



RESEARCH PAPER

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Evaluating safety and health practices in construction sector for implementation

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Abstract

The purpose of this study is to evaluate contractors' health and safety with regard to their personnel, workspace, and tools. Additionally, it sought to assess adherence to occupational health and safety regulations concerning heavy machinery operations, civil works projects, a health and safety plan, and occupational safety and health training. In order to objectively assess the variable or variables of interest, it combines quantitative research with a self-created questionnaire that forecasts and explains concepts that may be applied to other individuals and places. The questionnaire is chosen, produced, and standardized with validity and reliability in mind. The results showed that respondents only partially followed workplace, work equipment, and people safety and health regulations related to construction. The requirements for occupational health and safety were partially satisfied in the areas of heavy machinery operations, civil works projects, health and safety plans, and occupational safety and health training. Additionally, a portion of the construction safety and health level of compliance was fulfilled. Therefore, it is recommended that construction firms use the updated construction safety model.

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Introduction

Due to their subpar performance, the building sectors in both industrialized and developing nations are stigmatized (Enshassi and Abushaban, 2009). The Real Estate Developers Association (REDA) and the Hong Kong Construction Association Ltd., or HKCA, have chosen to establish a partnership in which both professional associations will provide financial assistance to participating companies in order to help them meet predetermined performance goals within a specified time frame. This is in contrast to the manufacturing sector, which is cyclical, fragmented, and volatile in terms of safety and health.

They offered guides that featured a solid, adaptable framework for handling health and safety concerns in small and medium-sized organizations for representatives, employers, and employees. Through their protocols, they manage workplace health and safety in a proactive manner. Compared to traditional techniques, which are typically reactive to issues, like when a worker is ill or injured, it is more effective. When a new standard or regulation is released, the proactive method is applied. These guidelines find problems and fix them before they become dangerous and result in harm, illness, or even death. The conceptual key to progress is to concentrate on the steps of a basic program and clear goals. Learn how to create and evaluate results after that. If safety and health precautions are taken at work, the company improves.

Because of this, the construction sector is dangerous and has a high accident rate. A compilation of accidents that happened within a specific time period can be used to estimate the level of safety in this specific economic sector. To evaluate the degree of safety and potential changes, it is essential to understand accident trends (Szosta, 2014).

The construction business has a high global accident and injury rate, which allows us to assess our priorities based on past performance and the most important safety and health factors. Organizations can recognize and distinguish possible risks of

careless behavior prior to accidents or illnesses by focusing on human factors. Measuring "leading" safety factors, like adoption of health and safety protocols, is one method to accomplish this.

Creating, promoting, and upholding workplace rules and programs that protect workers' mental, physical, and emotional health as well as keep the working environment largely free of potential or actual dangers that could cause harm to workers are the goals of occupational safety and health (Nrenda *et al.*, 2015).

However, until fifteen years ago, there weren't many articles about OSH in building. There have been more OSH publications about construction since 2001. Occupational hazards in buildings have been examined by researchers using a variety of methods and viewpoints. According to (Sousa *et al.*, 2014), there are a number of techniques and approaches available to look into and comprehend workplace accidents in the construction sector.

The main goal of our nation's Construction Occupational Safety and Health (COSH) programs is to minimize occupational diseases, injuries, and fatalities as well as the ensuing distress and financial burden. Due to the project's delay, it will have a major effect on the lives and productivity of both employers and employees. Employers have found that implementing these standards has several advantages, including fostering a collaborative environment between management and staff and enhancing employee relationships.

Series Number 13 of 1998 D.O. As mandated by Section 17, the Construction Industry Occupational Safety and Health Guidelines place a strong emphasis on the technique used to estimate the cost of the construction safety and health program. According to Section 17 of DOLE D.O. No. 1.3, construction safety must be taken into account at every stage of project procurement (design, estimate, and construction), and its cost must be included in the total project cost under Pay Item

"SPL-Construction Safety and Health" as a lump sum to be quantified in the detailed estimate. 2962, House Bill No. A law that creates a green building standard for the nation's government building projects' planning, design, construction, operation or maintenance procedures, renovation, expansion, and retrofitting.

