

See to it that all protective equipment in your plant is checked and regularly serviced by maintenance personnel. Work out a weekly schedule and see that it is followed.

Sanitary Facilities:

Check these facilities and their maintenance in your plant today! Serious communicable and occupational diseases can be spread through lack of decent sanitary facilities. Industrial hygiene experts can help you with final recommendations, but even if you do not have a medical service or engineering service now, you can start immediately.

1. *Lockers and dressing rooms:*
 - a. Large enough for all workers? Men? Women? Both white and Negro workers where separate rooms are maintained?
 - b. Clean and airy?
 - c. Well maintained? Broken lockers and furniture repaired?

2. *Wash rooms:*
 - a. Enough hand-washing basins? Toilets? Showers? For all workers?
 - b. Plenty of hot water?
 - c. Soap?
 - d. Towels?
 - e. Clean and aired at all times?
 - f. Inspected at frequent intervals every day?
 - g. Obstructions in the plumbing removed promptly?
 - h. Sanitary napkins and separate receptacles for their disposal in women's wash rooms?
3. *Drinking fountains* conveniently located in the several shops? (No plant should tolerate use of common drinking cups.)
4. *Salt tablets* located near the drinking fountains in hot weather?
5. *Cafeteria or lunch room:*
 - a. Clean?
 - b. Dishes, etc., washed and rinsed in very hot water?
 - c. Refrigerators large enough to store food safely and kept spotlessly clean?
6. *Individual goggles:*
 - a. Dust masks, gloves, and other protective clothing provided for each worker requiring such articles?
 - b. Protective clothing promptly repaired and kept clean?
7. *Daily shower* and complete change of clothes before leaving the plant for every worker engaged in operations where poisonous substances are used?

The Safety Program:

1. Every operation must be designed so it can be done safely.
2. All moving parts likely to injure the worker must be guarded.
3. In certain operations, workers need safety shoes, safety goggles, hard hats, special gloves, and other protective clothing.
4. Women workers should have hair nets and practical work clothes. The United States Women's Bureau has designed approved types.
5. *Daily inspections* of all operations by the safety engineer, to identify unsafe practices and conditions.
6. Frequent meetings of the safety committees.
7. Investigations of accidents to determine causes and prevent future accidents.
8. Safety meetings for all personnel at regular intervals.
9. Enforcement of safety regulations by foremen, with the full support of the safety committees, shop stewards, and other officials.
10. Training each new worker to do his job the safe way.

CONSULT YOUR STATE INDUSTRIAL HYGIENE SERVICE ON THESE ADDITIONAL PROBLEMS

1. How to reduce noise.
2. How to reduce glare.
3. How to install good lighting.
4. Control of excessive heat and sudden temperature changes.
5. Design and allocation of space when contemplating additions to the plant.
6. Safety of new installations and processes.

WELFARE SERVICES

Only the largest industries have welfare departments for employees. You do not have to have trained welfare workers. The War Production Drive Committee can constitute itself a welfare service, drawing upon the interest, knowledge, and experience of anyone in the plant. Look for cooperation from the medical service, personnel department, employees, and the executive offices. The following problems should have your immediate attention.

MEDICAL CARE FOR NONOCCUPATIONAL DISABILITY

Nine in every ten absences because of sickness in your plant are the result of diseases and accidents occurring in the home and the community. A few large, progressive firms have already developed excellent services for the care of employees and their families, including medical, dental, surgical, nursing, and hospital care. On the whole, however, plant medical services have not yet broadened their scope to include this general medical care. The War Production Drive Committee should study the plans for general medical service now in effect in other establishments with a view to adopting a plan best suited to the needs of the workers. In isolated communities with inadequate medical facilities, it may be necessary to extend the scope of the plant's emergency medical service for general illnesses.

1. Enlist the services of the local physicians in your community in working out a satisfactory medical care program.
2. The medical department, and, if none, the committee, should be responsible for putting every worker in touch with a well-qualified physician whenever sickness occurs in his family.
3. Get in touch with your State or local health department and see that the following problems, for which the health department is responsible, are attended to promptly:
 - a. Protection of workers and their families against smallpox and typhoid fever (children should also be protected against diphtheria and whooping cough).

- b.* Housing: Are the workers' homes (1) overcrowded? (2) unscreened—especially in malaria districts? (3) insanitary?
 - c.* Sewage disposal: (1) Is the central system of the community adequate to supply all workers' homes? (2) Are privies, outdoor toilets, trailer toilets, so constructed and maintained as to prevent pollution of the water supply?
 - d.* Is there enough safe water for every worker's family?
 - e.* Is the milk supply safe? Inspected by the health department? Pasteurized? Has your community adopted the Standard Milk Ordinance of the United States Public Health Service?
 - f.* Are hotels, rooming houses, and eating establishments of all types inspected by your health department? Operated according to the sanitary regulations of the State?
4. Make sure that there are enough physicians, nurses, and hospital beds in the community. In war areas where there are shortages of physicians, nurses, and hospitals, you can get help from the Federal Government:
- a.* To obtain physicians and dentists write to the Procurement and Assignment Service, War Manpower Commission, Washington, D. C.
 - b.* Use the services of the Visiting Nurses' Association in your community to get home care for the sick and injured.

THE PREPLACEMENT EXAMINATION

Modern streamlined industries have adopted the preplacement examination as an effective tool for placing all workers in jobs which they can do safely and efficiently without endangering themselves and their fellow workers.

The objective of the preplacement examination is to utilize every available worker. In no instance should it be interpreted as a means of rejection of handicapped persons. The old idea that an industrial worker must have the physical requirements of a 1-A or 1-B selectee must be thrown overboard in these critical times. Before this war is won, industry will have to depend largely upon older men, women, and physically handicapped younger men. Many industries with realistic personnel policies nowadays reject less than 1 percent of applicants.

You cannot adopt the preplacement examination as a policy unless you have a plant medical service to perform the examinations professionally. The personnel and safety departments should work in cooperation with the medical service. Physician, placement manager,

and safety engineer together determine the job in which each new worker can achieve peak production. The preplacement examination includes:

1. Complete medical and occupational history.
2. Complete physical examination.
3. Test of eyesight.
4. Blood pressure reading.
5. Laboratory analysis of urine.
6. Blood count.
7. Blood test for syphilis.
8. X-ray picture of the chest to detect tuberculosis, especially of applicants whose physical examination suggests the possibility of tuberculosis.

