

**Impact of Employee's Hazards at
working premises of Facility
Management
(Hard Service – Property Maintenance
Management)**

Author(s), S. MOHAN

1

**Euro Afro Studies International Journal®
(EASIJ.COM)**

Email: editor.easij@gmail.com , editor@easij.com Website: easij.com

Published By



Abstract:

The Facility management of hard service is technical concept tasks that have been carrying out by a group of employees such as electricians, HVAC technicians, Building automation technicians, Plumbers, Mechanical technicians, Masons, Carpenters, painters, and Electronic technicians. To the execution of the technical tasks, under the direction of a well-qualified & experienced facility manager through the respective section Heads (senior supervisors) & experience supervisors, the tasks are being carried out. The site engineers also help the facility manager for the execution of tasks. Though these employers are allied with machinery, they are social animals'/ human beings; hence, it is necessary to give importance to their health at their working place because of their facing several issues at the site. Thus an employer needs to prepare well standard occupational and safety health Procedures to safeguard the employees' well-being at operational places. This manuscript looks at various sections of hard service of the facility management to prepare standard well-found procedures of occupational & safety health by an employer through the safety officer and facility Manager.

EASIJAccepted 1 December 2019
Published 4 December 2019
DOI: 10.5281/zenodo.3562231

Keywords: Facility Manager, Safety officer, Facility management hard service, occupational & safety health procedure, employees, employer,

About Author

**Author(s), Oman Shaprooji Company LLC, Facility Management
Division,
Muscat, Sultanate of Oman
(Corresponding Author) Email: shanmugam.mohan40@gmail.com**



Introduction

The standard procedure of employee's occupational & safety health helps to save the life of employees, which leads to saving the moral value of human beings. An experienced facility manager of hard service leads the working place of his squad without any issues through his apt site visits regularly rather than an inexperienced facility manager who always depends on the safety officers. The well trained & experienced safety officer guides the facility manager to run the site / working place ethically. The facility manager must be aware of the nature of duties and hazardous of the squad working under him. And, the facility management of hard service includes the execution of the tasks of HVAC, Electrical, Electronic, Plumbing & Mechanical, BMS, and Civil. Hence a facility manager who must thoroughly acquaint the duties & responsibilities and hazards of his squad while execution of tasks by his team at working place. And so, the well-framed Occupational health and safety procedure facilitates to save the life of employees.

Methodology

In this study, by empirical research through the quantitative method, the researcher collected information from various working places wherein the facility management of hard service works forces worked. And by way of interrogation with workforces orally and observed their troubleshooting the issues during the daily researcher routine for the site inspection. The researcher, as a part of the squad (the reflection of the researcher) with diverse workforces, worked together for observing the employee's hazards. Analyzed the reports of the incident/accident (secondary data), which held earlier at working place and gathered information. Besides, the additional data were collected through actively participated in the weekly workshops, monthly seminars, which were conducted either by the Researcher Company or outsourcing.

By the descriptive research, the researcher analyzed various "hazards & solutions "of workforces at facility management when the researcher had prepared to present multiple workshops through several internet sources (secondary data). Besides, the researcher interacted with the work place's Safety officer and facility manager for gathering needful information while preparing the general/standard procedures of the occupational & safety health for overall working sites.

As a part of researcher's empirical research, the researcher prolonged experience in hard service of facility management guided to become more familiarity in the technical terminology of hard service and workforce's psychology for understanding the fundamental phenomenal of Hazards at working place to various employees such as A/c technician, Electrical technician, Plumbing & Mechanical technician, BMS technician, and civil workforces (mason, carpenter, painter).

The Operation & Maintenance manual of various types of machinery at working place (secondary data) helped the researcher to get the more necessary information to write this manuscript correctly. The breakdown reports and the installation reports, beyond the economic reports, were also assisted to the researchers to understand the ways to eradicate the employee's hazards at working places.

The researchers collected the other sources of information for writing this manuscript, ultimately from the working experience of various Project Engineers, Coordinators, site in charges, and Structural engineers. The Informal weekly meeting with the other company's supervisors, senior supervisors, expertise laborers also helped the researcher to shape this manuscript properly. Furthermore, the researcher collected many pieces of information using the Personnel protective equipment for evading as of Hazards by employees from the internet sources.

