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Workplace safety and dealing with occupational hazards is often neglected but a prime part of workplace practices. Almost 12 workers on average die every day due to workplace fatalities, in the USA. There are nearly 4500 reported cases in the USA every year due to workplace issues and injuries. The unreported cases are even more in number, thus increasing the bar (Canada, 2017). In the document, the workplace hazards and the safety issues at Tesla will be discussed, and the business report will surround the possible recommendations for the said company.

Introduction to Occupational Hazards

A hazard is a substance, material, situation, or any aspect of the case that is supposed to cause any harmful impact on the person involved. Occupational hazards can be defined as the potential hazards to any worker's safety and the worker's risk of exposure to dangerous situations. Workplace hazards are the potential hazards in the environment of a workplace that can create harm to the well being of the worker. The risk is the probability of an adverse outcome from exposure to any hazard. A substance is considered hazardous if it is corrosive, toxic, reactive or flammable. The dangers are generalized in two significant timelines. The acute risks are the ones that have an immediate impact (such as burning by corrosive substances). The constant dangers are the ones with long-term, hidden, cumulative and consistent effects. Occupational health and safety have six primary hazard categories. They are defined as follows.

*Physical Hazards*

 The physical hazards are the hazards that relate to the physical aspects of the workplace. The design, clutter, the lack of space, lack of oxygen, less lightning or very strong lightning, noise, lack of proper wire covers, electrical hazards, and so on, are to name the few.

*Chemical Hazards*

 The chemicals related to the workplace can be dangerous to the health of the workers and employers. The fumes, the vapors, different gases like Nitric Oxide, dust, etc. are the chemical hazards usually found in the factories.

*Biological hazards*

 The infections, containment, insects or parasites, poisonous reptiles, virus, fungus, contact with the person who is diseased, and other relevant biological hazards are the part of the paradigm.

*Radiological Hazards*

 The radiation is a hazard that involves the handling of radioactive devices, radioactive technologies, nuclear substances, nuclear wastes, radiation exposure such as exposure to Gamma rays, microwave radiation, infrared waves, ultraviolet waves, lasers, X-rays, and so on.

*Ergonomic Hazards*

 The hazards in the workplace can also be ergonomic. It includes the design of the workplace, the kind of tools, the equipment design, the postures and weight lifting, the dull moments for task completion are the names of a few factors.

*Psychological/ Behavioral factors*

 The hazards can be behavioral and psychological. The attitude of supervisors and bosses, the shift timings, the workload, stress of dealing with the public, harassment, constant pressure, mental health of workers and so on, are the few factors to name.

 The hazard is anything by which there can be harm. The risk is the likelihood, the probability of occurrence of the damage of the hazardous material/situation. Sometimes there is more potential for harm as compared to the risk of the case. The hazard may not always cause danger and damage, and many times risk and injuries come from the jobs that are otherwise not hazardous. The following example can understand it. Potassium Dichromate is a highly toxic carcinogen chemical used in some techniques to analyzed exhaled breath for alcohol content. For this reason, it is sealed in a tube and does not become airborne. Therefore, although it is a highly hazardous substance, the use of potassium dichromate does not create specific risk due to high safety precautions.

On the other hand, flour is not generally considered a harmful or hazardous substance. Unlike potassium dichromate, the jar of powder is not sealed with precautionary warnings and notes. The meal is readily available in the market, used for everyday purposes. However, the constant exposure of airborne dust and grit to bakery workers will cause them to have dermatitis (an inflammation of the skin), conjunctivitis (inflammation of eyes), rhinitis (inflammation of the nose), and even occupational asthma, an inflammatory disease of the lungs. All these can cause high stress and also produce a life-threatening situation. Thus, a material of relatively low hazard might create a highly substantial risk, while an article with high danger may not present a measurable risk in certain circumstances (Hencose, 2014).

 There can be a lot of differences in how the risks are seen in the public, as compared to how the risks are seen in the eye of the scientist and everyday workers. Several factors are the influencing factors that are apt in the development of the risk analysis. Personal experiences, of seeing the direct effect of a hazard, socio-economic factors, sociocultural background and beliefs, the ability to exercise control over a particular risk, the extent to which the information is gained from different sources (e.g., from the media, social media, etc.), and other such factors influence the perceptions of the risks and hazards. Risks and dangers cannot be wholly eradicated from the workplaces, but there can be reduced exposure that is in the limits of the prevention and causes no substantial harm. Thus, we have the society's role in generating the tolerable and acceptable limits in terms of social, political, cultural and even economic considerations. Currently, two federal agencies are primarily responsible for improving health and protecting the lives of workers in the USA. First is NIOSH (National Institute of Occupational Safety and Health), which is responsible for research and professional personnel development. The next is OSHA (Occupational Safety and Health Administration) in the Department of Labor, which is responsible for enforcing regulations. An adult spends around 25% of his/her adult life in the workplace. Workplace safety is, paramount in improving the quality of life. Thus, it is important to realize that the workplace safety and turning workplace to a more secure environment is the prime responsibility of government, employers, employee, workplace and relevant authorities, which are critical stakeholders in the occupational safety. The risk assessment and drafting of the policies to increase the security and reduce the risks and hazards are the essential aspect of the economic frontiers (Comcare, 2012).