One-eyed workers, and many applicants with handicaps such as hernia, high blood pressure, defective vision or hearing, and crippling conditions should be employed and placed by the physician and employment office at jobs they can do efficiently and safely. Applicants found infected with syphilis should be employed, providing: (1) Their disease is in a noninfectious stage; (2) they have no other disqualifying complications; and (3) they remain under treatment.

NIGHT WORK AND ROTATING SHIFT PROBLEMS

To maintain workers' health and thereby peak production, industries operating on the 24-hour basis must take special precautionary measures to minimize the effects of night work and the rotating shift. The United States Public Health Service makes these recommendations:

1. Workers changing over from day to night shift every 2 or 3 weeks find it difficult to adjust their eating and sleeping habits. In plants operating on a 24-hour schedule, shifts should not be rotated more often than every 2 or 3 months.
2. Each nursing shift should rotate at the same time as the workers' shift, so that the same nurses will always be acquainted with the workers they are treating.
3. Women with home responsibilities often try to do their housework during the day while working on night shifts. Chronic fatigue in short order is the result. In general, women workers who also have domestic duties should not be employed on the night shift.
4. Excessive increases in working hours lead to reduced efficiency during working hours, absenteeism, and sickness. A 48-hour week—on an 8-hour day, 6-day week basis—is preferable. Individual workers should have 1 day in every 7 reserved for rest and recreation; this does not preclude continuous operation of the factory.

5. Organized rest periods help maintain production at a high level. Five- to fifteen-minute rest periods should be provided at the end of the first quarter, and again at the three-quarter mark of each shift. This is especially important in repetitive monotonous work or heavy manual labor. Milk, sandwiches, and fruit should be available during the rest periods.
6. A particularly high standard of lighting and ventilation is necessary in plants operating at night or under black-out conditions. Proper lighting reduces fatigue, improves morale, and prevents accidents due to poor light or glare.

BETTER NUTRITION IN THE PLANT

Every plant should have a cafeteria, canteen, or at least a lunchroom for workers who bring lunch boxes.

The Cafeteria or Canteen:

1. Should be open to serve all shifts at all times.
2. Offer a special lunch at a reasonable cost, including a meat dish, a fruit or leafy vegetable, and milk or a milk dish.
3. Milk and other protective foods should be offered at cost or below cost, to encourage workers to eat them rather than soft drinks, pastries, and other nonprotective foods.
4. Bread made with enriched flour or whole wheat flour should be served.
5. Menus and preparation of food should be supervised by a nutritionist or a member of the medical service staff. Many State and local health departments have nutritionists for consultation. For further planning, write to the Industrial Education Section, Division of Nutrition, Federal Security Agency, Washington, D. C.

Food Carts:

Food carts should tour all shops during the middle of the first and second halves of each shift, in order that workers may get milk, fruit, and nutritious sandwiches.

Supplementary Foods:

Supplementary foods such as milk and vitamin preparations need not be provided routinely, except upon the advice of the plant physician.

Storage Space:

Storage space for lunch boxes should be provided in a clean, cool, well-aired place.

PERSONAL PROBLEMS

Worry, nervous strain, and emotional difficulties have a direct effect upon health, efficiency, and production. Your committee should do

all in its power to help workers solve their problems. Here are some suggestions:

1. If trained mental hygiene counselors are not available in your plant and cannot be obtained, appoint some responsible common-sense individual with a sincere, warm interest in people and their problems to work with your committee. Often all that is needed to iron out emotional difficulties is a good listener. The counselor, in general, should be an older person with rich life experience, and above all one who can be implicitly trusted to preserve the confidence of the worker.
2. The counselor should refer married women workers with special problems to the medical service or a private physician for advice on the proper spacing of children, as a means of protecting the health of the mother and her children.
3. Sponsor group insurance plans (hospital insurance, life insurance, sickness and accident benefit).
4. Establish credit unions to combat loan sharks.
5. Pregnant women workers should be given every consideration for continued employment commensurate with their physical capacity under medical supervision. Make sure that every pregnant woman in your plant receives medical supervision and care throughout pregnancy including delivery and the post-natal period. Secure the active cooperation of your local health department.
6. Make plans for the daytime care of the young children of women workers.
7. Help solve transportation problems.
8. Increase opportunities for wholesome recreation in the plant and in the community. Cooperate with the Federal recreation program, Office of Defense Health and Welfare Services, Washington, D. C.

HEALTH AND SAFETY EDUCATION FOR WORKERS

1. Organize an overall program to give all employees in the plant the information and training they need to protect themselves and to cooperate intelligently with the health and welfare services.
2. The program should include instruction on:
 - a. Occupational hazards in their jobs and the means employed to control the hazards.
 - b. Safety practices in their particular jobs and in such overall hazards as fire, traffic accidents, etc.
 - c. Nonoccupational diseases and the means to prevent sickness or to bring about speedy recovery.

- d.* Helpful personal practices, such as rest, sleep, posture, recreation, cleanliness, etc.
 - e.* Nutrition—choice of foods, family budget, meal planning.
3. Training of all new workers, in the beginning, and retraining of old workers frequently, in the use and care of protective equipment and clothing.
 4. Utilize talks, motion pictures, demonstrations, pamphlets, posters, plant and union periodicals to carry the story home; the United States Public Health Service has pamphlets, posters, motion pictures, photographs.
 5. Arrange meetings either at the plant, the union hall, or the recreation center, where wives and other members of the family may also participate in health activities.
 6. For guidance in developing and conducting the program, secure the cooperation of local physicians, nurses, dentists, health officers; local nutrition committees, Red Cross, and other voluntary agencies; the medical, safety, and engineering services of your plant.
 7. Have the medical service or a private physician instruct workers on the control and prevention of syphilis and gonorrhea.
 8. See that every preplacement and periodic physical examination of personnel is accompanied by careful interpretation of the findings to the worker.