The researcher prolonged experience in the facility management and informal coordinated with machinery suppliers and their guidance along with sharing the construction employees working places suffering during the hot summer, which helped the researcher to collect more information through the various web sites.

Definition -What does Occupational Health and Safety (OHS) mean?

1"Occupational health and safety (OHS) relates to well-being, security, and a prosperity issue in the place of work.OHS includes the bylaws, morals, and values and programs that aim at creating a better workplace for employees/workers, along with colleagues, family associates, clients, and other stakeholders. Educating a company's occupational health &safety ethics

ensures reputable business, a better trademark image, and sophisticated employee self-esteem."1

And Safeopedia expounds (OHS) the occupational Health and safety as

2" Occupational health and safety concern with addressing several types of place of work perils / hazardous such as,

Psychological fallouts, Ergonomics issues, biological agents, Chemical & Physical hazards and accidents

The standards of Occupational health and safety are in place to directive the elimination, decline, or replacement hazards at working place/ site. OHS programs should also comprise a material that aids in diminishing the special effects of the risks. Employers and company management are pleased to afford a harmless working atmosphere for all of their personnel."
"2

Thus, in facility management/ property maintenance management of hard service, a facility manager must take care of his subordinates through the site's safety officer. Still, in most of the sites, there are no safety officers, who do not deputize by employers. As a result, there is no proper occupational and safety health procedure, and it is not adequately followed an account of lack awareness / importance amid workforces and also lack of experience to the facility manager.

Keep an eye on, to the workforces' health through sit at the Head office by a safety officer is not a proper method. It needs to interact with various site employees for preparing better occupational and safety health procedures for taking care of employees, even if there are standard procedures 'of occupational and safety health, which are not following these days at various sites.

Hence, it is not the duty of a facility manager to sit at his chamber for an execution of the hard service of Occupational & safety Health procedures. The facility manager has to observe their subordinate's health through proper site visits while the workforces trouble shootings the breakdown maintenance calls and planned preventive tasks etc.

Safety officer responsibility

Facility management of the hard service, which includes the execution of tasks pertain to electrical, plumbing & mechanical, Building management Automation (BMS), HVAC,& electronics of the respective property through the relevant workforces, and the employer hires the workforces. Accordingly, an employer must give complete wellbeing to their Employees. Hence an employer deputizes a safety officer for their employee's wellbeing as per existing requirements the labor laws. And the general duties of a safety officer in facility management are such as,

- 3" Perform accident or incident investigation.
- Execute to perform incident/ accident investigation.
- Implement safety & health regulation, and standard of company policies and procedure.
- Notice work progress and declare safety equipment is worn and processes/procedures followed.
- Evaluate hazards and improve ergonomic risk valuations for public & nonpublic extents.
- Improve regulates and strategies to diminish employee jeopardy.
- Administer work-related wound workers' programs and workers' reimbursements.
- Resolve grievances and propose to management for remedial action.
- Warrant workforces' safety training, demos, classroom lectures, and hands-on tutoring.
- Appraisal accidents and advice to avert parallel future occurrences.
- Make chronicle reports on incidents.

- Familiarize with alternative processes on strategies and procedures of divisions.
- Implement operative safety, hazard mechanism, and industrialized sanitation program.
- Assess hazards and propose for remedial deed, and
- Understand, put on, and elucidate appropriate safety and environmental rulings, codes, and strategies. "3

As a consequence, safety officer duties are most accountable and as a "watchdog" of a site, who must be more vigilance. The relationship between safety officer and Facility manager/property manager always is not being ethically due to their ego. An experienced facility manager is a specialist who must familiarize himself with all sorts of hazardous because of his prolonged practice in a site but a safety officer having more theoretical acquaintance; hence, understanding among them is needful for the wellbeing of employees.

As a result, there must be necessary for mutual understand amid safety officer and a facility manager along with supervisors, including senior technicians of a site.

