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**IMBANGUKANABIGWI
TOP PRACTICAL SKILLS OUR GOAL**

SECTOR: CONSTRUCTION

SUB-SECTOR/TRADE: LAND SURVEYING

RTQF LEVEL: 5

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TVET CERTIFICATE V IN LAND SURVEYING

**CODE AND MODULE TITLE: CCMMS 501
MONITORING OF OCCUPATIONAL S.H.E AT
WORKPLACE**

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IMBANGUKANABIGWI TOP PRACTICAL SKILLS OUR GOAL

CCMMS 501 MONITORING OF OCCUPATIONAL SHE AT WORKPLACE

Competence: Monitor Occupational SHE Best Practices

ELEMENTS OF COMPETENCE AND PERFORMANCE CRITERIA

Learning units describe the essential outcomes of a competence.

Performance criteria describe the required performance needed to demonstrate achievement of the learning unit.

By the end of the module, the trainee will be able to:

ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Conduct OSHE (occupational safety and health) monitoring	1.1. Proper checking of application of OSHE policies, procedures and regulations 1.2. Proper monitoring of the use of PPEs 1.3. Proper monitoring the compliance of OSHE best practice
2. Collect and analyze occupational health, safety incidents report	2.1. Proper collection of data regarding OSHE incidents 2.2. Proper analysis of OSHE data collected 2.3. Adequate elaboration of a compiled incident reports 2.4. Proper recommendation of safest way to do the job
3. Train all staff on occupational health and safety matters	3.1. Appropriate provision of information and instructions 3.2. Appropriate training to all employees and supervisors on OSHE standards/regulations 3.3. Proper evaluation of trained OSHE programs

L.U1: CONDUCT OCCUPATIONAL SAFETY AND HEALTH (OSH) MONITORING

1.1. CHECK IF S.H.E POLICIES, PROCEDURES AND REGULATIONS ARE APPLIED

1.1.1. Employer's responsibilities

Under the law, **employers** are responsible for *health* and *safety management*. The following provides a broad outline of how the law applies to employers. Don't forget, **employees** and the self employed have important responsibilities too.

It is an **employer's** duty to protect the *health, safety* and *welfare of their employees and other people who might be affected by their business*. Employers must do whatever reasonably practicable to achieve this.

This means making sure that the *workers* and *others* are protected from anything that may cause *harm, effectively controlling* any *risks* to *injury* or *health* that could arise in the workplace.

Employers have duties under health and safety law to assess risks in the workplace. Risk assessments should be carried out that address all risks that might cause harm in your workplace.

Employers must give you information about the risks in your workplace and how you are protected, also instruct and train you on how to deal with the risks.

Employers must consult employees on health and safety issues. Consultation must be either direct or through a safety representative that is either elected by the workforce or appointed by a trade union.

1.1.2. Safety Health Environment (SHE) regulations and standards

❖ Safety Health Environment (SHE) regulations

- Safety roles of employees;
- Responsibility of administration;
- Incident reporting;
- Ventilation and air quality;
- First aid facilities;
- Hazard control in workplace;
- Equipment and machinery;
- Emergency response plans.

❖ **Safety Health Environment (SHE) standards**

- Responsibility in working place;
- Hazard identification and risk Control;
- Making the working area safe;
- Personnel protective equipment;
- Health of employees;
- Facilities;
- Reporting of incidents and accidents;
- Emergency preparedness procedures.

1.2. MONITOR USE OF PERSONAL PROTECTIVE EQUIPMENTS (PPEs)

1.2.1. Types of PPEs to be used according to the trade

The main personal protective equipments are:



Helmet



Safety goggle



Safety glasses



Safety shoes



Ear protector



Hand (Cotton) gloves



Respirator (Dust mask)

Hand gloves:

→ They have role to protect **hands** from:

- ✓ Abrasion;
- ✓ Sharp objects;
- ✓ Hot object corrosive substances;
- ✓ Toxic chemicals;
- ✓ High voltage equipment.

Helmet/hard hat for Head protection.

→ They have role to protect **head injury** from:

- ✓ Falling object;
- ✓ Swing/flying object;
- ✓ Hot/corrosive substances;
- ✓ Knocking /striking object;
- ✓ Electrical hazards.

Safety Goggles, Safety Glasses:

→ They have role to protect **eye** from:

- ✓ Flying particles
- ✓ Chemical splashes
- ✓ Intense radiation

O Home Assignment

1. Is it important to use Personal Protective Equipments (PPEs) at Workplace? Justify your answer.
2. List the Personal Protective Equipments (PPEs) a Land Surveyor can use at workplace when he/she conducts the surveying activities.
3. Give the role of the following Personal Protective Equipments (PPEs) used at workplace:
 - Safety shoes/boots;
 - Respirator (Dust mask);
 - Ears protector;
 - Overall.

