

# Conduct a continuous Risk Assessment in a Workplace

## Learner Guide



|                |   |
|----------------|---|
| Number:        | 120330  |
| NQF Level:     | 03  |
| Credits:       | 4   |
| Qualification: | National Certificate: Construction – Plant Operations |

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## BEFORE YOU GET STARTED...

Dear Learner,

This Learner Guide contains all the information to acquire all the knowledge and skills leading to the unit standard:

Title: Conduct a continuous risk assessment in a workplace

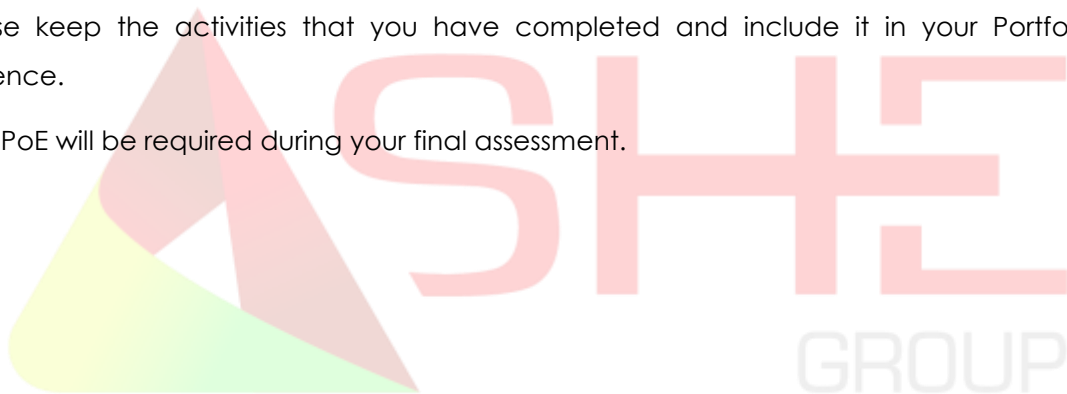
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The full unit standard is attached. Please read the unit standard at your own time. Whilst reading the unit standard, make a note of your questions and aspects that you do not understand, and discuss it with your facilitator.

This Learner Guide contains all the information, as well as the activities that you will be expected to do during the course of your study.

Please keep the activities that you have completed and include it in your Portfolio of Evidence.

Your PoE will be required during your final assessment.



## THE LEARNING EXPERIENCE...

**The Purpose:** This unit standard is intended to explain the legal and specified requirements for conducting continuous risk assessments. Prepare to conduct a continuous risk assessment. Conduct a continuous risk assessment. Initiate remedial action and follow up on Continuous Risk Assessment.

**People credited with this unit standard are able to:**

- Explain the legal and specified requirements for conducting continuous risk assessments.
- Prepare to conduct a continuous risk assessment.
- Initiate remedial action and follow up on Continuous Risk Assessment.



## WHAT IS THE ASSESSMENT ALL ABOUT?

Assessment takes place at different intervals of the learning process and includes various activities. Some activities will be done before the commencement (Baseline) of the program whilst others will be done during programme (Formative) delivery and other after completion (Summative) of the program.

You will be assessed during the course of your study. This is called formative assessment.

You will also be assessed on completion of this unit standard. This is called summative assessment.

Before your assessment, your assessor will discuss the unit standard with you. The assessment experience should be user friendly, transparent and fair. Should you feel that you have been treated unfairly, you have the right to appeal. Please ask your Assessor about the appeals process and make your own notes.

Your activities must be handed in from time to time on request of the facilitator and the assessor. Sources of information to complete these activities should be identified by your facilitator.

**Please note** that all completed activities, tasks and other items on which you were assessed must be kept in good order as it becomes part of your Portfolio of Evidence for final assessment.

Enjoy this learning experience...

# MODULE 1 – EXPLAIN THE LEGAL AND SPECIFIED REQUIREMENTS FOR CONDUCTING CONTINUOUS RISK ASSESSMENTS.

## Risk Assessment for Construction Work (SO1-AC1)

Construction Regulation 2014

**Government gazette, 2 JUNIE 2017 No. 40883 85**

**Regulation 9(1)** A contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include—

- a) the identification of the risks and hazards to which persons may be exposed to;
  - b) an analysis and evaluation of the risks and hazards identified based on a documented method;
  - c) a documented plan and applicable safe work procedures to mitigate reduce or control the risks and hazards that have been identified;
  - d) a monitoring plan; and
  - e) a review plan.
- (2) A contractor must ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in a risk assessment.
- (3) A contractor must ensure that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site.
- (4) A principal contractor must ensure that all contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site.
- (5) A contractor must consult with the health and safety committee or, if no health and safety committee exists, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site.
- (6) A contractor must ensure that copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any

contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee.

- (7) A contractor must review the relevant risk assessment—
- a) Where changes are affected to the design and or construction that result in a change to the risk profile; or
  - b) When an incident has occurred.

## The Continuous Risk Assessment Process Is Explained (SO1-AC1)

A continuous risk assessment is a critical examination of health and safety hazards at a construction site. Performing regular construction risk assessments can help construction stakeholders to comply with health and safety regulations and can help safety teams to implement corrective measures and protect workers from health and safety threats.