Workplace Safety

The work environment wellbeing can be characterized as the practices that guarantee the security of laborers and the earth in which they work. A protected workplace is a gainful one. Regardless of the size or sort of the business, work environment wellbeing methods are a need for all staff. Security measures ensure workers and additional hardware and business property. Maintaining a strategic distance from or limiting wounds and harm to gear and offices will result in fewer costs and the more benefit for a business. The working environment wellbeing gives essential components in the improvement of the productivity and manageability of the company. It requires that there are moves made toward the safety measures that guarantee that the representative, working environment, bosses are in a condition of harmony and proactive methodology is utilized to limit the conceivable issues in a working environment. The careful steps are as per the following.

*Security Training*

Preparing is vital with the goal that representatives will realize how to rehearse wellbeing in the working environments. Contingent upon the sort of gear utilized, the preparation might be required by government command. For instance, any work environment that works a forklift must give preparing to representatives for its protected task. Preparing can originate from outside specialists procured to encourage classes or workers exceptionally prepared to perform wellbeing guidance.

*Gear*

Proper individual defensive hardware (IDH) must be made accessible to any individual who interacts with a potential work danger. This incorporates hard caps, protective eyewear, ear plugs, shoes, gloves, goggles, and dress. The individual defensive hardware is to be claimed by everybody regardless of how little act or methodology is. For whatever length of time that the presentation is in critical breaking points, it is to be ordered that PPE directions be pursued.

*Stress Reduction*

A large portion of the representatives are not fit and solid on account of their bustling calendar, which incorporates long working hours, work-weight and clashes happen with associates or with the supervisor of the association. Every one of these components can prompt some ailment or wretchedness to the workers. Affects their expert life as well as makes the annoyance in their own lives as well. Subsequently, it is vital to center around the pressure decrease and glad condition working for the representatives. It is to be guaranteed that representatives get regular breaks, they can work in the great soul, they are paid well, and their dignity is kept up.

*Screenings*

There needs to be the screening process that requires that employees are screened for sight, hearing, agility, dexterity, attention, memory and physical/mental health to make policies of how to improve the well-being and performance of employees. The daily routine and work routine adjustability is to be screened to find out, which kind of tasks and methods are taking the toll on the employees. The screening data will allow the company to the development of the policies and frameworks that will enable the workers to be directed into the prospects of workplace improvement.

 Workplace safety is a standard paradigm. It involves the authorities and the workers on a personal level to be precautious and take necessary actions so that the workplace is a safer place. The workers need to be more precautious, and there need to be more strict rules and regulations for the workplace behaviors that are risky. Necessities such as good public dealing, stress reduction strategies, first aid kits, fire extinguishers, back braces must be added and learning the use of such devices/protocols is a must for the workers at all levels.

 The manufacturing field is one of the unique places, and manufacturing factories are filled with the materials and processes that require a great deal of care and precautions. There are types of machinery that need preventive measures for operating. Heights and climbing is also a presenting problem. Chemicals and corrosive materials are present everywhere. The non-employees, clutter and fast working machines are a source of threat to the workers. Fire, electric flames and the confined space are the problems of working in manufacturing companies. The raw materials, the process of development of the product, the demand pressure is the contributing factor towards the unsafe workplace practices (Goldberg, Dar-El and Rubin, 1991, pg 122- p130).