Building Management (automation) Hazards

4" A building Management system is computer focused control system which is always at huge construction/ building for monitoring equipment such as doors, air conditioning, video surveillance, etc., and it is also essential for the maintenance of mechanical and electrical equipment of a building."4

Due to monitoring, the building equipment, through Building Management systems of the computer for a long time and also improper breaks from the tasks, the BMS technicians may suffer by 5 "muscle joint pain, overuse of injuries shoulder, arms, back & neck, headaches pain. Besides, the illuminated computers screen/monitor which cause eye damage such as blurred vision, a temporary inability on faraway of objects and headaches to BMS technician."5

And the working place can be adjusted to suit of BMS technician such as the height of the screen, chair height for avoiding suffering by the computer-related injuries

Besides, whenever getting alarmed at the B.M. system, it is a duty to/of B.M.S technician to attend the complaint immediately. The BMS technician further informs to the respective section of hard services of facility management according to the nature of issues. Hence, a BMS technician has the potentiality to troubleshoot all kinds of problems at an initial level. So he must have the occupation and safety health hazards as, like other hard service technicians, he must follow all safety rules and regulations like other technicians of hard service.

Swimming pool technician Hazards

6 "In general, the swimming pool technician/ operator suffers by the chemical agents that add to the water at the Swimming pool such as chlorine, Ozone, Disinfectants due to inhalation of them. Further, the swimming pool technician/operator is ill with the organic matter of human origin, protozoa (saprophyte), Amoebae, fungi also.

And, for avoiding suffers by an electric shock in areas of Wet & corrosive swimming pool, the swimming pool technicians keep the electrical & electronic equipment away from the premises of the swimming pool. And he also periodically checks the status of the electrical installation is earthed & appropriately bonded or not. During hot summer, to avoid obtaining injuries, it needs to check insulation /lag of pipe, marking of warning signs at pipelines."6

Besides, 7 "It needs to care the pool properly; otherwise, it should become a breeding center for mosquitoes & insects, bacteria and algae. Which can carry disease, and mishandling of the chemicals leads to question the safety of swimming pool operator because of monitoring the electrical connectivity equipment such as filter, pump, and mechanical parts lead to cause injuries/death. An account of suction drains, the swimming pool operator installs a "safety vacuum release system" that can usually shut down the pumps while the drain acquires a block. It needs to pin up hairs or wear a swim cap due to many trap incidents occur hair getting trap in a sewer. The Chemicals of the pool always cause burns; injuries if it mixes improperly; hence, the swimming pool operator must be more vigilance while using week / strong chemicals in the pool."7

7"An account of feeling a burning sensation at nose/throat, contact dizzy, nauseous or vomit, difficulty breathing while handling chemicals at the swimming pool, it is indispensable to pool operator getting fresh air soon and obtain medical attention. It needs to apply an ample amount of water rather than using the "dry chemical fire extinguisher" when the fire cannot extinguish instantly. Furthermore, it needs immediately clean up any chemical spills according to manufactures' direction at swimming pool premises."7

So, the swimming pool technician can take precaution steps to avoid to suffer by illness, and it needs to do medical checkups now & then. The application of electrical and plumber technicians' occupational safety health norms is also applicable to the swimming pool technician/ operator.

Sewage plant Hazards

Rather than other technicians in a site, a sewage plant operator physically & mentally suffers too much due to their tasks at sewage plants by 24/7 service. And their service is unavoidable at facility management of hard service, and so strictly following the occupational & safety health procedures, which saves their life without suffering by any disease in their future life.

And 8 "The sewage plant operator does not wear loose-fitting cloth during working around machinery with moving parts because it causes severe injury or death. Rather than using open-toe shoes, it is better to use a rubber boot or leather shoe while removing the unwanted object from the bottom of the pole. And Full cover goggles or face shields are most suitable, and the eyeglass / hard ended lenses are not advisable instead goggles to sewage operator. The complete head covering, it needs while handling acids, caustics, dry chlorine, ammonia at sewage plant premises. Besides, the chlorine and herbicide commonly using chemicals, and the chlorine uses for disinfection of effluent; the herbicide uses to control the weed. The granular chlorine, table chlorine, household bleach are the other forms of the dry chlorine, which are necessary to keep in a dehydrated bowl with sealed cover to prevent humidity interaction through chlorine.