1.2.2. Maintenance and storage of equipment and tools

→The **EHP** is responsible for making sure that all **tools** and **equipment** are well organised and maintained in good working condition.

→**They** should be stored in a **separate secure place** so that they are **safe** and **easy to find**. This is usually best done in a place which is separate from the office.

→**Lost tools** are expensive to replace and much time can be wasted if they are not available and ready to use when needed.

→It is usual for those who have responsibility for looking after tools, equipment and materials to keep an inventory (list) of these things.

- The **EHP** should check off the inventory regularly and if any items have been loaned out and not returned, he/she must get them back.
- Breakages** and **losses** and materials which have been used up should be reported to the Community Council Administration (CCA) and requests made to replace them.
- It is a **good idea** to have a **tool box equipped** with the necessary plumbing tools and materials (washers, thread tape, O-rings) ready to be picked up and taken to a job.

1.3. MONITOR COMPLIANCE OF OSHE BEST PRACTICE

1.3.1. Want Safety In Manufacturing? Turn to the Safety Manager!

- When it comes to safety in manufacturing, the **safety manager** is an employer's point man for worker safety.
- This means that the safety manager's responsibilities start with ensuring that all of the employer's **OSHA (Occupational Safety and Health Association)** mandated responsibilities are met.
- The following are five of the main responsibilities OSHA places on employers:
 - ❖ **Provide a workplace that is free from serious safety and health hazards**
 - Ensure that the workplace is monitored and is fully in compliance with all applicable OSHA standards, rules and regulations in order to maintain safety in manufacturing facilities.
 - Use labels, signs, posters, floor marking, and color coding to warn employees about potential hazards.

❖ Monitor the workplace to ensure employees follow safety in manufacturing

- Have and use safe tools and equipment.
- Tools and equipment are properly maintained.
- Ensure that Safety Standard Operating Procedures (SOPs) are maintained, and communicated to employees.

In addition, the safety manager is usually the person responsible for ensuring the company is in compliance with OSHA employer requirements. These types of requirements include:

- Fatal accidents that result in the hospitalization of three or more employees, must be reported to the nearest OSHA office within eight hours.

If the company is not exempt, or partially exempt from the OSHA record keeping requirements, the safety manager ensures that records of work-related injuries and illnesses are maintained. To be partially exempt an employer must meet one of the following requirements:

- Have ten or fewer workers, or
- Be a type of business that OSHA has classified as a lower-hazard industry.
 - Ensure medical examinations and training are provided as required by OSHA standards.
 - Ensure the required OSHA poster is posted in a prominent location.
 - Provide the names of the authorized employee representatives, who may be asked to accompany an OSHA compliance officer during an inspection, to the OSHA compliance officer.
 - Ensure OSHA citations, and abatement verification documents, are posted at or near the work area where the accident happened. Each citation must remain posted until the violation has been corrected, or for three working days, whichever is longer.
 - Ensure any violations cited by OSHA as a result of an OSHA inspection are corrected by the deadline set in the OSHA citation, and submit the required abatement verification documentation.

❖ **Getting The Safety Responsibility Done**

With the responsibilities of a safety manager encompassing such a broad range for safety in manufacturing facilities, how do they accomplish all of this? The following are some of the functions that are the responsibility of a safety manager, and that result in compliance with OSHA requirements. In larger organizations safety assistants will be responsible for some of these functions. In a smaller organization the owner, or **HR** manager, may be responsible for safety.

The responsibilities of a safety manager may include:

- Participating in workplace safety and health planning meetings.
- Ensuring managers and supervisors have the appropriate safety and health; accident prevention; and investigation training.
- Ensure that managers/supervisors provide safety training and information to workers.
- Providing leadership in developing measures and practices that prevent accidents and ensure compliance with OSHA standards. This includes:
 - Continuously monitor the workplace for hazardous safety and health conditions.
 - Ensure safety and health hazards are corrected, eliminated or guarded.
 - Assessing engineering controls, administrative controls, and PPE on an on-going basis.
 - Assisting in the investigation of accidents. This includes:
 - Identifying hazardous situations that are associated with the accident.
 - Having the authority to:
 - Stop and prevent unsafe actions
 - Stop the use of unsafe equipment and tools.

- Stop work and/or have employees leave a work area.
- Investigating all close calls and other safety-related incidents that have occurred within the accident area.
 - Ensure the results of safety inspections are documented; monitoring the investigation of accidents and injuries; ensuring that corrective actions are taken; and providing recommendations for ways to prevent similar accidents.
 - Ensure that all accident reports are recorded in a timely, complete, and accurate manner.