HOW TO USE THIS OUTLINE

Do not be discouraged if your plant has none of the services or programs suggested in this outline. Do not be discouraged if present services fall short. Get busy and do something about it. Health and welfare services such as are outlined here cannot be brought into being overnight. The important thing is to get started. Many of the adverse conditions can be corrected in a day!

Use the services of your State industrial hygiene bureau. All industrial States now have such services ready to help you. The Division of Industrial Hygiene, National Institute of Health, United States Public Health Service, Bethesda, Md., has already asked your State industrial hygiene director to visit you. For further information and consultation, do not hesitate to call upon him or upon the Public Health Service.

775

OK3

FD #2203

CHILD-LABOR SERIES No. 27

File #2203

HAZARDOUS OCCUPATIONS

SUBJECT TO A MINIMUM
AGE OF 18 YEARS UNDER
FAIR LABOR STANDARDS
ACT OF 1938

U. S. DEPARTMENT OF LABOR
DIVISION OF LABOR STANDARDS
Child Labor and Youth Employment Branch
Washington • 1946

CONTENTS

	Page
How young workers are protected by hazardous-occupations orders	1
Where the 18-year minimum age applies	2
Explosives manufacturing (Order No. 1)	2
Motor vehicles (Order No. 2)	3
Coal mining (Order No. 3)	3
Logging and sawmilling (Order No. 4)	4
Power-driven woodworking machines (Order No. 5)	5
Radioactive substances (Order No. 6)	7
Power-driven hoisting apparatus (Order No. 7)	7
References	9

ii

HAZARDOUS OCCUPATIONS

subject to a minimum age of 18 years under the Fair Labor Standards Act

HOW YOUNG WORKERS ARE PROTECTED BY HAZARDOUS-OCCUPATIONS ORDERS

To protect young workers from hazardous employment, the Fair Labor Standards Act of 1938 provides [in Section 3 (1) (2)] for a minimum age of 18 years in occupations found and declared to be particularly hazardous for minors 16 and 17 years of age.

Hazardous-occupations orders are the means through which occupations are declared to be particularly hazardous for minors. The effect of these orders is to raise the minimum age for employment to 18 years in the occupations covered. The orders apply to all establishments subject to the child-labor provisions of the Fair Labor Standards Act; that is, to establishments producing goods for shipment in interstate or foreign commerce.

Power to issue hazardous-occupations orders under the act was transferred from the Chief of the Children's Bureau to the Secretary of Labor under the President's reorganization plan effective July 16, 1946. The Child Labor and Youth Employment Branch of the Division of Labor Standards, U. S. Department of Labor, makes investigations preparatory to issuance of orders and administers these and other child-labor provisions of the Fair Labor Standards Act.

Seven orders have been issued under the Fair Labor Standards Act and are now in effect:

- No. 1. Occupations in or about plants manufacturing explosives or articles containing explosive components.
- No. 2. Occupations of motor-vehicle driver and helper.
- No. 3. Coal-mine occupations.
- No. 4. Logging occupations and occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill.
- No. 5. Occupations involved in the operation of power-driven woodworking machines.

[1]

No. 6. Occupations involving exposure to radioactive substances.

No. 7. Occupations involved in the operation of power-driven hoisting apparatus.

WHERE THE 18-YEAR MINIMUM AGE APPLIES

The occupations covered by each hazardous-occupations order are given here with definitions, as used in the orders, and with amendments and exemptions now in effect. *Wartime exemptions which have been revoked are not shown.*

Explosives-Manufacturing Occupations (Order No. 1)

1. All occupations in or about any plant manufacturing explosives or articles containing explosive components except plants manufacturing small-arms ammunition not exceeding .50 caliber in size, shotgun shells, or blasting caps when manufactured in conjunction with small-arms ammunition.

2. The following occupations in or about any plant manufacturing small-arms ammunition not exceeding .50 caliber in size, shotgun shells, or blasting caps when manufactured in conjunction with small-arms ammunition:

(a) All occupations involved in the manufacturing, mixing, transporting, or handling of explosive compounds and all other occupations requiring the performance of any duties in the explosives area in which explosive compounds are manufactured or mixed.

(b) All occupations involved in the manufacturing, transporting, or handling of primers and all other occupations requiring the performance of any duties in the same building in which primers are manufactured.

(c) All occupations involved in the priming of cartridges and all other occupations requiring the performance of any duties in the same workroom in which rim-fire cartridges are primed.

(d) All occupations involved in the plate loading of cartridges and in the operation of automatic loading machines.

[2]

(e) All occupations involved in the loading, inspecting, packing, and shipping of blasting caps.

Definitions.

The term "plant manufacturing explosives or articles containing explosive components" means the land with all buildings and other structures thereon used in connection with the manufacturing or processing of explosives or articles containing explosive components.

The terms "explosives" and "articles containing explosive components" mean and include ammunition, black powder, blasting caps, fireworks, high explosives, primers, smokeless powder, and all goods classified and defined as explosives by the Interstate Commerce Commission in "Regulations for Transportation by Rail of Explosives, etc.," as amended, Docket 3666, issued pursuant to the Act of March 4, 1921 (c. 172, 41 Stat. 1444, U. S. C., title 18, sec. 382).

[Effective July 1, 1939. Amended February 18, 1943.]

Motor-Vehicle Occupations (Order No. 2)

The occupations of motor-vehicle driver and helper.

Definitions.

The term "motor vehicle" shall mean any automobile, truck, truck-tractor, trailer, semitrailer, motorcycle, or similar vehicle propelled or drawn by mechanical power and designed for use as a means of transportation but shall not include any vehicle operated exclusively on rails.

The term "driver" shall mean any individual who, in the course of his employment, drives a motor vehicle at any time.

The term "helper" shall mean any individual, other than a driver, whose work in connection with the transportation or delivery of goods includes riding on a motor vehicle.

[Effective January 1, 1940.]

Coal-Mine Occupations (Order No. 3)

All occupations in or about any coal mine, except the occupation of slate or other refuse picking at a picking table or picking chute in a tippie or breaker, and occupations requiring the performance of duties solely in offices or in repair or maintenance shops located in the surface part of any coal-mining plant.

Definitions.

The term "coal" shall mean any rank of coal, including lignite, bituminous, and anthracite coals.