Management must provide strong leadership, a clear vision, and sufficient resources for a safety and health program. The improvement of workplace safety and health performance requires the full commitment of business owners, CEOs, managers, and supervisors at all levels. They must also make worker safety and health a core organizational value, allocate enough funds to implement the safety and health program, and be open and honest in their demonstrations and communications with employees.

Additionally, it sought to ascertain whether heavy machinery operations, civil works projects, health and safety plans, and occupational safety and health training all adhered to occupational health and safety regulations. Additionally, it sought to establish a construction safety program that could be implemented prior to the start of the project and assess adherence to safety and health laws.

Materials and methods

This study made use of quantitative research, which identifies, develops, and standardizes the variable or variables of interest with consideration for validity and reliability. It also explains and forecasts concepts that may be generalized to other people and locations. A deeper comprehension of people's experiences is provided by qualitative research design. By using both of these as models, the researcher may collect more data for his study and the research can be filled with information. The main goal of the study is to analyze and assess the current Construction Safety Program.

The study respondents were selected randomly, as is required for the study. It utilized eighty-seven

(87) respondents that include: (3) Contractors, (6) Engineers, (6) Architect, (3) Safety Practitioners, (60) Engineering students, (30) Engineering faculty and (3) safety maintenance personnel.

The instrument used in this study was a set of self-made questionnaires made by the researcher. It is validated by the instructors/professors and safety practitioners, including contractors, engineers, architects, engineering faculty, and safety maintenance personnel. It dealt with the effectiveness of the safety program.

The final draft of the instrument was shown to the experts for last comments and approval. With the recommendation of the statistician and the experts, the device undergoes subjected to a reliability test. Ten (10) respondents were randomly selected who were not part of the identified respondents and were used as pilot samples to test the instrument's reliability.

Cronbach's Alpha was utilized to measure the internal consistency and reliability of the instrument by employing the Statistical Package for the Social Sciences (SPSS Statistics version 17.0) and Microsoft Excel Data Analysis Toolpak. The results were 0.55, 0.41, and 0.70 for the level of compliance with occupational health and safety standards, respectively. The Cronbach alpha reliability for the overall scale was 0.75 for the present sample. The data gathered from the survey was collated, tallied, tabled, and subjected to statistical treatments using weighted mean and t-test analysis.

Results and discussion

All of the results pertaining to the evaluation of construction safety and health among contractors, concerning personnel, workspace, and tools; adherence to occupational safety and health regulations concerning occupational safety and health training; health and safety plan; civil works operations; and heavy machinery operations are included in this section.

Level of compliance on occupational safety and health in terms of workforce

As indicated in Table 1, there were four (4) items related to occupational safety and health in terms of workforce.

Level of compliance on occupational safety and health in terms of workforce

Table 2 shows the compliance level of contractors in Zamboanga Del Norte on Occupational safety and health in terms of workplace.

Table 1. Level of compliance of the respondents on occupational safety and health in terms of workforce

Indicators	Mean	Description
Non-skilled labor	1.5	Partially complied
Skilled labor	1.4	Partially complied
Non-skilled professional	1.6	Partially complied
Skilled professional	1.9	Partially complied
Average weighted mean	1.6	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 2. Level of compliance of the respondents on occupational safety and health in terms of workplace

Indicators	Mean	Description
Welding and fabrication area	1.5	Partially complied
Wood and furniture area	1.4	Partially complied
Concrete and masonry area	1.6	Partially complied
Formwork and scaffolding area	1.9	Partially complied
Electrical area	1.6	Partially complied
Mechanical area	1.9	Partially complied
Painting area	1.4	Partially complied
Equipment area	1.5	Partially complied
Average weighted mean	1.6	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 3. Level of Compliance of the respondents on occupational safety and health in terms of work implements