Overall, the responsibilities of a safety manager include anything required to ensure complete compliance with OSHA standards, and for maintaining a safe and healthy workplace. What this means will be different in each workplace. At a minimum it requires familiarity with OSHA standards and implementing management practices to ensure compliance with those requirements

❖ **Improve Safety in Manufacturing Facilities with Good Signage**

One of the critical responsibilities of a safety manager is to ensure that durable, clear and effective signs and labels are used. The best way to accomplish this is by using a label printer and tough-tested labeling supplies.

❖ **Note Safety Violations with Clear Tags**

In order to keep employees and supervisors focused on the importance of safety in the organization, the safety manager should TAG ANY safety violations with different colored TAGS. When operations personnel see these TAGS, they must fill them out as to what action was taken to correct the safety violation and what will be done to avoid it the next time.

As Safety Manager, in one company where I was the man responsible for safety in manufacturing operations, I saw an ocean going container being unloaded without safety shoes being used by warehouse employees, there was no unloading dock, the forklift was not able to get into the 40 foot ocean going container and they used long rubber strips to move the pallets inside the container. Naturally the employees in this container jumped out to avoid the heavy tipping pallets, and the forklift was not maintained properly, and died several times while unloading this container. There were colored tags all over this UNSAFE operation. The Warehouse Manager had to write a Standard Operating Procedure (SOP) to eliminate these unsafe issues for the next 40 foot ocean going container that was due in the following week. This was a lesson on how NOT to practice Safety. **Never take safety for granted!**

L.U2: COLLECT AND ANALYZE OCCUPATIONAL HEALTH, SAFETY

INCIDENTS REPORT

2.1. COLLECT DATA REGARDING OSHE INCIDENTS

2.1.1. What is an Incident Report?

The initial incident report is the first step in the incident investigation process no matter what type of incident is being recorded.

The answer to this question depends on how we define “**incident**”. **Incidents** can be related to **accidents** and **injuries** or other **health and safety issues, property damage, security issues, workplace misconduct** and could even cover **conduct of employees outside the workplace**.

The employee incident report varies according to the type of incident being reported.

The initial incident report is the first step in the incident investigation process no matter what type of incident is being recorded. It is the documentation that outlines:

- What happened;
- When it happened;
- Where it happened;
- How it happened;
- Who it happened to;
- Who reported it;
- Everyone who was involved;
- Any damage or injury that incurred.

The incident report can be initiated by:

- ✓ an employee who witnessed the incident;
- ✓ a manager who has knowledge of the incident;
- ✓ an automated detection method;
- ✓ a hotline call;
- ✓ an email from someone with knowledge of the incident;
- ✓ a customer report;
- ✓ any other way a company becomes aware of an incident.

Purpose of the Employee Incident Report

An incident report serves as the official record of the incident and all subsequent activity related to the incident relies on the initial information recorded in this document.

A timely incident report helps companies respond quickly to issues, resolve conflicts and take preventive measures to reduce risk.

The incident report:

- Triggers an investigation
- Provides documentation for follow-up
- Supplies information to be used in the investigation
- Is used for reporting to identify areas of risk
- Provides data for company and industry research and analysis
- Shows the company documented the incident within the required timeline
- Ensures compliance with industry regulations that govern reporting of certain types of incidents and in certain industries

Recording a work-related injury or illness does not mean the employer or employee was at fault, an OSHA rule has been violated, or that the employee is eligible for workers' compensation or other benefits. OSHA injury and illness recordkeeping and Workers' Compensation are independent of each other. An injury or illness may not be a Workers' Compensation case, but it may still be an OSHA recordable case.

Recording Criteria

1. Has an injury or illness occurred?

Yes ➡ Continue to question 2.

No ➡ An injury or illness has not occurred. Do not record this as a case on your OSHA log.

2. Is the injury or illness work-related?

Work-relatedness is presumed for injuries and illnesses occurring in the work environment. Assume the injury or illness has met the work-related criteria unless it is specifically addressed in the exceptions listed below.

Yes ➡ Continue to question 3.

No ➡ A recordable injury has not occurred. Do not record this as a case on your OSHA log.

3. Is the injury or illness a new case?

4. Does the injury or illness meet the general recording criteria?

☐ **Steps of collection data;**

- Consulting of incident report documents
- Talk to people involved or witnesses to the event
- Site visit

☐ **Categories of incidents;**

- Major accident fatal permanent injury
- Minor accident (injuries)
- Near miss

2.2. ANALYZE OSHE DATA COLLECTED

☐ **Root and causes of incident;**

❖ Poor management

- Laziness
- Stupidity
- Forgetfulness
- Negligence
- Ignorance

❖ Influencing factors associated with the work

- Environment
- Individual
- Physical abilities, organization and its management system
- Overload
- Poor procedures
- Inadequate training
- Low motivation