Literature Review

There are many types of research on occupational health and public safety. The research provides ideas about the development of trends in a certain field. Occupational health and safety measures apply to every field of work. The few types of research will give an insight as to how the work safety measures work. In research by Vilkman (2004), the voice functioning of the teachers and the related effect on vocal cords was seen. A strong functioning voice is an essential teaching tool. Vocal demands vary a lot between the different voice/speech professions. In professions with heavy vocal loading (e.g., school and kindergarten teachers), occupational voice disorders threatening working ability are common. The research analyzed the vocal health of 50 school teachers in Philadelphia. The comparison showed that many teachers were more prone to sore throats, change of voice, problems in vocalizations and the health of larynx issues. The research emphasized that due to greater stress on the improved occupational health and safety measures and arrangements for voice and speech professionals. In another research, the critical challenges for occupational safety, health and ergonomics (OSHE) in the contemporary industry were observed. The employees of 5 moderate sized businesses were asked a questionnaire about the health, occupational safety, and ergonomics in which responses of 500 workers were assessed on domains of the personal knowledge, technical knowledge and organizational knowledge about the OSHE in the contemporary settings. The results provided that many workers have limited organizational knowledge of OSHE models within the context of their workplace. The personal knowledge was up to the mark while the technical knowledge varied with age, years of experience and payroll as the major predictors. The research focused on better OSHE training and development for better protection of the workers in the industry (Sherehiy and Karwowski, 2006). The examination by Lingard (2002) led a multi-week trial to survey how emergency treatment is preparing influences the inspiration of independent venture development industry workers in staying away from word related wounds and sicknesses and its impact on their word related wellbeing and security conduct. An improved different pattern structure crosswise over work environment settings was utilized to assess the impacts of emergency treatment preparing. Members' inspiration to control word related wellbeing and wellbeing dangers were investigated amid top to bottom meetings when receipt of emergency treatment is preparing. Target estimation of word-related security and wellbeing conduct was led by a specialist specifically watching the working environment when members got medical aid preparing. The perceptions at members' worksites proposed that, generally, the emergency treatment preparing positively affected the word related wellbeing and wellbeing conduct of members. Emergency treatment preparing seemed to lessen members' "self– other" predisposition, making them more mindful that their involvement of word-related wellbeing and wellbeing dangers isn't outside their ability to control however that their conduct is a crucial factor in the evasion of word-related damage and disease. Medical aid preparing likewise seemed to lessen members' eagerness to acknowledge winning dimensions of word-related wellbeing and wellbeing danger and increment the apparent likelihood that they would endure a business related damage or disease. Members communicated more noteworthy worry about going out on a limb at work in the wake of accepting medical aid preparing. Correspondingly, in another examination by Li et al. (2015), the conduct based security as a way to deal with unravel risks in development organization word related to wellbeing and wellbeing issues was watched. Development is a standout amongst the most dangerous ventures because of its dynamic, brief, and decentralized nature. Conduct based security (BBS) is one compelling methodology in overseeing worker wellbeing issues. The exploration proposed augmentation of the BBS approach, proactive conduct based wellbeing (PBBS), to enhance development security. PBBS coordinates the hypothesis of BBS with the innovation of Proactive Construction Management System (PCMS). The developments of PBBS are: (1) naturally checking area based practices; (2) quantitatively estimating wellbeing execution; (3) examining potential reasons for hazardous practices; and (4) enhancing the effectiveness of security the executives. A pilot investigation of a Hong Kong building site rehearsing PBBS was directed. The analysis results demonstrated that PBBS performed well on development mischance aversion and the Safety Index (SI) of the two venture groups, with expanded enhancements by 36.07% and 44.70% separately. It was discovered that PBBS is compelling and versatile to the development industry. The looks into demonstrates the word related measures by which the word related wellbeing, security, ergonomics and wellbeing measures can be enhanced for the advancement of better security rehearses in work environment condition.

Tesla’s Workplace Issues and Recommendations

Tesla is the Palo Alto, California based American automotive and energy company that provides the energy solutions and the electricity operating cars to the general public. The company specializes in motor care development. Model S, Model X, Model 3 are the name of a few products. There are some factories and subsidiaries of Tesla Inc. The issue at hand is to see whether Tesla's factory settings are following the rules of workplace safety or not. The California Occupational Health Department has issued multiple warnings to the department for a reduction in workplace injuries. There are 26 reported injuries at Tesla main factory by the year of 2017. Elon Musk, the CEO of the company, has taken some steps for a reduction in the workplace injuries but to no avail. The issues at Tesla, as investigated by COHD, in the central manufacturing unit, are summarized as follows.

1. There is clutter, in the factory. The objects and raw material are in close locations, and the usage is cluttered.
2. There are no signs on the machinery on how to use it or a line of precaution. There is no standing area line, where the workers will be allowed to stand, and non-workers steer away.
3. The floor is very slippery at times, and the standard cleanliness is not maintained.
4. There is the issue of the lack of safety gears and safety uniforms. The kits do not follow a proper protocol.
5. The factory materials do not put labels of "dangerous" or "safe" labels on its contents being used
6. The factory has the use of any machineries used in the process of manufacturing. Employees are not given any safety training before the usage of the machines.
7. There has been no comprehensive response to the worker's complaints of workplace injuries and lack of safety gears.
8. The factory has no appraisals on health and well being of their workers.
9. Many hazardous chemicals are used in factory and workers are not well aware of handling of the substances, as chemicals are uncategorized.
10. The workers of one department do not know about hazardous situations in the other department.

There has been some response from Tesla about the issue of the workplace safety and concerns of employees (Evans, 2018). However, the answer is not enough. Following steps are being recommended to Tesla as a source of development in workplace safety and occupational precautions.

1. The workers require extensive safety gears and training on workplace safety for all employees.
2. Tesla needs to renew its mechanism on the response management to the complaints of the workers and employees.
3. Tesla also needs a proper check and balance in the clutter, flooring, work conditions, lining and labeling of the machinery, chemicals and raw materials.
4. Tesla needs a board of response committee that will look into the screening and appraisals of workplace conditions safety ratings to make policies on occupational safety.

Tesla's response to workplace safety issues requires that Tesla provides a quick and proper response by increasing safety precautions for the employees. Thus, Tesla's worker satisfaction will allow better productivity and improved rating of the environment of the factory.

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