Furthermore, it is more cautious while releasing a large volume of gas in a short time, and pile in an appropriate enclosure to avoid unlawful damaging with cylinders. The STP operator

necessities to sweeping the valve at barrel simply $\frac{1}{4}$ turn or as much as looked for attaining the adequate gas drive to the chlorinator. While operating of sea wage plant, the plant operator must be very cautious nearby the sludge collection and aeration tanks due to blustery of aerated water.

For avoiding a hazardous situation, the sewage operator must be aware of potential accident areas such as narrow walkways, steep stairways, and uncovered aeration. It assists him in working without any issues, and that the defects of the guard rails are to carry out soon. The foundation is to be appropriately secured because the operating person executes duties in the plant at whatever time. Also, there is proper/adequate lighting to the operating personnel at Indoor areas, which aids to perform tasks without any problems." 8.

HVAC Hazards

"9 It is necessary for HVAC technicians at the site to learn how to assess the situation before attending either break down tasks or preventive maintenance tasks to identify the hazards/safety threads. The short additional training program in electrical is vital to them even though it is not part of the on the job training. Further, a Hvac technician is to 10" Spend some time in getting the job done. And also he makes *sure not to rush things. He must see the situation first to prevent winding be injured*" 10

Because usually, an HVAV technician has multiple tasks in various job sites. Hence it is most indispensable to him depends on work order he must double-check the equipment & necessary tools and their working conditions such as strippers, wrenches, vacuum gauge, and it helps to reduce the chance of an injury. While checking the equipment, an HVAC technician who checks the equipment cleanliness, updated status, and make sure that it is necessary for replacing the material or not to keep him safe.

Besides, it is better for an HVAC technician at the site who must take self-care during hot summer working with the Gas cylinder. Due to high temperature, the gas cylinder generates very high pressure; hence, the cylinder will be taken off and exploded like a rocket if it is failed or damaged.

11-**For Example** "due to the heat generates during hot summer, the pressure of **R-410 gas cylinder reaches up to 366 PSIG**", and a large, 1500 Sqa gas cylinder generates a pressure of up to 549,000 Psig. "11

And the Wearing protective gears to the HVAC technician are most significant because the safety is first rather than others, a few gears to an HVAC technician at the site are such as,

Face shield/Goggle, which helps to protect an HVAC technician from HVAC / chiller liquids and chemicals. The Respiration gears that help to shield while existing at site unsafe air contaminants, the hard cap facilitates to protect wherein the hard objects falling. The shoes & boots protect the HVAC technician from falling and heavy objects; the safety glass stops to fall the flying objects and debris into the eyes.

However, it is the duty of employing contractors making sure equipment is in good working condition and also who always reminds to wear protective gear to prevent accidents and injuries such as hearing or eyesight loss or broken limbs.

The cleaning liquids, detergents, solvent, and refrigerants are few chemicals, which are used in sites by most of the HVAC technicians who shall have serious health risks and causing injuries if mishandled, and it is better to the New HVAC / Chiller technicians get advice from respective site safety officer, HVAC supervisors and senior technicians how to handle the most common HVAC system / chiller chemicals for own protection."9

12"The average noise level over a day for us is 85 Decibel, an above 85 decibel damages our hearing capacity, and the normal conversation typically situates in the 60-70 decibel ranges."12

Hence, 13"Noise reduction using silencer/soundproofing/acoustic insulation that is needful to chillers/ cooling system at the site for protecting the hearing capacity of employees."13

Thus, the site Incharge of property maintenance along with respective safety officer needs to identify the Hazards to protecting employees after discussion with HVAC technicians/chiller technicians, supervisors.

Electronic Hazards

14“To making safe to the electronic technicians at a site while working with a circuit that works with 120 VAC power from an electrical outlet, they need to be followed safety guidelines properly; otherwise, it leads to killing them.

It is familiar to an electronic technician who does not work on a circuit when the power is applied because it causes death. Until the circuit finishes, the electronic technician does not connect power to a circuit.

And an account of, avoiding significant issues at the site, and electronics technician soon disconnects the power and examines the circuit for finding out what is wrong therein as more quickly as who smells anything burning. It is better to keep the working area at the site dry. During troubleshooting /attending complaints, i.e., break down maintenance or Planned preventive maintenance calls, an electronics technician must wear safety Goggles. In spite of the large capacitors hold voltage continuously even after disconnected from power, the electronic technician is careful around the large capacitor; also, the hot soldering iron can quickly burn; hence, an electronics technician is aware while soldering”14.