[3]

The term "all occupations in or about any coal mine" shall mean all types of work performed in any underground working, open pit, or surface part of any coal-mining plant that contributes to the extraction, grading, cleaning, or other handling of coal.

[Effective September 1, 1940.]

Logging and Sawmilling Occupations (Order No. 4)

All occupations in logging and all occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill are particularly hazardous for the employment of minors between 16 and 18 years of age, except the following:

- (a) Work in offices or in repair or maintenance shops.
- (b) Work in the operation or maintenance of living quarters.
- (c) Work in timber cruising, surveying, or logging-engineering parties, provided that no work in the construction of roads or railroads is performed.
- (d) Work in forest protection, such as clearing fire trails or roads, piling and burning slash, maintaining fire-fighting equipment, constructing or maintaining telephone lines, or acting as fire lookout.
- (e) Work in the feeding or care of animals used in logging.

Exemptions Under Wartime Amendments.

(1) Saw filing, except in connection with logging operations; packing shingles; straightening, marking, tallying, or pulling lumber from the dry chain, the drop sorter, or the green chain (other than the pulling of lumber larger than 1 inch by 6 inches in size from the green chain); unstacking from the dry kiln; clean-up in the lumberyard; or the handling or shipping of dry lumber or of lumber products in yards or sheds of sawmills, lath mills, shingle mills, or cooperage-stock mills excepting the operation of cranes, lumber carriers, and other power-driven equipment, and the occupation of crane hooker.

(2) Repair or maintenance of equipment; work as fire patrolman or watchman; log scaling on trucks when performed away from a landing

[4]

or log dump; peeling or loading of posts of sizes ordinarily used for fencing; driving of animals; and the construction, repair, or maintenance of roads, railroads, flumes, or camps: *Provided*, That the provisions of this exemption shall not apply to the felling or bucking of trees, the operation of machinery, the handling or use of explosives, the lifting and placing of ties or rails, and work on trestles.

Definitions.

The term "all occupations in logging" shall mean all work performed in connection with the felling and bucking of timber into logs or converting of timber into poles, piles, ties, bolts, or similar products; the collecting, loading, transporting, or unloading of such products in connection with logging; the constructing and maintaining of roads, railroads, flumes, or camps used in connection with logging; the moving and installing of machinery or equipment used in logging, and other work performed in connection with logging. The term shall not apply, however, to such occupations when carried on in connection with the logging of pulpwood or other wood similar in size to pulpwood, including excelsior wood, chemical wood, and cordwood, unless such logging is done in conjunction with and at the same time and place as logging covered by the order; nor shall the term apply to work performed in timber culture, timber-stand improvement, or in emergency fire-fighting.

The term "all occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill" shall mean all work performed in or about any such mill in connection with converting logs into rough lumber; converting logs, bolts, or scrap wood into laths, shingles, or cooperage stock; storing logs, bolts, or scrap wood; or storing, drying, or shipping of lumber, laths, shingles, cooperage stock, or other products of such mills. The term shall not include, however, work performed in the planing-mill department or other remanufacturing departments of any sawmill.

[Effective August 1, 1941. Amended September 12, 1942; June 25, 1943; and October 18, 1944.]

Power-Driven Woodworking Machine Occupations (Order No. 5)

The following occupations involved in the operation of power-driven woodworking machines:

- 1. The occupation of operating power-driven woodworking machines, including supervising or controlling the operation of such machines, feeding material into such

[5]

machines, and helping the operator to feed material into such machines, but not including the placing of material on a moving chain or in a hopper or slide for automatic feeding.

2. The occupations of setting up, adjusting, repairing, oiling, or cleaning power-driven woodworking machines.

3. The occupations of off-bearing from circular saws and from guillotine-action veneer clippers.

Exemption for Apprentices.

This order shall not apply to the employment of apprentice pattern makers, cabinet makers, airplane-model makers, ship joiners, and mold-loftsmen in the occupations declared particularly hazardous, if such employment is incidental to their apprentice training, is intermittent and for short periods of time and under the direction and supervision of an instructor as a necessary part of such apprentice training, and is carried on in accordance with a written apprenticeship agreement that has been approved by the Federal Committee on Apprenticeship of the Apprentice-Training Service, U. S. Department of Labor, or by a State apprenticeship council or other authority recognized by the Federal Committee on Apprenticeship.

Definitions.

The term "power-driven woodworking machines" shall mean all fixed or portable machines or tools driven by power and used or designed for cutting, shaping, forming, surfacing, nailing, stapling, wire stitching, fastening, or otherwise assembling, pressing, or printing wood or veneer.

The term "off-bearing" shall mean the removal of material or refuse directly from a saw table or from the point of operation. Operations not considered as off-bearing within the intent of this order include (a) the removal of material or refuse from a circular saw or guillotine-action veneer clipper where the material or refuse has been conveyed away from the saw table or point of operation by a gravity chute or by some mechanical means such as a moving belt or expulsion roller, and (b) the following operations when they do not involve the removal of material or refuse directly from a saw table or from the point of operation: The carrying, moving, or transporting of materials from one machine to another

[6]

or from one part of a plant to another; the piling, stacking, or arranging of materials for feeding into a machine by another person; and the sorting, tying, bundling, or loading of materials.

[Effective August 1, 1941. Amended November 13, 1942, and February 18, 1944.]

Occupations Involving Exposure to Radioactive Substances (Order No. 6)

Any work in any workroom in which (a) radium is stored or used in the manufacture of self-luminous compound; (b) self-luminous compound is made, processed, or packaged; (c) self-luminous compound is stored, used, or worked upon; or (d) incandescent mantles are made from fabric and solutions containing thorium salts, or are processed or packaged.

Definitions.

The term "self-luminous compound" shall mean any mixture of phosphorescent material and radium, mesothorium, or other radioactive element.

The term "workroom" shall include the entire area bounded by walls of solid material and extending from floor to ceiling.

[Effective May 1, 1942.]

Power-Driven Hoisting Apparatus Occupations (Order No. 7)

The following occupations involved in the operation of power-driven hoisting apparatus:

1. Work of operating an elevator, crane, derrick, hoist, or high-lift truck, except operating an unattended automatic operation passenger elevator or an electric or air-operated hoist not exceeding 1 ton capacity.