Indicators	Mean	Description
Work near unprotected areas	1.2	Partially complied
Work involving the pouring of concrete	1.1	Partially complied
Work involving the laying of asphalt	1.5	Partially complied
Working with derricks and cranes	1.7	Partially complied
Working with the earth moving equipment	1.2	Partially complied
Manual excavation or digging	1.2	Partially complied
Work on top of or near bodies of water	1.1	Partially complied
Work where hot cutting and welding of metals	1.5	Partially complied
Work involving exposure to or handling of hot materials	1.7	Partially complied
When working with live electricity above 50 volts	1.2	Partially complied
Work involving the handling of noisy	1.2	Partially complied
Work involving exposure to harmful dust	1.1	Partially complied
Work that may involve shortage of oxygen	1.5	Partially complied
Working with atmospheres containing contaminants above recommended threshold limit values for airborne contaminants	1.0	Partially complied
Working with organic solvents or toxic and/or corrosive chemicals	1.2	Partially complied
Working near vehicular traffic	1.1	Partially complied
Work involves working underwater	1.6	Partially complied
Working at night under low lightning conditions	1.0	Partially complied
Average weighted mean	1.28	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Level of compliance on occupational safety and health in term of work implements

Table 3 shows the level of occupational safety and health compliance among contractors in Zamboanga

Del Norte in terms of work implements. As shown in the table, there were eighteen (18) pieces of information relevant to occupational safety and health in terms of work implements.

The average weighted mean for partial compliance is 1.28, and the average weighted mean for complete compliance is 1.6. This implies that the contractors did not wholly comply with Department Order No. 13 Construction Safety Program Standards. They are working in areas where hot cutting and welding of metals, handling burning materials, working with live electricity above 50 volts, handling noisy, exposure to harmful dust, and a lack of oxygen are examples of this.

Level of compliance of the respondent as to occupational safety and health training

As presented in Table 4, there were nine (9) level OSH compliance standards in terms of OSH Training: The Average Weighted Mean is 1.37.

Level of compliance of the respondent as to occupational safety and health training

As presented in the Table 5, there were Fourteen (14) level OSH compliance standard in terms of OSH Plan. It has the average weighted mean of 1.31.

Table 4. Level of compliance as to occupational safety and health training

Indicators	Mean	Description
Basic occupational safety and health (BOSH)	1.4	Partially complied
Construction occupational safety and health (COSH)	1.5	Partially complied
Basic first aid	1.1	Partially complied
Scaffolding safety	1.6	Partially complied
Rigging safety	1.7	Partially complied
Heavy equipment operation's safety	1.1	Partially complied
Basic driving safety	1.2	Partially complied
Electrical safety	1.5	Partially complied
Fall arrest safety	1.3	Partially complied
Average weighted mean	1.37	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 5. Level of compliance as to safety and health plan

Indicators	Mean	Description
Hazard controls	1.2	Partially complied
Warning and barricades	1.0	Partially complied
Temporary lightings	1.3	Partially complied
Confine space entry procedures and permit	1.9	Partially complied
Emergency response plan	1.3	Partially complied
Providing site storage facilities	1.2	Partially complied
Safety installation, use and dismantling of hoisting equipment	1.0	Partially complied
Testing, inspection, and certification of heavy equipment	1.3	Partially complied
Workers skills certification	1.9	Partially complied
Safety while using transport facilities	1.3	Partially complied
Health care and first aid facilities	1.2	Partially complied
Worksite toilet and sanitary facilities	1.0	Partially complied
Work schedules and working hours	1.3	Partially complied
Waste disposal	1.9	Partially complied
Average weighted mean	1.31	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 6. Level of compliance as to civil work activities

Indicators	Mean	Description
Working with concrete masonry units	1.1	Partially complied
Working with scaffold-erections	1.0	Partially complied
Work involving exposure to or handling of hot materials	1.1	Partially complied
Working with piping works	1.4	Partially complied
Work with painting	1.3	Partially complied
Average weighted mean	1.18	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 7. Level of Compliance as to heavy equipment operations

Indicators	Mean	Description
Earth moving operations	1.5	Partially complied
Lifting & rigging operations	1.6	Partially complied
Fast moving operations	1.2	Partially complied
Light tender operations	1.1	Partially complied
Average weighted mean	1.35	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 8. Level of compliance on construction safety and health

Indicators	Mean	Description
Safe policy	1.8	Partially complied
Health and safety risk assessment	1.2	Partially complied
Health and safety training in construction sites	1.2	Partially complied
Working environment	1.3	Partially complied
Welfare facilities	1.6	Partially complied
Legislation and enforcement of health and safety regulation	1.2	Partially complied
Average weighted mean	1.38	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Table 9. Occupational health and safety constraints related to construction practice

Indicators	Mean	Description
Confine space	1.5	Partially complied
Work at Heights	1.6	Partially complied
Electrical	1.4	Partially complied
Heavy equipment	1.2	Partially complied
Average weighted mean	1.4	Partially complied

Legend: (0.0-0.9 --> Not Complied; 1.0-1.9 --> Partially Complied; 2.0-3.0 --> Fully Complied)

Level of compliance of the respondent as to civil works activities

Table 6 illustrates the degree of compliance of construction workers as to civil work activities. The average weighted mean has a rating of 1.18.