In most cases, it will be a good start for a supervisor to simply look and see what is happening in the workplace. By simply observing what is happening and how staff is dealing with challenges that could pose a risk, the supervisor should get a first-hand indication of possible risks. Checklists, like inspection checklists, pre-use checklists can also play an important role in identifying possible risks immediately.

To keep companies on their toes, it has become compulsory to carry out a risk assessment, to prepare a safety statement and to implement what has been written down.

Violating these rules could cost companies dearly; an inspector is allowed to close down a site until such time as it is deemed safe again.

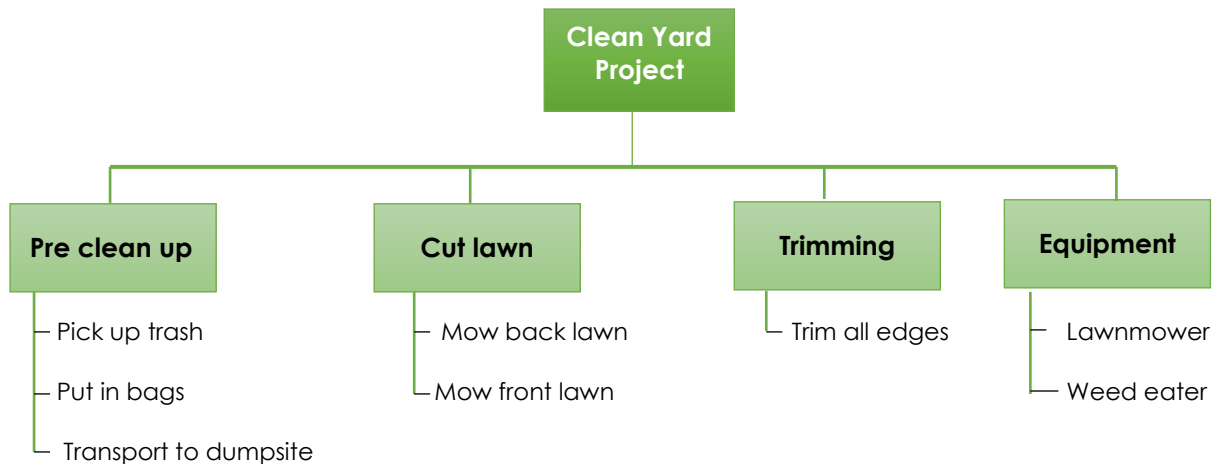
The generally accepted risk management model subdivides the risk management process in the following headings (Example: see figure 1.)



**Define Objectives:** Defines the goals and objectives the project sets out to achieve. A Work Breakdown Structure list of work and checklists can be used to define the objectives. This defines what you have to achieve to be successful and establishes a basis for dealing with risk and future decisions. (See example below)



## Yard Clean-up Work Breakdown Structure (WBS)



**Identify Risk:** Identifies areas of risk, uncertainty, limitations and restrictions, which may impact on your project, and limit or prevent you achieving our objectives.

**Quantify Risk:** Evaluates the risks and prioritizes the level of risk and uncertainty and quantifies their frequency of occurrence and impact on the objectives

**Develop Response:** Define how you are going to respond to the identified risks. The response could be a combination of:

If your work involves any kind of building, demolishing, or other physical labour, you will likely face a variety of physical construction site hazards, such as:

- Working at height
- Falling objects
- Moving objects and vehicles
- Structural collapse
- Harmful materials
- Manual handling

Eliminate: You can eliminate hazards such as manual handling by using alternative, mechanical, means of lifting, moving, or operating heavy or unwieldy loads, or by splitting a bulky load into smaller, more manageable parts. If a hazard can't be avoided completely, you can minimize risk by providing training, restricting access to hazardous work, and providing Personal Protective Equipment (PPE).

### **Telecoms industry hazards:**

This field covers a broad area of vital networks of connectivity, from telecommunications masts to setting up modems and internal networks. Typical hazards could include:

- Working at height (e.g. telecoms masts and towers)
- Electrical hazards

- Inclement weather
- Equipment failure
- Structural collapse of towers

One simple way to eliminate the risk of inclement weather is to make it a rule to suspend any activities that involve working at height until the weather improves. You should also provide appropriate training and protective equipment to ensure that only qualified and well-prepared workers have access to risk areas.

### **Warehouse hazards:**

If your business concerns storing and shipping goods or equipment, there are a variety of common hazards that you are likely to encounter. Your warehouse might have some of the following hazards:

- Forklifts
- Loading docks
- Conveyors
- Storage systems
- Manual handling
- Falling objects
- Slips, trips, and falls
- Fire hazards
- Energized Equipment

To eliminate hazards such as falling objects, you should make sure that your storage systems are secure and appropriate to the load. Avoid unbalanced and loose loads, and make sure that hard hats are provided, as necessary. You should also make sure that specialized equipment such as forklifts and conveyors are only operated by trained employees who have full and proper protective equipment, and hazards such as loading areas are clearly signposted to keep people away from risk.

### **Catering and hospitality:**

If your business involves food or hospitality services, there will likely be hazards that present risk to both your workforce and members of the public.