2. Work which involves riding on a freight elevator. (Where employees are customarily transported to their work place at the beginning and end of scheduled work periods in a freight elevator operated by an assigned operator, such riding shall not be considered as work within the intent of this paragraph.)

3. Work of assisting in the operation of a crane, derrick, or hoist performed by crane hookers, crane chasers, hookers-on, riggers, rigger helpers, and like occupations.

[7]

Definitions.

The term "elevator" shall mean any power-driven hoisting or lowering mechanism equipped with a car or platform which moves in guides in a substantially vertical direction. The term shall include both passenger and freight elevators (including portable elevators or tiering machines), but shall not include dumbwaiters.

The term "crane" shall mean a power-driven machine for lifting and lowering a load and moving it horizontally, in which the hoisting mechanism is an integral part of the machine. The term shall include all types of cranes, such as cantilever gantry, crawler, gantry, hammerhead, ingot-pouring, jib, locomotive, motor-truck, overhead traveling, pillar jib, pintle, portal, semigantry, semiportal, storage bridge, tower, walking jib, and wall cranes.

The term "derrick" shall mean a power-driven apparatus consisting of a mast or equivalent members held at the top by guys or braces, with or without a boom, for use with a hoisting mechanism or operating ropes. The term shall include all types of derricks, such as A-frame, breast, Chicago boom, gin-pole, guy, and stiff-leg derricks.

The term "hoist" shall mean a power-driven apparatus for raising or lowering a load by the application of a pulling force that does not include a car or platform running in guides. The term shall include all types of hoists, such as base-mounted electric, clevis suspension, hook suspension, monorail, overhead electric, simple drum, and trolley suspension hoists.

The term "high-lift truck" shall mean a power-driven industrial type of truck used for lateral transportation that is equipped with a power-operated lifting device usually in the form of a fork or platform capable of tiering loaded pallets or skids one above the other. Instead of a fork or platform, the lifting device may consist of a ram, scoop, shovel, crane, revolving fork, or other attachments for handling specific loads. The term shall mean and include high-lift trucks known under such names as fork lifts, fork trucks, fork-lift trucks, tiering trucks, or stacking trucks, but shall not mean low-lift trucks or low-lift platform trucks that are designed for the transportation of but not the tiering of material.

[Effective September 1, 1946.]

[8]

REFERENCES

Hazardous-occupations orders appear in the Code of Federal Regulations under Title 29, chapter IV, secs. 422.1-422.7.

The text of individual orders in mimeographed form can be obtained from the Child Labor and Youth Employment Branch, Division of Labor Standards, U. S. Department of Labor, Washington 25, D. C. Other publications of interest in connection with occupations hazardous for young workers, obtainable from the Child Labor and Youth Employment Branch, are:

Fair Labor Standards Act of 1938 (text).

Folder 26.—Ten Questions Answered About the Child-Labor Provisions of the Fair Labor Standards Act.

Folder 28.—Age Certificates Are the Employer's protection Under the Fair Labor Standards Act of 1938.

Occupational Hazards to Young Workers: Reports No. 1-No. 7. These reports contain, for each hazardous-occupations order, data on which the findings were based.

Which Jobs for Young Workers? A series of leaflets containing advisory standards for the safe employment of young workers in a number of fields not covered by hazardous-occupations orders.

U. S. GOVERNMENT PRINTING OFFICE 16-50121

[9]

775

OK3

File #2204

How *do we* Rate?



A Self-check of
Health Practices *in Our Plant*

NATIONAL ASSOCIATION OF MANUFACTURERS
FOURTEEN WEST 49th STREET • NEW YORK CITY



SOURCES OF DETAILS OR STANDARDS

- ¹ WHO'S TOO SMALL FOR A HEALTH PROGRAM? *National Association of Manufacturers.*
- ² SUGGESTIONS FOR AN INDUSTRIAL DISPENSARY, *National Association of Manufacturers.*
- ³ PHYSICAL EXAMINATIONS IN INDUSTRY, *Industrial Health Series No. 2, Metropolitan Life Insurance Co., One Madison Avenue, New York City.*
SUGGESTED PHYSICAL EXAMINATION PRACTICES FOR INDUSTRY, *National Association of Manufacturers.*
- ⁴ DO GOOD WORKING CONDITIONS PAY? — page 29, *National Association of Manufacturers.*
- ⁵ OCCUPATIONAL HAZARDS AND DIAGNOSTIC SIGNS, *Bulletin No. 582 of the U. S. Bureau of Labor Statistics, Department of Labor, Washington, D. C.*
- ⁶ List of industrial hygiene facilities of state departments, insurance companies, schools, private consultants, *National Association of Manufacturers.*
- ⁷ RECOMMENDED PRACTICE OF INDUSTRIAL LIGHTING, *Illuminating Engineering Society, 51 Madison Avenue, New York City.*
- ⁸ AMERICAN STANDARD SAFETY CODE FOR INDUSTRIAL SANITATION IN MANUFACTURING ESTABLISHMENTS, *American Standards Association, 29 West 39th Street, New York City.*
- ⁹ QUALIFICATIONS OF AN INDUSTRIAL DOCTOR, *National Association of Manufacturers.*
- ¹⁰ QUALIFICATIONS OF AN INDUSTRIAL NURSE, *National Association of Manufacturers.*



This Check List

has been prepared by the National Association of Manufacturers to enable plant managers and executives to compare the employee health activities in their plants with a guide accepted as good practice by both operating executives and health experts. These recommended health practices are classified in four sections, each with a ranking value as follows, totaling 100 points:

I. Employee Health and Safety Control.....	35
II. Factory Hygiene Control.....	35
III. Records.....	20
IV. Health Education	10

THE basic hazards of work in different occupations or industries vary only in degree and detail. Remedies for the harmful effects of heat, or dust, or vibration, or fumes are similar whether in a steel mill, textile plant or glass factory.

A skin rash may appear on the girl at her typewriter as readily as on the operator in a machine shop. The trucker in the storehouse and the executive in his front office may be equally receptive to the same cold germs. The items included in this pamphlet are considered the minimum for satisfactory health protection. They are practical and are in operation in plants throughout the country. Many plants employing less than one hundred employees

have the bulk of these provisions, while some have the entire program.