Level of compliance of the respondent as to heavy equipment operations

Table 7 describes the degree of compliance of construction workers as to heavy equipment operation. The overall result has a rating of 1.18 described as partially com-plied.

Level of compliance on construction safety and health

Table 8 illustrates the compliance level of contractors on construction safety and health with an average weighted mean of 1.38 described as partially complied.

Occupational health and safety constraints related to construction practices

Table 9 stipulated some related constraints of construction practices on occupational health and safety.

All items were rated closely related to each described as partially com-plied.

Implication

It illustrates that almost all of the respondents agreed that the contractors Association in Zamboanga del Norte, Philippines, has only partial compliance with the requirements as stipulated in the D.O. Number 13, Series of 1998 as governing guidelines for occupational safety and health in the construction industry with an average weighted mean of 1.6. Only a few of them responded as they fully complied. It implies a need to adopt the designed construction health and safety model.

As indicated in Table 2, eight (8) pieces of information related to occupational safety and health in the workplace. The average weighted mean was 1.6. As the overall rating of the respondents with partial compliance. It emphasized that the welding and fabrication workplace has only partially complied, including

wood and furniture area, concrete and masonry area, formwork and scaffolding area, and electrical, mechanical, painting and equipment area. This implies that the construction safety program standards stated in Department Order No. 13 are not fully complied with by contractors. It shows that there's a need for the authorities to conduct safety inspections regularly and that the adoption of the model is highly recommended.

Workers also work in environments with contaminants beyond specified airborne contaminants threshold values, working with organic solvents or caustic chemicals, vehicular traffic, working underwater, and working at night under low illumination conditions. It indicates that workers at some building sites may be provided with adequate working procedures. Contractors can also apply the construction health and safety model to create a safe and secure working environment.

It goes to show that some of the workers have only a few basic training on occupational safety and health training specifically on basic occupational safety and health; construction occupational safety and health (COSH); basic first aid; as well as safety on scaffolding, rigging, heavy equipment operation, basic driving, electrical, fall arrest.

Table 5 shows that contractors did not meet all of the required requirements in their construction sites, including hazard control, warning and barricades, temporary lighting, confined space entry procedures and permits, emergency response plan availability, partial compliance with providing site storage facilities, installation of safety materials in general, and dismantling of hoisting equipment; and partial compliance on testing and inspection. They also offer partial compliance with worksite toilet and sanitary facilities, work schedules and working hours, and waste disposal facilities. Almost all construction companies in Zamboanga Del Norte will have to implement a new construction health and safety model to improve their current situation.

The findings found that the workers did not fully comply with all indications of civil work activities, particularly in working with concrete masonry units, scaffold erections, exposure to or handling hot materials, pipework, and painting. The construction contractor in Zamboanga Del Norte was not fully complying with all of the required preventive measures of the construction safety program standards as indicated in Department Order No. 13.

The findings revealed that the contractors' level of compliance with heavy equipment operations was insufficient. Partial compliance with earthmoving, lifting, and rigging procedures and partial compliance with fast-moving and light tender operations. This indicates that the contractors association should adopt the researcher's construction health and safety model.

There were Six (6) levels OSH compliance vis a vis the standard of construction safety P standards based on the Department Order No. 13. The contractors partially complied with the safety policy and health/safety risk assessment, including health and safety training in construction sites and working environments as well as welfare facilities and legislation enforcement of health and safety regulations. This means that the level of compliance in construction health and safety is deficient since all the requirements have only partially complied with.