For avoiding consequent issues at a working place in the site, an electronic technician always works in a well – ventilated space. Thus who must keep the electronic workshops in a well – ventilated area, along with necessary equipment nearby premises such as fire extinguisher, first- aid kit, and phone.

Hence an electronic supervisor must familiar with the occupational safety rules and regularization and its consequence for guiding his colloquies.

Electrical Hazards

15“The *GFCI* (*ground fault current interrupter*) is mandatory for an electrician on every occasion of electrical tasks using extension lights, tools (electrical), card set, etc. As it applies

13

Euro Afro Studies International Journal®
(EASIJ.COM)

Email: editor.easij@gmail.com , editor@easij.com Website: easij.com

Published By



at all portable electrical devices, equipment below/ less 240 Volts while the equipment & tools use at damp atmosphere. Besides, it uses, not in lieu but in addition to, of the standard 4 / 3 wire equipment grounding conductor. The lockout / tag-out procedures are most vital to be followed in facility Management policy "15

15" *A log out / Tag out (LOTO)* process is a security system using to preclude unintentional, or unapproved admittance to the power sources of electricity that are undertaking maintenance / further tasks. With this protected progression, all persons employed on the identical circuit or equipment have their locks, and they secure against a detach device beforehand of starting to work the system"15

16" Furthermore the electrician requires to well acquainted with the "PPE" (Personal Protective Equipments), tools and equipment for overhaul effort necessitating numerous electrical items (Multi-Meter, Insulated hand tools, double insulated or grounded electrical appliances, Lockout / Tag-out services. Without prior permission from a supervisor, an electrician bares to work at energized circuits more significant than 240 Volts. The jewels, accessories/decoration, conductive tools, articles, equipment, are not used or worn because the electrician has probable to interaction with the unprotected, energized components.

And the portable power tools require being the three-wire grounded type or double insulated."16

Plumbing Hazards

17" It is general duties to a plumber who can connect/install the overhaul of pipes, fit & fix servicing the water supply, waste dumping, and heating system. Further, the plumber also hauls supplies, assembles and cuts sanitation materials and usage the plumbing equipment and tools too.

And a plumber makes sure for his training on the potential hazards in the area who is assigned, and it is best advisable to plumber utilizing *material safety sheets (MSDS)* while working with new chemicals for familiarizing the chemical properties, well-being hazards, and the essential PPE (personal protective equipment).

Besides for avoiding exposure from sewage, a plumber wears gloves, coveralls, washing his hands, and decontaminating equipment after using, and obeys the confined space procedures, while entering into the plumbing work areas. The appropriate/proper footwear needs wear to a plumber when a plumber works at the wet environment to avoid slips, trips, and falls, and the power tools having a ground fault circuit interrupter (GFCI) are safe a damp environment for avoiding electric shock.

Furthermore, the sewage decomposition by-product, such as the hydrogen sulfide and oxygen deficiency, creates an Unhealthy atmosphere & levels, so a plumber checks the air quality before initiating tasks. Due to hot equipment/apparatus parts, steam (vapor) lines, and discharge of boiling water/steam, a plumber can get burns. Hence it is indispensable using insulating gloves (heat), face/ eye shield, and checks to drain pipes before opening them active.

When a plumber feels any tingling for touching a metal pipe while working on it, it is better to stop the task immediately. To avoid the musculoskeletal disorder during working in awkward positions or performing a repetitive manual task, a plumber uses proper techniques and keeps back straight."17

18 "Too proper execution of mechanical tasks, a mechanical technician must aware the three basic areas of dangerous moving parts for avoiding hazardous in working place/site such as,

The point of operation is the premises whereby the tasks are executing along with materials (on materials) I.e. Boring / forming of stock, cutting, shaping, and *the power remission apparatus / gadget*, which are components wherein transmitting the energy to its parts in a mechanical system (for machine performing) such as connecting rods, belts, coupling , cranks , gear, pulley , flywheels . and that *the other moving parts* which move while machines are working that are included revolving , reciprocating , transverse/oblique moving parts in addition to ancillary portion of machine , feed mechanisms."18

Mechanical Machinery hazards

19" In facility management, while executing tasks, the machinery ensures to cause injuries/hurts which are a minor cut, deactivating mutilation, overwhelming, amputation or another fatal injury. The Uniquely powered machines and the manually operated machines cause injuries if the mechanisms, which do not adequately safeguard.