Typical hazards could include:

- Slips, trips, and falls
- Cleaning chemicals
- Manual handling
- Knife accidents
- Poor ventilation and extreme temperatures

- Cooking equipment
- Biological hazards and germs (germs and viruses)
- Dermatitis (inflammation of the skin)

Some hazards, such as a water spill on a tiled floor, can be eliminated quickly and easily, while others will need more attention. You might decide that the best way to eliminate a hazard such as knife accidents for kitchen staff is to outsource knife sharpening to a specialised service, or that some hazardous chemicals can be replaced by safer alternatives. Always make sure that food-preparation storage and preparation areas are in a hygienic and sanitary condition, to prevent bacteria developing.

- **Mitigate:** Avoid the risk entirely by eliminating the potential problem. Transfer the risk to another party (e.g. appoint a subcontractor) through contractual clauses and insurance. Reduce the risk by planning effective action in the cases where the problem shows. Accept the risk.
- **Risk prevention:** Methods include all techniques and management practices that help to prevent unnecessary or foreseeable risks.
- **Risk Control:** Controls are typically policies and procedures or technical safeguards that are implemented to prevent problems and protect the assets of an organization.

## Levels of Risk

Risk levels are calculated as the product of the LIKELIHOOD and IMPACT of a potential threat event / threat event category:

Low risk items need to be considered, but there is a smaller change that they will cause the entire project to go off the rails. It is most unlikely that harm would arise under the controlled conditions listed, and even if exposure occurred, the injury would be relatively slight

Medium risk items are the ones that could cause issues, but that there is still a lower change that they will cause your project to fail. It is more likely that harm might actually occur and the outcome could be more serious (e.g. some time off work, or a minor physical injury)

High risk items, these are the risks that take the highest priority. They can cause your project to fail, and you need to plan for these risks ahead of time.

## Components of Risk

*Consequence / severity (how serious)*

Consequences are the expected severity. The severity is expressed in terms of the effect on the person, whether injury or ill health, and ranging from minor injury to death.

The risks are higher if an accident is likely to result in serious injury or death, than a bruise or a scratch

### *Probability/ Likelihood (how likely)*

By evaluating the risks associated with each hazard you have identified, you're deciding how likely it is that harm will occur from the hazard. The likelihood should be based on the worst case scenario, ranging from a remote possibility to the inevitable.

Factors affecting the likelihood include:

- Number of times the situation occurs
- Location of the hazards
- Duration of the exposure
- Environmental conditions
- Competence of the people involved and
- The condition of equipment

### *Frequency (how often)*

How often is the activity involving the hazard taking place? How many people come into contact with it? Risks are higher when frequency of contact is higher.

## **The Relevant Documentation Required For Conducting A Continuous Risk Assessment Is Named (SO1-AC2)**

When conducting a continuous risk assessment, the relevant documentation required includes the following:

### **Types of documentation include, but are not limited to:**

A pre-start/use inspection involves a routine examination of a piece of equipment by its operator, which is standardised via a checklist. Whether it be a light vehicle, or tools, pre-start inspections are an important task with financial, and more importantly, safety implications.

Planned Task Observations enable the observer to know whether or not a worker is performing all aspects of a specific task the correct way.

Critical parts inspections are regular inspections of the critical parts of a machine, piece of equipment, or system that have a high potential for serious accidents. These inspections are often part of a preventive maintenance program or hazard control program. Inspection checklists can be used for forklifts, tractor semi-trailers, for example.

Structural inspection checklist is an assessment made to evaluate a structures current and future use and conformance to current building codes.

Mine Standards: The Chief Inspector of Mines has over the years issued several Guidelines in terms of which employers are required to prepare mandatory codes of practice

Procedures: A fixed, step-by-step sequence of activities or actions with definite start and end points that must be followed in the same order to correctly perform a task.

Task directives: These work tasks represent the necessary framework to permit scheduling of construction activities

Analyse and evaluate the risk associated with that hazard (risk analysis, and risk evaluation)

## **The Relevant Hazards And Risks Likely To Be Encountered During A Specific Continuous Risk Assessment Are Named (SO1-AC3)**

### **Construction site main hazards**

- Slip Trips, and falls
- Noise
- Hand arm vibration syndrome
- Electrocution
- Airborne fibres and materials
- Caught -in / Between
- Struck by hazards

### **Main Categories Of Workplace Hazards Are:**

Chemical hazards: mainly threaten employees whose roles expose them to dangerous liquids, solvents or flammable gases. Individuals who are most likely to be affected are those working in cleaning facilities these hazards can cause illness, skin irritation, breathing problems and, in extreme cases, death.

Biological hazards: are extremely dangerous. These include exposure to dangerous substances and diseases associated with working amongst animals, people or infectious plant materials. Employees who work in hospitals, laboratories etc. can cause adverse health impacts.

Physical / Safety hazards: can affect those who work in extreme weather conditions or in harmful environments. Physical hazards most commonly affect individuals. Workers exposed to loud noise, radiation, sun rays and ultraviolet rays could be at risk.