In terms of OSH Constraints, there were four (4) levels of compliance, as shown in Table 9. Compliance with the results also suggested associated practices of contractors as to limiting space of construction safety, work at heights, and heavy electrical equipment, with an average weighted mean of 1.4 as reported by the respondents. This found that almost all contractors did not follow the construction health and safety model to the letter.

Construction safety program model description

More than only safety management is addressed by the Construction Safety Program. It's all about

ensuring that practitioners are in a secure environment. All safety programs are rigorously implemented and closely monitored. Every day, construction accidents occur in our country.

Construction companies lack a Department of Labor and Employment-approved safety program (DOLE). Before the construction begins, the construction administration must prepare a safety program. At least one (1) registered construction firm's owner must employ a safety practitioner to carry out daily safety programs to prevent worker injury or death. This content responds to the need to stay abreast of new advances and techniques in building construction that is safe and applicable to educational institutions.

This Construction Safety Manual is designed for construction practitioners, safety personnel, construction managers, engineering students, and other stakeholders and clients in the construction industry to use as a resource for sound, efficient, and effective management of educational construction facilities and resources, as well as making them safe and conducive to construction learning activities. Its use will support the construction-based management philosophy inherent in the construction safety practices initiative's principles.

The construction safety program manual contains the following

Health And Safety Policy ensures the adoption of safe work practices and procedures that comply with all regulatory requirements on Health and Safety, particularly the Occupational Safety and Health Standards and D.O. 13 - Guidelines Governing Occupational Safety and Health in the Construction Industry. They maintain and review the Company's Health and Safety Program regularly to ensure its adequacy and effectiveness and identify existing job hazards and eliminate or reduce their risks to employees.

General Safety Rules to ensure the safety and health of our employees protect the company's property and

provide all Company Employees with safe and healthy working conditions. Each employee must familiarize themselves with and adhere to these safety rules. If everyone uses their assigned safety equipment and follows the established safety rules, most accidents can be avoided allowing for a safe and successful construction project.

Personal Protective Equipment shall be the primary method to eliminate or reduce exposure to workplace hazards. It cannot mitigate the danger for which everyone must wear the required PPE. It also includes protection for the head, eyes, face, feet, and hands in its specifications and usage.

Department Order 13 prohibits using safety belts for fall arrest full body harness is required, and defective components must be removed from service.

Respiratory protection because construction workers are frequently exposed to respiratory hazards like hazardous dust, gases, fumes, mists, and vapors. Despite these drawbacks, respiratory protective equipment is the only practical control for many construction operations. Housekeeping in Job sites and Office Areas housekeeping and general cleanliness are essential for preventing accidents. It addresses specific housekeeping requirements and good housekeeping practices, which are necessary for fire and accident prevention in growing construction companies.

Materials Storage General rules for material storage are as follows: dry, raw materials, finished product, flammable, and compressed gas storage require procedures to prevent fires, keep exits and aisles clear, and avoid injuries and illnesses. Storage of Materials/Products, Flammables, Compressed Gas, Lumber, and Dangerous Chemicals. Fall Protection is a policy that ensures all construction areas are devoid of uncontrolled fall hazards. All employees are appropriately trained in fall prevention and protection. The procedure is inspected and monitored to determine its effectiveness.

Electrical Safety Program aims to prevent electrical injuries and property damage. Installing, repairing, or replacing electrical components or equipment is restricted to personnel qualified by this program. Scaffolds describe the policy on erecting, moving, dismantling, or altering under the supervision of a competent person. Confined space allows authorized and trained personnel to enter the confined space or act as safety watchmen.

Emergency Response emphasizes that all affected personnel shall be trained in the Emergency Response Plan. Welding and Cutting Welding and cutting are significant sources of fire and injury, so they should be indicated. It is also intended to emphasize the management's duties and responsibilities to provide training for all employees performing welding work, develop and monitor effective hot work procedures, provide safe equipment for desirable results, and provide adequate and appropriate PPE for all hot work. This also ensures that supervisors oversee all hot work operations that all hot work equipment and PPE are in safe working condition, and that only trained and authorized employees can perform hot work. That permits are utilized for all hot work performed outside of assigned areas. This policy also requires employees to adhere to all hot work procedures, use the proper PPE for hot work, inspect all hot work equipment before use, report equipment problems, and avoid using damaged work equipment.