It is suggested that this check-list be referred to the proper operating personnel in each plant for checking and then returned to the executives for review and consideration. It is not intended that this check-list should be returned to the N.A.M. Additional copies of this bulletin are available from the N.A.M. for use by member companies operating more than one plant.

The practices outlined herein merit careful study by all manufacturers, for they have consistently proved their worth as a means to reduce absence, accidents and illness; to lower compensation premiums; and to improve industrial and public relations.

Any comments or suggestions may be addressed to Industrial Relations Department, National Association of Manufacturers, 14 West 49th Street, New York 20, N. Y.

How do we Rate? I. *Employee Health and Safety Control*

ACTIVITY	MAXIMUM SCORING VALUE	OUR PLANT SCORE	IF OUR POLICY INCONSISTENT:	
			Change Recommended	Operations Do Not Warrant Change
1] Licensed physician in plant each week regular schedule ^{1, 9*}	4	.....	.....	.....
2] Graduate nurse in plant each week on regular schedule ^{1, 10}	4	.....	.....	.....
3] Dispensary in plant equipped for physical examinations and emergency care ²	3	.....	.....	.....
4] Pre-employment physical examination of all new employees by doctor ³	2	.....	.....	.....
a. Urinalysis and blood cell count or hemoglobin test of all new employees.	1	.....	.....	.....
b. Wasserman or Kline or Kahn blood test of all new employees.....	1	.....	.....	.....
c. X-ray of chest of all new employees..	1	.....	.....	.....
5] Complete periodic physical examination of all employees at least every two years by doctor ³	2	.....	.....	.....
a. Periodic check-up by doctor of employees on hazardous work, at regular intervals	2	.....	.....	.....
6] All costs of physical examinations borne by company	1	.....	.....	.....
7] Records of all physical examinations maintained and under sole responsibility of doctor and nurse.....	2	.....	.....	.....
8] Foremen and supervisors instructed to send <i>all</i> injury and illness cases to dispensary	2	.....	.....	.....
9] Low cost or pre-payment hospitalization plans made available or encouraged by company	1	.....	.....	.....
10] Safety committee composed of management, employees, doctor or nurse and safety man, if present ¹	3	.....	.....	.....
a. First aid instruction of employee(s) on every shift by doctor (and safety man, if present).....	2	.....	.....	.....
b. Personal instruction of all new employees on safety factors and devices..	2	.....	.....	.....
c. Regular maintenance and repair of guards and safety equipment (goggles, masks, etc.).....	2	.....	.....	.....
Subtotal.....	35	.....	.....	.....

* Numerals refer to sources of information on this item listed on the inside front cover.

How do we Rate? II. Factory Hygiene Control

ACTIVITY	MAXIMUM SCORING VALUE	OUR PLANT SCORE	IF OUR POLICY INCONSISTENT:	
			Change Recommended	Operations Do Not Warrant Change
1] Observation and maintenance of work room temperature at optimum for comfort consistent with process ⁴	3	.....	.....	.....
a. Use of salt or extra protection for employees in necessary high or low temperatures	1	.....	.....	.....
2] General ventilation supervised for maximum comfort and health.....	2	.....	.....	.....
a. Exhaust ventilation of hazardous dust, gas, fume, spray or mist ⁵	3	.....	.....	.....
b. Engineering survey of potential hazards by state, insurance company, or company industrial hygienist ⁶	4	.....	.....	.....
c. Scheduled periodic check-up of air at working places where potential hazard exists	2	.....	.....	.....
3] Illumination supervised for maintenance of adequate light at working surfaces ⁷	1	.....	.....	.....
4] Program for maintenance of good plant housekeeping	4	.....	.....	.....
5] Periodic check-up on purity of food and water accessible in plant ⁸	4	.....	.....	.....
6] Regular check-up of adequate, efficient and clean washrooms, sanitary fixtures, and waste disposal ⁸	4	.....	.....	.....
7] Regular inspection of plant by doctor, to assist occupational disease and sanitary control	4	.....	.....	.....
Subtotal.....	35	.....	.....	.....

How do we Rate? III. Records

ACTIVITY	MAXIMUM SCORING VALUE	OUR PLANT SCORE	IF OUR POLICY INCONSISTENT:	
			Change Recommended	Operations Do Not Warrant Change
1] <i>Accident Records</i> , classified by department or type of work, for:				
a. Number of industrial accidents				
i. All accidents.....	1/2	.....	.....	.....
ii. Lost-time accidents.....	1/2	.....	.....	.....
b. Number of employees having accidents	1	.....	.....	.....
c. Total number days lost due to accidents	1	.....	.....	.....
2] <i>Sickness Records</i> , classified by department or type of work for:				
a. Occupational disease				
i. Number of cases.....	1	.....	.....	.....
ii. Number of days lost.....	1	.....	.....	.....
b. Non-occupational disease				
i. Number of cases.....	1/2	.....	.....	.....
ii. Number of days lost.....	1/2	.....	.....	.....
3] <i>Absence Records</i> , classified by department or type of work, for:				
a. All causes (industrial and non-industrial accidents and illness, "asked off")	4	.....	.....	.....
4] <i>Use of Records</i>				
a. Summary report of records sent to executives	2	.....	.....	.....
b. Conference to discuss and act on report	2	.....	.....	.....
c. Investigation of causes of illness and accidents	3	.....	.....	.....
d. Recommendations to prevent continuance of causes.....	3	.....	.....	.....
Subtotal.....	20	.....	.....	.....

How do we Rate? IV. Health Education

ACTIVITY	MAXIMUM SCORING VALUE	OUR PLANT SCORE	IF OUR POLICY INCONSISTENT:	
			Change Recommended	Operations Do Not Warrant Change
1] Instruction in and value to employees of <i>personal health maintenance</i> through posters, news letters, house organs, meetings, etc.	2	.....	.....	.....
2] Instruction in prevention and avoidance of <i>occupational disease</i> through posters, news letters, house organs, meetings, etc.	2	.....	.....	.....
3] Instruction in and value of <i>accident prevention</i> through posters, news letters, house organs, meetings, etc.....	2	.....	.....	.....
4] Cooperation with public and private accident and disease prevention organizations	2	.....	.....	.....
5] Personal health education by doctor and nurse at examinations and dispensary visits	2	.....	.....	.....
Subtotal.....	10	.....	.....	.....