Ergonomic hazards: affect individuals whose work puts a strain on their body. Manual roles that require lifting or sitting for long periods can cause damage over time. These hazards

may not be noticeable at first which makes them much harder to identify. If your staffs use improperly adjusted workstations or have poor posture when performing manual roles and heavy lifting they may be at risk of musculoskeletal injuries.

Psychosocial hazards: Workload hazards include issues that could cause stress or strain, such as workload, violence, aggression and harassment.

## **The Importance Of Conducting Continuous Risk Assessment In A Manner That Fosters Teamwork And Avoids Conflict Is Explained (SO1-AC4)**

It is important that the supervisor/manager responsible for the work conducts the risk assessment using a team of people who will be involved in the work and who can offer the necessary expertise to evaluate the risks arising. In some cases others with specialist knowledge or experience may need to join the assessment team.

A teamwork environment promotes an atmosphere that fosters friendship and loyalty. These close-knit relationships motivate employees in parallel and align them to work harder, cooperate and be supportive of one another. Individuals possess diverse talents, weaknesses, communication skills, strengths, and habits.

The risk management team functions are trust, conflict management, commitment, accountability and focusing on results.

# MODULE 2 – PREPARE TO CONDUCT A CONTINUOUS RISK ASSESSMENT

## Appropriate Documentation Is Selected (SO2-AC1)

|                     |                  |
|---------------------|------------------|
| PROJECT NAME:.....  | START DATE:..... |
| SCOPE OF WORK:..... | END DATE:.....   |

|   | LIST TASK /ACTIVITY STEPS             | HAZARDS                                  | RISKS DUE TO HAZARDS   | PROBABILITY | CONSEQUENCE | RANK     | IF THE RISK IS NOT TOLERABLE, ESTABLISH FURTHER CONTROLS TO PREVENT/MITIGATE          | PROBABILITY | CONSEQUENCE | RANK     |
|---|---------------------------------------|--|--|-------------|-------------|----------|---|-------------|-------------|----------|
| 1 | SITE CLEARANCE                        | USE DEFECTIVE TOOLS/MACHINERY            | INJURIES TO HANDS AND BODY TOOLS.  | <b>C</b>    | <b>2</b>    | <b>5</b> | COMMUNICATE SAFETY PLAN FOR THE PROJECT BEFORE COMMENCEMENT OF WORK<br>USE PROPER PPE | <b>D</b>    | <b>1</b>    | <b>1</b> |
|   |                                       | EXCESSIVE NOISE                          | SHORT TERM LOSS OF HEARING   |             |             |          | ENSURE TO WEAR APPROPRIATE EARMUFFS   |             |             |          |
| 2 | EXCAVATIONS - USING MANUAL LABOUR     | <b>UNIDENTIFIED UNDERGROUND SERVICES</b> | <b>DAMAGES TO UNDERGROUND CABLES AND PIPELINES,</b>                      |             |             |          | OBTAIN PERMIT TO WORK BEFORE COMMENCEMENT OR WORK                                     |             |             |          |
| 3 | CONCRETE MIXING – USING MANUAL LABOUR | CEMENT DUST INHALATION                   | IRRITATES THE NOSE AND THROAT AND CAUSES CHOKING AND DIFFICULT BREATHING |             |             |          | WEAR N95 PARTICULATE RESPIRATOR   |             |             |          |

| REQUIRED AND EXISTING CONTROL MEASURES   | AVAILABLE |    | ADEQUATE |    | REMARKS |
|--|-----------|----|----------|----|---------|
|  | Yes       | No | Yes      | No |         |
| SCOPE OF WORK (LOGICAL STEPS ON HOW TASK WILL BE PERFORMED)                          |           |    |          |    |         |
| PROCEDURES: (WI / SOP / VENDOR SPEC)   |           |    |          |    |         |
| TRAINING, INDUCTION, COMPETENCY CERTIFICATES, SPECIFIC TRAINING / OTHER INSTRUCTIONS |           |    |          |    |         |
| SPECIAL PERMITS REQUIRED (SPECIFY)   |           |    |          |    |         |
| EQUIPMENT / TOOL REGISTERS / OTHERS (SPECIFY)  |           |    |          |    |         |
| OTHER  |           |    |          |    |         |