Tool safety

Is a policy for utilizing tools to make numerous tasks easier? Inefficient use or maintenance can pose significant risks in the workplace. Employees who utilize tools must be appropriately trained in their use, adjustment, storage, and maintenance. This policy addresses the safety of electrical, pneumatic, powder-driven, and hydraulic hand tools. It also specifies the duties and responsibilities of management, including providing the appropriate tools for assigned tasks, ensuring that they are stored safely, training employees, and repairing equipment. It outlines

the duties and responsibilities of employees to adhere to proper tool safety guidelines, report tool defects and malfunctions, and store tools properly when the work is complete.

Materials handling

First in, First out Policy" is also a policy that ensures proper storage and handling procedures are carried out by "Standard Practice." It specifies that the construction company is responsible for providing site storage facilities and identifying the potential location of the general materials storage area, such as aisles with sufficient, safe clearance, through doorways, and whenever there are turns and passages; ensuring that the storage of materials does not pose a hazard. Bag containers or mega bags, stored in tiers, are stacked, blocked, interlocked, and limited in height so that they are stable and secure against collapse; ensure that the storage area is kept free from accumulations of materials that constitute hazards from tripping, fire, explosion, or pest harborage; ensure that there are required clearance limits on passageways used by delivery trucks and cargo forwarders, and ensure that all covers and guardrails are in place.

Mechanical equipment

Is a policy that ensures that every part of the structure, machinery, and equipment shall be of good design, good mechanical construction, sound material, adequate strength, free from defects; kept in good working condition; manufactured following the Occupational Safety and Health Standard; and there is a warning and safety signage upon installation and dismantling, as well as a clean worksite.

Testing, inspection, and certification of heavy equipment

Is a procedure for the utilization of heavy equipment that has been inspected, tested, and Certified Safety for Use by a DOLE Accredited Testing Organization following the OSH Standards, As Amended, D.O. 13 and D.O. 16; follows all the registration requirements following the registering bodies such as LGU and Department of Labor and Employment; ensures that

quarterly testing and inspection of heavy equipment and other mechanical equipment.

Transport facilities

There is a policy regarding providing service vehicles from the town proper and worker barracks to jeep line streets. It also ensures the availability of an emergency vehicle for use in an emergency. In addition, it ensures that all company drivers possess valid licenses and have completed a defensive driving course.

Health Care and First Aid Facilities, as required by the Occupational Safety and Health Standard, a policy ensures that healthcare and first aid facilities are available for workers on the site.

The welfare facilities

Consist of a written procedure for Worksite Toilets and Sanitary Facilities. It also ensures that the construction company will provide separate comfort rooms for men and women and toilets and sanitary facilities for the project's personnel. It will also include a provision for a temporary canteen within the compound, safe potable drinking water with monthly water analysis reports from the supplier, and the installation of a project site office where no stay-in workers are permitted.

Hours of work and rest

Is a policy that ensures employees receive rest breaks during work hours and that the company provides (1) a one-hour lunch break and (2) two fifteen-minute breaks (morning and afternoon breaks). It also includes Work Schedules and Working Hours for Regular working days; the day of rest. This policy also emphasizes that management has the right to change, delay, or amend the work schedule to accommodate changes in the conditions prevailing at the workplace, highlighting the most efficient use of time and the company's best interests.

Safety inspection

There is also a written procedure for inspecting the work areas to identify problems and hazards before

their cause accidents or injuries. It also aids in determining the efficacy of safety program management and serves as a guide for ensuring regulatory compliance and a safe workplace. In addition, it outlined the duties and responsibilities of the Safety Officer/Project Engineer/Supervisors in conducting informal daily safety inspections and ensuring all unsafe conditions are corrected, conducting documented weekly reviews, and ensuring all dangerous conditions are updated.

Conclusion

Contractors are responsible for providing all employees with a safe, accident-free, and healthy work environment. However, exceptional safety and health are not the results of chance. They result from everyone's hard work and observance of all company policies.

Everyone must cooperate to ensure safety. Therefore, communication between management and employees must be maintained at all times. Workers who observe hazards or other safety issues or believe they require additional training must inform their supervisor. Supervisors and management must address these concerns and take corrective action when necessary.

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