☐ **Impact of incidents**

○ Social impact

- ✓ loss of manpower
- ✓ medical expenses

○ Economic impact

- ✓ poor production,
- ✓ closer of the company
- ✓ compensation
- ✓ repairs

○ Physical effects

- ✓ permanent injuries,
- ✓ loss of ability to handle materials,
- ✓ persistent pain (uburibwe buhoraho)
- ✓ headaches

○ Psychological effects

- ✓ Anxiety (kugira ubwoba)
- ✓ Depression (agahinda gakabije)

2. 3. ELABORATE COMPILED INCIDENT REPORTS

2.3.1. Type of incident reports;

- Monthly report
- Quarterly report
- Annual report

2.3.2. Categories of incidents;

- ✚ Major accident
 - fatal
 - permanent injury
- ✚ Minor accident (injuries)
- ✚ Near miss

2. 4. RECOMMEND SAFEST WAY TO DO THE JOB

2.4.1. Analyze

Your report should include an in-depth analysis of the **causes** of the accident. Causes include:

- **Primary cause** (e.g., a spill on the floor that caused a slip and fall)
- **Secondary causes** (e.g., employee not wearing appropriate work shoes or carrying a stack of material that blocked vision)
- Other **contributing factors** (e.g., burned out light bulb in the area).

2.4.2. Recommend

Recommendations for corrective action might include immediate corrective action as well as long-term corrective actions such as:

- Employee training on safe work practices
- Preventive maintenance activities that keep equipment in good operating condition
- Evaluation of job procedures with a recommendation for changes
- Conducting a job hazard analysis to evaluate the task for any other hazards and then train employees on these hazards
- Engineering changes that make the task safer or administrative changes that might include changing the way the task is performed

L.U3: TRAIN ALL STAFF ON OCCUPATIONAL HEALTH AND SAFETY MATTERS

3.1. PROVIDE INFORMATION AND INSTRUCTIONS

3.1.1. Training needs for small business

Generally training should be provided:

- to all new workers which includes:
 - induction training;
 - emergency procedure;
 - correct use of equipment and personal protective equipment (PPE); and
 - accident and hazard reporting procedure;
- to all experienced workers given new tasks for which training has not been provided previously;
- to all workers who perform physical tasks in areas that are known to have high risk of injuries such as manual task training;
- to migrant workers who may require additional training;
- when new substances, processes, procedures or machinery are introduced to the workplace and represent a new hazard;
- when new hazards are identified; and
- subsequent to work-related injuries, illness and incidents.

3.1.2. Specialised training requirements

Certain work areas and roles need additional specialised training to meet safety and health requirements. These can include training in areas such as:

- first aid training for a worker who has been selected to apply first aid;
- high risk work training such as forklift training and dogging licence;
- construction induction training;
- hazardous substances information and training;
- working in confined spaces;
- demolition work;
- working with asbestos;
- fatigue management training for commercial vehicle drivers and their supervisors; and
- safety and health representative training.

3.1.3. Information and instructions

Small businesses have a duty of care to provide safe workplace environments for their workers and anyone who could be affected. Safety information and instructions where they are relevant will need to be given to workers, contractors or members of the public.

Information and instructions to be provided include:

- workplace facilities and housekeeping procedures;
- safe work procedures;
- emergency action and who is at risk and why; and
- the safety responsibilities of individual people.

Training tips

- Do not assume that a worker knows how to do his or her job and will do it safely unless they have been trained to do so.
- Safety training is an ongoing process.
- Training needs should be based on accidents/incidents, identified hazards, hazard/accident prevention initiatives, and input from your workers.
- Provide adequate supervision to check people are working safely.

3.2. TRAIN ALL EMPLOYEES AND SUPERVISORS ON OSHE STANDARDS/REGULATIONS

❖ Training on SHE regulations

- Safety roles of employees Responsibility of administration Incident reporting
- Ventilation and air quality
- First aid facilities
- Hazard control in workplace
- Equipment and machinery
- Emergency response plans

❖ Training on SHE standards

- Responsibility in working place
- Hazard identification and risk control
- Making the working area safe
- Personnel protective equipment
- Health of employees
- Facilities
- Reporting of incidents and accidents
- Emergency preparedness Procedures

3.3. EVALUATE TRAINED OSHE PROGRAMS

Learning assessment

- Questions and responses,
- Topic of discussion

Training Impact Assessment (TIA)

- Have you ever measured the impact of your training programmes?
- Have you ever measured the impact of external training on employee performance and business strategic intentions?
- How effective training was and what information the employees retain?
- How effective was the trainer with those sessions?
- What information do the employees take away from the training?
- How effectively do you manage the knowledge of your team?
- Want to know how effective the training and development plans in your company are?
- Want to know exactly what areas should the departmental trainers be concentrating on their on-the-job training sessions?
- Where do you have skill and/or knowledge gaps in your company or department?