| PROBABILITY LEGEND                   |  | CONSEQUENCE / INJURY / LOSS  |   | RANKING               |          |          |          |          |   |   |
|--------------------------------------|--|--|---|-----------------------|----------|----------|----------|----------|---|---|
| <b>A</b>                             | HAS HAPPENED                                       | <b>5</b>   | FATALITY OR PERMANENT DISABILITY OR > R 1,000,000   |                       | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |   |   |
| <b>B</b>                             | QUITE POSSIBLE TO HAPPEN (HAPPEN DURING LAST YEAR) | <b>4</b>   | MAJOR INJURY OR > R 500,000 < R 1,000,000           | <b>5</b>              | 24       | 22       | 19       | 15       |   |   |
| <b>C</b>                             | COULD HAPPEN (NO RECORD OF RECENT OCCURRENCE)      | <b>3</b>   | AVERAGE LOST TIME INJURY OR > R 250,000 < R 500,000 | <b>4</b>              | 21       | 18       | 14       | 10       |   |   |
| <b>D</b>                             | NOT LIKELY TO HAPPEN                               | <b>2</b>   | MINOR INJURY OR < R 250,000                         | <b>3</b>              | 17       | 13       | 9        | 6        |   |   |
| PROB: PROBABILITY                    | CON: CONSEQUENCE                                   | <b>1</b>   | MEDICAL TREATMENT ONLY OR LESS OR NO FINANCIAL LOSS | <b>2</b>              | 12       | 8        | 5        | 3        |   |   |
| <b>HIGH RISK = 17-24</b>             |  | <b>MEDIUM RISK = 7-15</b>  |   | <b>LOW RISK = 1-6</b> |          | <b>1</b> | 7        | 4        | 2 | 1 |
| <b>BASIC PPE REQUIRED FOR TASK</b>   |  | <input type="checkbox"/> HARD HAT <input type="checkbox"/> OVERALL <input type="checkbox"/> EAR PROTECTION <input type="checkbox"/> DUST MASK <input type="checkbox"/> SAFETY GLASSES<br><input type="checkbox"/> SAFETY FOOTWEAR <input type="checkbox"/> GLOVES <input type="checkbox"/> SAFETY VEST |   |                       |          |          |          |          |   |   |
| <b>ADDITIONAL REFERENCES TO TASK</b> |  | <input type="checkbox"/> METHOD STATEMENT <input type="checkbox"/> MSDS <input type="checkbox"/> PLANNED TASK OBSERVATION <input type="checkbox"/> SAFE WORK PROCEDURE <input type="checkbox"/> WORK INSTRUCTION   |   |                       |          |          |          |          |   |   |

## Various Physical And Environmental Conditions Which Could Exist Are Evaluated (SO2-AC2)

The factors in the physical environment that are important to health include harmful substances, such as air pollution or closeness to toxic sites (the focus of classic environmental diseases; access to various health-related resources (e.g., healthy or unhealthy foods,)

The physical environment includes land, air, water, plants and animals, buildings and other infrastructure, and all of the natural resources that provide our basic needs and opportunities for social and economic development. A clean, healthy environment is important for people's physical and emotional wellbeing.

The physical risk factors are air speed, air temperature, air humidity, noise, vibrations, ionizing and non-ionizing radiation, electromagnetic fields and other physical risk factors present in the working environment, which may be harmful to the health of workers.



## **The Persons, Tools And The Materials Required To Conduct The Continuous Risk Are Verified As Fit For Purpose And Available (SO2-AC3)**

The employer is responsible for risk assessments within a workplace, meaning that it is their responsibility to ensure it is carried out. An employer can appoint an appropriate individual to carry out a risk assessment on behalf of the organisation, as long as they are competent to do so.

A risk assessment team (workgroup) is a separate and often independent unit within the project management team headed by the Project manager. It helps place a value on the project's activities (such as procuring, communicating, controlling quality, staffing etc.

Tools and material required include templates, a checklist used to verify.

## **Consequences For Not Conforming To Legal And Specified Requirements In Preparing For Risk Assessment Are Explained (SO2-AC4)**

The Occupational Health & Safety Act, 1993 regulations require all employers and the self-employed to assess the risks from their work on anyone who may be affected by their activities.

### **Additional Regulations**

- Control of Substances Hazardous to Health Regulations 2002
- The Manual Handling Operations Regulations (often abbreviated to MHOR)
- The Control of Asbestos at Work Regulations 2002
- The Personal Protective Equipment at Work Regulations 1992

Failure to adhere to these legislative instruments will result in business closure until compliance is met. In some instances heavy fines are payable and criminal cases can be opened against the business owners.

Fines: being charged under the Occupational Safety and Health Act with fines, ranging between R50 000 to R100 000, and possible imprisonment of business owners.

- Loss of Reputation
- Loss of current or potential Staff
- Down time and Loss of Productivity
- Incidents and accidents;

Financial implications due to bigger amounts that must be paid to the compensation commissioner;



## MODULE 3 – CONDUCT A CONTINUOUS RISK ASSESSMENT

### Hazard Identification Is Conducted Correctly (SO3-AC1)

Hazard identification is part of the process used to evaluate if any particular situation, item, thing, etc. may have the potential to cause harm.

Determine appropriate ways to eliminate the hazard, or control the risk when the hazard cannot be eliminated (risk control).

Overall, the goal of hazard identification is to find and record possible hazards that may be present in your workplace. It may help to work as a team and include both people familiar with the work area, as well as people who are not – this way you have both the experienced and fresh eye to conduct the inspection.

#### Hazard identification can be done:

- During design and implementation
- Designing a new process or procedure
- Purchasing and installing new machinery
- Before tasks are done
- Checking equipment or following processes
- Reviewing surroundings before each shift
- While tasks are being done
- Be aware of changes, abnormal conditions, or sudden emissions
- During inspections
- Formal, informal, supervisor, health and safety committee
- After incidents
- Near misses or minor events
- Injuries

#### To be sure that all hazards are found:

- Look at all aspects of the work and include non-routine activities such as maintenance, repair, or cleaning.
- Look at the physical work environment, equipment, materials, products, etc. that are used.
- Include how the tasks are done.
- Look at injury and incident records.
- Talk to the workers: they know their job and its hazards best.