SUMMARY TABULATION

	MAXIMUM SCORING VALUE	OUR PLANT SCORE
I. Subtotal on Employee Health and Safety Control	35	.....
I. Subtotal on Factory Hygiene Control....	35	.....
III. Subtotal on Records.....	20	.....
IV. Subtotal on Health Education.....	10	.....
TOTAL.....	100	.....

File #2205

UNIONS AND THE PREVENTION OF INDUSTRIAL DISEASES

The following article was written by Dr. I. D. Fagin, head of the Health Institute of the United Auto Workers, CIO, largest international union in the world. This American union has an extensive health program. It should be noted that the 'Sanitary Survey' suggested in this article can be carried on by a union health committee. This article can be reproduced in whole or in part by any Japanese organization so desiring.

"Industrial workers are subject to hazards arising directly from their occupations, in addition to the usual diseases which afflict mankind. In comparison with their colleagues in clerical and professional fields, workers in industry are far more affected by environmental exposures in their daily work. The increased use of toxic chemical agents in industry makes it advisable for the worker to understand what measures are available for his protection. The responsibility for protecting the worker has fallen to the relatively new specialties of industrial medicine and sanitary engineering. Members of these professions work in close collaboration to protect the worker from exposure to the noxious effects of dusts, vapors, gases, fumes, heat, fatigue, and other harmful factors encountered in industry.

"There are three primary phases in the prevention of occupational diseases:

- "1. Periodic medical examinations.
- "2. Sanitary surveys of plants and occupations.
- "3. Installation of mechanical safety equipment and instruction of the workers in personal hygiene and protective measures.

"These primary causes will be discussed in more detail."

Periodic Medical Examinations

"Periodic medical examinations are a decided advantage both to the worker and to management. Some of the larger organized labor units offer medical examinations to their membership by facilities such as our own Health Institute. Many of the larger plants have their own medical departments for the conduct of such programs. Whether it is labor or management which arranges for the examinations, the objective can be the same; maintenance of the health and efficiency of the worker. From management's point of view, the advantages are:

- "1. Decreased absenteeism from sickness.
- "2. Decrease in insurance costs resulting from reduction in accidents and industrial diseases.
- "3. Increase in efficiency of the individual worker with resultant increase in productive capacity.
- "4. Elimination of risks to other employees resulting from improper placement of individuals subject to convulsive seizures or mental disturbances.

"From the worker's point of view, the benefits are:

"1. Information relative to his physical condition with discovery of diseases in their early stages, and a greater sense of security.

"2. Decrease in loss of time and wages due to illness, with concomitant decrease in expenses for medical care.

"3. Proper placement in industry, eliminating exposure to ill-advised strains.

"4. Protection against accidents due to physical defects, with a decrease in the possibility of suffering permanent disability, and an increased protection in the event of compensation claims."

Sanitary Surveys

"These surveys are usually conducted by consulting sanitary engineers employed by the plant or by the industrial hygiene department of public health services. There is yet no adequate provision for the direct representation of the interests of organized labor in these surveys. The sanitary survey is an extremely important item in the prevention of occupational diseases because it indicates the necessity for the institution of protective devices and methods. The survey should consist of the investigation of the following features:

"1. Types of medical services available to the workers in the event of illness or injury.

"2. Availability of periodic medical examinations.

"3. The structure of the plant, particularly with respect to provisions for ventilation, lighting, and elimination of overcrowding.

"4. Provision of sanitary facilities, such as rest rooms, toilets, drinking water, cafeterias, etc.

"5. Analysis of types of occupations in the plant, particularly with respect to the hazards, the exposures, the illnesses, and the labor turnover in each occupation.

"6. Provision of methods for the protection of the workers.

"It is apparent that such a survey requires close cooperation between the industrial engineers and the industrial physicians."

Protective Methods

"The instruction of the workers in health and safety measures is an integral part of their protection. Instruction is offered under the guidance of agencies such as U. S. Department of Labor, National Safety Council, local boards of health, U. S. Public Health Service, and various insurance companies. The Health Education Department of the Health Institute conducts health and safety courses in cooperation with Wayne University.

"There are various methods available for the protection of the worker exposed to occupational hazards, depending upon the type of exposure encountered. It is possible in certain types of hazards to isolate that particular hazard

within a restricted area and thus decrease the number of workers exposed to it. Such isolation procedures have been applied to paint-spraying and some dust hazards.

"Another protective method is the provision of adequate local exhaust ventilation to remove toxic dusts, fumes, gases, and vapors from the vicinity of the workers.

"The substitution of non-toxic substances for toxic agents may remove certain hazards. For example, the use of steel abrasives instead of sand in sandblasting rooms reduces the dust concentration in those rooms to about 1/6 of the sand figure. The addition of aluminum dust to an atmosphere containing silice dust has been suggested in attempt to decrease the incidence of silicosis.

"Personal protective devices such as goggles, masks, respirators, aprons, gloves, boots and protective skin ointments are other measures which may be applicable to specific hazards."

Conclusion

"This very brief survey has attempted merely to indicate the extent of the problem of industrial disease prevention. The industrial physicians are trained to recognize diseases due to occupational exposures and to supervise the general medical conditions of the workers. The sanitary engineers are trained to analyze the hazards in industry and to recommend protective measures. Organized labor has recognized that industrial hygiene is of great significance to the worker, and clauses referring to health hazards are being incorporated in many union contracts. It is to the best interests of the workers to cooperate in the industrial hygiene programs of the plants. The problem is greatest in the small factories where there is no provision for an industrial medical set-up. The workers in such plants should take the initiative in educating themselves with respect to general hygiene and safety measures so that they may call attention to inadequacies in protective equipment, deficiencies in sanitary provisions, and other existing hazards."

File #2206

Did you know: (1) Working conditions should be decided by the worker and employer on equal basis.

Did you know: (2) The worker and employer must abide by the collective agreement rule of employment and labor contract and discharge their respective duties faithfully.