Mechanical technicians who get injuries by machinery on account of

The Shearing hazard that damages part of the body, usually fingers or hands, amid moving and fixed portions of machines. The cutting or severing danger happens over interaction with the cutting edges, such as rotating cutting disc/ as a band saw. And an entanglement hazard occurs, due to machines which grip loose clothing, hair and working materials such as around revolving exposed parts of the machinery, emery paper, and that an impact hazard occurs because of moving part of machines strikes mechanical technicians. And Due to the ejection of sharp particles from machinery (a stabling or puncture hazard), and contact with friction."19

Painter's Hazards

20" In property maintenance, while painting building interiors, a painter faces different environments and must concern with proper ventilation, lighting, and during painting exteriors, the inclement weather and people of the site are closely related to him. Hence, whereas the execution of painting works, a painter always is aware of the surrounding and clean a paintbrush inside a bucket for protecting eyes from splattering paint, and that use gloves to protect skin against cleaning agents. Painters always use a proper ladder and not stand paint cans/chairs. Proper ventilation helps to avoid facing hazard at working place. For preventing injuries by slipping, a painter takes time to put down a tarp and secure it to the floor with tape and also keep the warning signs at appropriate places. Further, it is most necessary for releasing pressure by the painter in paint gun for avoiding the accumulation of pressure and observes the direction of the wind during outdoors painting. A painter is sure of footing before setting up a ladder, scaffold / Hi ranger."20

20" And it is necessary the scaffolds and their components must be accomplished of supportive as a minimum four times the maximum projected load for the accomplishment of painting tasks " 20

Carpentry's Hazards

21" It is common and also most necessary at a carpentry workshop to a civil supervisor / civil workforces everyday morning check the arrangement of the shop for avoiding accidents caused by bumping into an object, and before operating a machine, a carpenter must follow safety rules such as

- Put on the proper eye & ear protection such as safety glasses, goggles or full face shield.
- Wear a dust mask or appropriate respirator, and check the machine whether it is turned off or not before plugging it in, and check the blades of the device.

While operating individual machines, the civil workforces need to follow specific safety procedures for avoiding major incident such as,

Before proceeding the table Saw, a carpenter must keep the track without sawdust, and avoid too much of wood at one time, and that the height adjuster of a radial arm saw needs to use while the machine is running. There is a high incidence of injury occurs to a carpenter uses a chop saw, hence a carpenter does not hurry to keep the downward motion smooth and does not push the blade through the wood. The sharpness of bit is to check before installing it in a drill press and not to leave the key in the chuck, and it is necessary not adjust the height of the drill press with a piece of wood." 21

Ladder Hazards

22“A wooden ladder is most usable for electrical devices and fixtures tasks rather than metal ladders, and by using solvent/steam cleaning, the slippery materials such as oil, grease need to clean. The bottom of the four rails of a step ladder is to with non-slip material.

While executing the civil tasks, the distance between the bottom of the ladder and the supporting point ladder needs to keep approximately one-fourth of the ladder length. One person can be on the ladder at one time, never splice two ladders together to form a long one. The maximum height of the insulate person climbs on the ladder is the third step from the top. It is needed to use both hands and face ladder whilst ascending and descending the ladder and at an elevated position (roof)

The side rails of a ladder prolong a minimum of 3 feet above the dismount position when dismounting from a ladder at a high rank (as at a tent) and do not place hand tools on a ladder.” 22

Masonry’s Hazards

23“Masonry is an integral part of facility management of property maintenance, and masons use bricks, concrete blocks, concrete to build walls, walkways, fences, etc., the most common injuries to mason are

- Falls Slips, strips,
- Collapsing or cave in of excavation or walls, Falling objects,
- Exposure to harmful chemicals, Sharp or protruding objects
- Moving and lifting or carrying heavy objects and
- Contact to dust

Therefore an experienced mason, who takes following preventive actions every day such as,