- Include all shifts, and people who work off site either at home, on other job sites, drivers, teleworkers, with clients, etc.
- Look at the way the work is organized or done (include experience of people doing the work, systems being used, etc.).
- Look at foreseeable unusual conditions (for example: possible impact on hazard control procedures that may be unavailable in an emergency situation, power outage, etc.).
- Determine whether a product, machine or equipment can be intentionally or unintentionally changed (e.g., a safety guard that could be removed).
- Review all of the phases of the lifecycle.
- Examine risks to visitors or the public.

## Significant Hazards Are Systematically Identified, Utilising The Elected Hazard Identification Technique (SO3-AC2)

One of the best things to do in your company is to have a preventive maintenance schedule template. There are a lot of people having the benefit of this activity and daily control for every maintenance detail. You need to make sure, if everything in your office, including electronics equipment and devices, can be working well.

### Techniques

#### Pre-work/use assessments

The checklists should be developed following risk assessments exercises such as those described in the continuous risk assessment

Example: Pre use checklist

|                                    |                                |
|------------------------------------|--------------------------------|
| <b>Employee Name &amp; Surname</b> | <b>Pre use inspection list</b> |
| <b>Section:</b>                    | <b>GRINDER</b>                 |

| INSPECTION CODES |  | MON | TUE | WED | THU | FRI | SAT |
|------------------|--|-----|-----|-----|-----|-----|-----|
| 01               | IS WORK AREA CLEAN?  |     |     |     |     |     |     |
| 02               | USE SAFETY EQUIPMENT, EYE PROTECTION, DUST MASK, SAFETY BOOTS, HEARING PROTECTION AND HARD HAT FACE MASK, HELMET AND APRON TO BE WORN. |     |     |     |     |     |     |
| 03               | ENSURE THE SWITCH IS IN OFF-POSITION BEFORE PLUGGING IN.   |     |     |     |     |     |     |
| 04               | SUPPLY CORD IS NOT DAMAGED.  |     |     |     |     |     |     |
| 05               | GRINDER DISKS CORRECT TYPE.  |     |     |     |     |     |     |

|    |   |  |  |  |  |  |  |
|----|---|--|--|--|--|--|--|
| 06 | CHECK THAT SPEED MARKED ON THE WHEEL IS EQUAL TO OR GREATER THAN THE RATED SPEED<br>OF THE GRINDER. ENSURE THAT THE WHEEL DIMENSIONS ARE COMPATIBLE WITH THE GRINDER.               |  |  |  |  |  |  |
| 07 | INSPECT GRINDER WHEEL; DO NOT USE CHIPPED, CRACKED OR OTHERWISE DEFECTIVE PRODUCTS.   |  |  |  |  |  |  |
| 08 | ENSURE THAT THE MOUNTED WHEEL/DISCS AND PARTS ARE ATTACHED IN ACCORDANCE WITH<br>THE MANUFACTURER'S INSTRUCTION.  |  |  |  |  |  |  |
| 09 | ENSURE THAT SPARKS RESULTING FROM USE DO NOT CREATE A HAZARD. E.G. NOT HIT PERSONS<br>OR IGNITE SUBSTANCES.   |  |  |  |  |  |  |
| 10 | THERE MUST BE EARTH CONTINUITY – TEST EARTH LEAKAGE UNIT.   |  |  |  |  |  |  |
| 11 | GUARDS MUST BE SECURE AND PRESENT. MUST BE IN WORKING ORDER AND NOT DAMAGED.<br>ADJUST THE GUARD TO PROTECT YOUR HANDS AND DIRECT GRINDING DEBRIS.                                  |  |  |  |  |  |  |
| 12 | DO NOT TOUCH THE WORK PIECE IMMEDIATELY AFTER GRINDER AS IT WILL BE VERY HOT.   |  |  |  |  |  |  |
| 13 | THE DISC WILL CONTINUE ROTATE FOR A FEW SECONDS AFTER THE ANGLE GRINDER HAS BEEN<br>SWITCHED OFF. WAIT UNTIL THE DISC HAS STOPPED COMPLETELY BEFORE PUTTING THE ANGLE GRINDER DOWN. |  |  |  |  |  |  |
| 14 | BENCH GRINDERS MUST HAVE A MIN 3MM GAP BETWEEN DISK & PLATE.  |  |  |  |  |  |  |
| 15 | THE SPINDLE LOCK BUTTON LOCKS THE SPINDLE AND STOPS THE BLADE FROM ROTATING. DEPRESS AND HOLD THE LOCK BUTTON WHILE INSTALLING, CHANGING, OR REMOVING BLADE.                        |  |  |  |  |  |  |
| 16 | CHECK THAT ON AND OFF SWITCH BUTTON IS WORKING.   |  |  |  |  |  |  |
| 17 | SOFT GRIP HANDLE IS CLEAN.  |  |  |  |  |  |  |
| 18 | POWER CABLE SLEEVE IS NOT DAMAGED AND IN SAFE WORKING CONDITION.  |  |  |  |  |  |  |
| 19 | COOLING VENTS IS CLEAN  |  |  |  |  |  |  |
| 20 | AUXILIARY HANDLE IS CLEAN   |  |  |  |  |  |  |
| 21 | ENSURE THAT THE LOCK WASHER AND MOUNTING WASHER IS CORRECTLY IN PLACE AND TIGHTEN.  |  |  |  |  |  |  |
| 22 | WORK IN A WELL-VENTILATED AREA  |  |  |  |  |  |  |
|    | <b>DATE :</b>   |  |  |  |  |  |  |