Did you know: (3) No person shall discriminate against or for any worker by reason of nationality, creed or social status and wages, working hours and other working conditions.

Did you know: (4) The employer shall not practice sex discrimination concerning wages by reason of the worker being a woman. The employer shall not force workers to work against their will by means of violence, intimidation, imprisonment or any other unfair restraint on the mental or physical freedom of the worker.

Did you know: (5) When the worker on the occasion of retirement requests a certificate stating the period of employment, the kind of occupation, the position and the enterprise and wages, the employer shall present him one without delay.

The employer shall not insert in the certificate what the worker does not require. The employer in conspiracy with others shall not send any communication concerning nationality, creed or social status or the union activity of the worker with the will to impede the employment of the worker nor tack on any secret sign on the certificate.

Did you know: (6) Upon the workers death or his dismal the employer shall complete the payment of wages, and return whatever reserve, bonds, savings and other funds and valuable belongings to the worker within seven days of the claimants request. If the claims to the wages and valuables are disputed the employer shall pay or return the amount remaining undisputed within the period fixed.

Did you know: (7) Wages must be paid at least once a month at a designated date. However, this is not applied to extraordinary wages, bonus, and the like which will be defined by ordinance.

Did you know: (8) When the worker request to appropriate money for emergency use such as childbirth, disease, accident and other cases which will be defined by ordinance in detail, the employer shall pay the accrued wages before specific date of payment.

Did you know: (9) The employer shall provide recess totaling at least 45 minutes for those who have worked more than 6 hours and at least one hour for those who have worked more than 8 hours. The recess must be given to all workers at the same time. However, this is not applied when the employer receives sanction from the administrative office. The employer shall allow the workers to use the recess as they please.

Did you know: (10) That the employer must provide at least one rest day per week to the worker.

Did you know: (11) That the employer shall grant 6 days annual vacation with pay consecutively or separately to the worker who has been employed continuously for one year and was present over 80 percent of the whole working days.

The employer shall grant an increased annual vacation with pay amounting to one day per one continuous year in addition to the annual vacation specified in the foregoing paragraph to the workers who have worked continuously for two or more years. However, in case the total vacation with pay exceeds 20 days the employer need not give vacation with pay so far as the excess is concerned.

Did you know: (12) the employer must take necessary measures to prevent accidents resulting from machinery, tools and other equipment or gas, steam, dust and other materials.

Did you know: (13) With regard to the establishment or its annex where the workers are accommodated the employer must take necessary means for ventilation, lighting, heating, emergency escape, cleanliness and other facilities necessary for the maintenance of health, good morale and life of the workers.

Did you know: (14) Workers shall observe necessary rules for the prevention of danger and injury.

Did you know: (15) Machinery and tools which require particularly dangerous work shall not be manufactured, altered or installed unless special permission of the administrative office is given in advance. The kind of machinery and tools and the certain standard for the safety equipment shall be defined by ordinance.

Did you know: (16) The employer shall not allow an inexperienced worker to clean, oil or examine or repair any dangerous part of any machine or transmission apparatus in motion or to put on or to take off the driving belts or ropes of any machine or transmission apparatus in motion or to perform any other dangerous work.

Did you know: (17) An employer shall not allow a worker to engage in dangerous work without the proper skill.

Did you know: (18) The employer shall stop the work of workers who have contracted a contagious disease or mental disease. The kind and degree of the sickness which should be banned shall be determined by ordinance.

Did you know: (19) An employer engaged in a certain enterprise shall give workers physical examinations at the time of employment and also at fixed periods. The worker who does not desire to undergo the diagnosis of the doctor nominated by the employer must undergo the diagnosis of another doctor and submit a document which proves the result of the diagnosis to the employer.

Did you know: (20) Minors under full 16 years of age shall not be employed. However, this does not apply to minors who are under full 14 years old who have completed the course of compulsory education prescribed by ordinance or the course equivalent to or higher than that. Children above 12 years of age maybe employed in certain occupations in light labor which is not injurious to the health and welfare of the children outside of the specified school hours of the children with the permission of the administrative office.

Did you know: (21) That the employer shall keep a register which proves the age of the minors under full 18 years old at the working place of employment.

Did you know: (22) The parent or the guardian shall not make a labor contract for the minor.

Did you know: (23) The employer shall not allow minors under 18 years of age and women to engage in dangerous jobs which require the conveyance of heavy weights.

Did you know: (24) The employer shall not employ minors under 18 years of age in work involving the handling of poisons, powerful drugs or other injurious substances or explosives or inflammable goods or work in places where dust or powder or harmful gas or radial rays are generated, or other places which are dangerous to the health and welfare of the minor.

Did you know: (25) The employer shall not employ women within six weeks after childbirth. However, when the woman requests employment after five weeks it is permissible to assign her to a job that a medical doctor pronounces unharmed to her.

Did you know: (26) The employer shall not employ a woman for six weeks prior to childbirth when she requests rest days during that period.

Did you know: (27) The employer shall not exploit the apprentice, pupil, student or other workers under whatever name he may call him.

Did you know: (28) The employer shall not employ a worker who purports to learn a skill in a job which has no relation to learning the skill.

Did you know: (29) The Labor Standard Inspector is authorized to inspect working places, dormitories and other attached buildings and examine records and documents and question the employer or the worker.

Did you know: (30) The Labor Standard Inspector who is a doctor is authorized to make a medical examination of a worker who seems to be afflicted with disease.

Did you know: (31) That the Labor Standard Inspector may collect without cost such amount of samples or ingredients of the manufacturers materials as necessary for examination of injurious matter.

Did you know: (32) That when the establishment, dormitory and other annex in which the workers are working or the equipment or materials are below the standards of safety and health and there is an imminent threat to the safety and health of the workers, the Labor Standard Inspector can immediately exercise the authority vested in the administrative office under Article 55, Labor Standard Law.

Did you know: (33) That in case there is a fact inferior to the standard of the Labor Standard Law at the working place, laborers may report to the Labor ^{STANDARD SUPERVISORY} Administrative Office to the Labor Standard Inspector to that effect. The employer shall not dismiss or discriminate against the workers who report the fact.