- Evade contacting with unhardened masonry cement

- Wear watertight clothing and gloves to eradicate the possibility of skin contact
- Regularly binary - check the safety of portable electric apparatuses
- Mount well-made work surface
- Wear robust protection along with anti-skid soles
- Clean hands meticulously at the end of the everyday work shift and
- Usage respiratory safeguard apparatus, like respirators & air masks. “23

OSHA Regulations for Personal Protective Equipment

24“Facility manager / Maintenance manager of a site, who can provide safe work place to his employees / staffs through his administrative controls, but many times, the facility manager / Maintenance manager, they never get good feedback for their implementation, hence personal protective Equipment is needful technique to protect employees “24, and

The Personal protective equipment is labeled as

25 “The safety equipments give to employees at site for their self-protection. The general personal protective equipments are hard caps, gas masks, safety eye glass, gloves, immune clothing. The equipments of food hygiene are excluded from this group such as plastic gloves, etc”.25

26“Normally the PPE is in many forms, nevertheless the *OSHA* (the occupational Safety and Health Administration) covers the below mentioned areas,

Head & Foot protection, Face & Eyes Protection, Respirational protection, electrical defensive derives and hand defense

The Organizations / companies act upon an assessment to determine the appropriate PPE for specific tasks, and the work forces of particular site are to assess the work place hazards for using PPE, the assessment must be formal and it must be certified by employee.

Most organization have been doing excellent tasks for providing PPE to their employees, however many managers are doing a poor jobs of providing and documenting required PPE training, and when a facility / maintenance manager addressing to their staffs pertaining the PPE It is necessary to address such as ,

- When using the personal protective equipments (PPE) are necessary,
- hat type of PPE (personal protective equipments) obligatory?
- The proper way ways to adjust & attire the equipment and
- The constraint of the PPE, and the appropriate overhaul, care, valuable life, disposal of PPE.”26

W

Therefore, while preparing the Safety Procedure Manual, it is necessary to discuss with the respective supervisors and senior technicians of a site, and the facility manager goes through the previous accident report/incident reports for assisting in preparing the safety procedure manual to the safety officer.

Depends upon the human resources and size of the site, the execution of tasks may vary. However, the hazardous appearance to be more or less the same to the workforces, and it is the duty of facility Manager who must over review the weekly / monthly accident reports regularly, counsel all sections supervisors and senior technicians without fail.

The Monthly and fortnight seminars/workshops need to conduct through the outsourcing expert for diverse workforces at working places, about how to face the hazardous without fail.

FINDINGS AND RESULTS

Findings: The researcher conducted systematic library/internet research. In my research, there are 02 Nos major methods applied for empirical research engross quantitative method, descriptive research engrosses the qualitative method. Further, all over my work, I intended at wide-ranging of discussing the hard service employee's hazards at working premises of facility Management/ property management. The Lack of awareness to the facility manager, Section head and supervisors for creating awareness about working places hazards through conducting practical workshops at site. And so, an employer needs to frame a well-defined the occupational & safety health procedure for the employees away from the hazards at working place.

Results: Several sites were visited by the researcher to understand the meaning of Hazards of employees and also gather information. From the finding, the researcher realized that strict implementation of well-defined the occupational & safety health procedures through the respective site facility manager & safety officer would diminish the hazards of employees at working place. The employers need to give the ISO standard personal protective equipments (PPE) to employees for execution of the site tasks. The facility manager's bias mannerism and favoritism generate carelessness to employees engender the hazards to employees. An employer needs to deputize a well experienced & certified Facility manager because he will be only handling the site at any unforeseen circumstances without any issues. Self-conscious of the employees during troubleshooting issues at the site is a better way to evade endanger at the site.

CONCLUSION

The facility management of hard service is “a *unit of work*”, and the workforce involvement is human beings oversee the machines for achieving targets towards the client; hence, the employers need to give more significant to defend their employees while execution of their tasks at the site. Besides, the employees are not machineries but communal faunae; hence, employers frame the procedures of safety health through their experts without any bias and implement strictly to save their employees from various hazardous. The facility manager, like a watchdog of a site, must follow their workforces personally to protect them from hazards through Safety officers, supervisors.

Hence, an experienced facility manager knows vital of the human value and always gives more moral worth their workforces' safety rather than other factors and achieve the targets without any issues.