|  |   |             |  |  |  |  |  |
|--|---|-------------|--|--|--|--|--|
|  | EQUIPMENT SERIAL NUMBER                       |             |  |  |  |  |  |
|  | REMARKS                                       |             |  |  |  |  |  |
|  | IS THE EQUIPMENT SAFE FOR USE                 | (YES OR NO) |  |  |  |  |  |
|  | SIGNATURE OF EMPLOYEE INSPECTED THE EQUIPMENT |             |  |  |  |  |  |

### Planned Task Observations

Enable the observer to know whether or not a worker is performing all aspects of a specific task the correct way. They are to be recorded in a manner sufficient for review following the observation

| PLANNED TASK OBSERVATIONS                        |        | Example                              |           |
|--|--------|--------------------------------------|-----------|
| OBSERVATION SHEET JOB/TASK:                      |        | SECTION:                             |           |
| REFERENCE NUMBER:                                |        | TIME:                                |           |
| DATE:  |        | NAME: (Person Observed)              |           |
| NAME: (Person Observing)                         |        | INDUSTRY NUMBER:                     |           |
| SOP/SWP REF NO:                                  |        |                                      |           |
| REASON FOR OBSERVATION                           |        |                                      |           |
| 1. NEW WORKER                                    |        | 2. GOOD PERFORMER                    |           |
| 3. POOR PERFORMER                                |        | 4. WORKER WITH KNOWN ABILITY PROBLEM |           |
| 5. RISK TAKER                                    |        | 6. ROUTINE OBSERVATION               |           |
| 7. INCIDENT (INJURY)                             |        | 8. INCIDENT (DAMAGE)                 |           |
| EVALUATION                                       |        |                                      |           |
| EVALUATION                                       | YES/NO | COMMENTS                             |           |
| 1. SAFE AND LOGICAL STEPS FOLLOWED               |        |                                      |           |
| 2. USED CORRECT TOOLS                            |        |                                      |           |
| 3. USED CORRECT P.P.E.                           |        |                                      |           |
| 4. WORKPLACE SAFE                                |        |                                      |           |
| 5. HEALTH AND SAFETY OF OTHER WORKERS CONSIDERED |        |                                      |           |
| 6. WORK ORDERLY AND CLEAN UP                     |        |                                      |           |
| 7. DANGERS RECOGNIZED                            |        |                                      |           |
| COMMENTS   |        |                                      |           |
| RECOMMENDATIONS                                  |        |                                      |           |
| RECOMMENDATIONS                                  | YES/NO | PERSON RESPONSIBLE                   | SIGNATURE |
|  |        |                                      | DATE      |
| 1. WRITE NEW S.W.P.                              |        |                                      |           |

|  |                     |
|--|---------------------|
| 2. MODIFY EXISTING S.W.P.  |                     |
| 3. REPAIR EQUIPMENT  |                     |
| 4. RE-ARRANGE EQUIPMENT  |                     |
| 5. INTRODUCE NEW HEALTH AND SAFETY RULE  |                     |
| 6. RETRAIN WORKER  |                     |
| 7. DO ERGONOMIC STUDY  |                     |
| REVIEWED WITH EMPLOYEE   |                     |
| SIGNATURE OBSERVER:  | SIGNATURE EMPLOYEE: |
| <b>REMARKS : USE THE WRITEN SAFE WORK PROCEDURE/RA TO GUIDE YOU DURING THE OBSERVATION</b> |                     |

### Critical Parts Inspections Example

|     |    | OSHA<br>Flammable, Combustible Liquids, Fuel Island   | Regulatory Reference |
|-----|----|---|----------------------|
| Yes | No | Narrative   | 1910.106             |
|     |    | Emergency shut off valve clearly marked and accessible  | (g)(3)(III)          |
|     |    | Refuel point: "NO SMOKING" signs posted   | (g)(8)               |
|     |    | Refuel point: Fire extinguisher within 20 meter   | (g)(9)               |
|     |    | Dispensing units for Class 1 liquids (e.g. gasoline) shall be mounted on concrete island or protected for collision damage? | (g)(3)(iv)(d)        |

### Structured inspections

The following describes three other types of inspection reports:

- Ongoing
- Pre-operation
- Periodic

Supervisors and workers continually conduct ongoing inspections as part of their job responsibilities. Such inspections identify hazardous conditions and either correct them immediately or report them for corrective action. The frequency of these inspections varies with the amount and conditions of equipment use. Daily checks by users assure that the equipment meets minimum acceptable safety requirements.

Pre-operation checks involve inspections of new or modified equipment or processes. Often these are done after workplace shutdowns.