References

BMS and smart systems faced with the challenges of industrial cyber security- what is building Management system (BMS) <https://www.sentryo.net/bms-smart-systems-challenges-industrial-cybersecurity/>

<http://www.businessdictionary.com/definition/personal-protective-equipment-PPE.html>

Computer-related injuries.<https://www.betterhealth.vic.gov.au/health/healthyiving/computer-related-injuries>.

EU-OSHA – European Agency for Safety and Health at Work (EU-OSHA) p-30, & p-35

Electronic safety rules, <https://www.dummies.com/programming/electronics/electronics-safety-rules/>

Facility management safety handbook highlights for facilities management employees, p-13. https://www.creighton.edu/fileadmin/user/AdminFinance/Facilities/docs/Facilities_Management_Safety_Handbook.pdf

<https://www.facilitiesnet.com/maintenanceoperations/article/OSHA-Regulations-for-Personal-Protective-Equipment-Facility-Management-Maintenance-Operations-Feature--11524>

Maintenance safeties –<https://www.swimmingpool.com/pool-living/pool-safety/maintenance-safety/>

Safety Manual wastewater treatment plant operation and swage collections. <Systems.file:///C:/Users/admin/Desktop/SEAWAGE%20PLANT%20SAFETY.pdf>.

Safety guidelines for HVAC technicians. (<https://www.conycontractingbusiness.com/residential-safety-guidelines-new-hvac-technicians>).

Safety officer Responsibility and duties <https://www.greatsamplersresume.com/job-responsibilities/safety-officer-responsibilities/>

The amount of noise your ears can handle. <https://soundear.com/2017/11/17/amount-noise-ears-can-handle/>

I bid, P-2, (<https://www.conycontractingbusiness.com/residential-safety-guidelines-new-hvac-technicians>).

I bid, p-3, (<https://www.conycontractingbusiness.com/residential-safety-guidelines-new-hvac-technicians>).

Lockout / tag-out (LOTO) procedures for electrical equipment. <https://www.thebalancesmb.com/lockout-tagout-procedure-loto-procedure-844754>.

Mechanical machinery hazards. <https://www.hseblog.com/the-mechanical-machinery-hazards/>

Noise reduction device for chiller/cooling systems. <https://www.its-acoustique.fr/en/acoustical-insulation-soundproofing/noise-reduction-chiller-cooling-system.html>.

Osha regulations for personal protective equipment. <https://www.facilitiesnet.com/maintenanceoperations/article/OSHA-Regulations-for-Personal-Protective-Equipment-Facility-Management-Maintenance-Operations-Feature--11524>

Osha regulations for personal protective equipment.

Occupational health and safety (OHS) – Definition – what does occupational Health and safety (OHS) Mean- (<https://www.safeopedia.com/definition/439/occupational-health-and-safety-ohs>)



Occupational health and safety (OHS) – Definition – what does occupational Health and safety (OHS) Mean-(<https://www.safeopedia.com/definition/439/occupational-health-and-safety-ohs->

Plumbing Safety-Plumbing revision guide. <https://www.pearsonschoolsandfecolleges.co.uk/plumbing/Samples/Pl...>

Safety manual – Paints shop safety producers. www.fm.colostate.edu

I bid, Carpentry and lock shop procedures .p-01-03, Chapter # 03, www.fm.colostate.edu

I bid, Ladder safety, chapter # 22, www.fm.colostate.edu

7 recommended safety precautions for Masonry contractors.<https://contractorsinsurance.org/masonry-contractors-safety-tips/>

Where Mechanical Hazards occur, 18-<https://ehs.princeton.edu/workplace-construction/workplace-safety/physical-safety/machine-guarding/where-mechanical-hazards-occur>.



Cite this article:

Author(s), S. Mohan (2019). “Impact of Employee’s Hazards at working premises of Facility Management (Hard Service – Property Maintenance Management)”, Name of the Journal: Euro Afro Studies International Journal, (EASIJ.COM), P, 1 - 26. DOI: 10.5281/zenodo.3562231, Issue: 1, Vol.: 1, Article: 1, Month: December, Year: 2019. Retrieved from <https://www.easij.com/all-issues/>

Published by