Periodic inspections are regular, planned inspections of the critical components of equipment or systems that have a high potential for causing serious injury or illness. The inspections are often part of preventive maintenance procedures or hazard control programs. Laws and regulations may specify that qualified or competent persons must inspect certain types of equipment, such as elevators, boilers, pressure vessels, scaffolding, and fire extinguishers at determined points in the work process and at regular intervals.






## Relevant Documentation is Completed (SO3-AC3)

WHMIS is a short form for Workplace Hazardous Materials Information System. It is a comprehensive plan for providing information on the safe use of hazardous materials used in

Exposure to hazardous materials can cause or contribute to many serious health effects such as effects on the nervous system, kidney or lung damage, sterility, cancer, burns and rashes.

Some hazardous materials are safety hazards and can cause fires or explosions.

WHMIS was created to help stop the injuries, illnesses, deaths, medical costs, and fires caused by hazardous materials.

| Sybol   | Name                                | Risks   | Precautions  |
|---|-------------------------------------|---|--|
|  | Compressed gas                      | Contents under high pressure<br>Contents under high pressure.<br>Could explode if heated or dropped | Keep away from heat<br>Store it safely (not on a high shelf where it could fall)   |
|  | Flammable and combustible materials | Catches fire easily<br>May ignite without warning   | Keep away from heat.<br>Don't smoke near these product<br>Store in a cool, fire proof area                               |
|  | Oxidizing materials                 | May cause combustible material to explode<br>Increases fire hazards                                 | Keep away from combustible materials<br>No smoking<br>Wear protective equipment, including eye, face and hand protection |
|  | Biohazardous infectious material    | Contains living organisms that can cause harm (viruses, bacteria, parasites)                        | Avoid handling or handle using proper protective equipment   |
|  | Corrosive material                  | Causes eye and skin irritation on contact.<br>Severe burns after long periods of contact.           | Proper protective equipment needed   |

### Products with which WHMIS symbols should be stored separately



# MODULE 4 – INITIATE REMEDIAL ACTION AND FOLLOW UP ON CONTINUOUS RISK ASSESSMENT

## Remedial Action For Hazards Is Implemented Accordingly (SO4-AC1)

Remedial action is action proposed or taken to remove nonconformity. Remediation is the act of correcting an error or stopping something bad from happening, e.g. "contamination clean up actions"

Corrective actions are steps that are taken to address a problem. This is compared with preventative actions taken to avoid a problem in the first place

### Remedial Action Plan

A Remedial Action Plan is a guideline that proposes a series of procedures, in order to perform contamination clean-up actions over a period of time. When pollution exists on a property, at levels requiring clean up, it is important to design the most appropriate course of action to carry out the environmental remediation process.



The main requirements for a Remediation Plan are to outline which remediation methods are necessary, and why.

Corrective action is action planned or taken to stop something from recurring. Corrective actions are steps that are taken to address a problem. This is compared with preventative actions taken to avoid a problem in the first place

Techniques of risk control may be selected here as a guideline:

- Terminate / avoid (eliminate, withdraw from or not become involved)
- Treat (control / reduce) (optimize – mitigate)
- Transfer (Insurance/contract) achieved through the payment to third parties who are prepared to take the risk on behalf of the organization – Outsource
- Tolerate (accept and budget)

Information, instruction and training should be provided and communicated, and PPE should always be considered as a last resort after the above controls have been considered.

## **Follow-Up Action On Continuous Risk Assessment Is Implemented Accordingly (SO4-AC2)**

### ***Reviewing risk controls***

A review, and if necessary, a revision is required: when the control measure does not control the risk, it was implemented to control. Before a change at the workplace which is likely to give rise to a new or different health and safety risk that the control measure may not effectively control.

But first, control measures need actually to be developed, implemented and documented within the scope systems.

This happens after:

- Identifying hazards
- Analysing risk
- Assessing risk and
- Reviewing and documenting existing control measures

Control measures need to actively exist in the operational environment, and not simply exist "on paper." This seems like a rather obvious point, but you might be surprised how often this issue arises.

## **The Consequences Of Non-Compliance To The Procedure For Initiating Remedial Action And Follow-Up On Continuous Risk Assessment Are Explained (SO4-AC3)**

**Lawsuits:** Failing to ensure your company complies with all laws and regulations can increase the odds of your being sued, whether it's by an employee, competitor or customer.

**Catastrophic Losses:** The failure to adequately evaluate, prevent and minimize damage from risks can ruin your company entirely. You could suffer irreparable damage to your company's reputation by failing to prepare to manage difficulties.

Building in risk remedial actions, can demonstrate that you intend to control non-compliance in a very strict and effective way. Failing to build risk management into your company can signal a lax attitude. And that lax attitude could be tempting and impossible to ignore for unscrupulous employees.

Lack of Transparency: Transparency both requires and creates mutual trust, a key component of a company culture that's genuinely engaged.

When a company integrates risk management into multiple aspects of its operations, it creates transparency—an acknowledgement that risks exist and the company and employees have a responsibility to mitigate them.

But if risks are ignored—or worse, hidden from employees—then business owners could miss out on vital contributions from staff. It can also create barriers between themselves and staff. These barriers don't build trust. They don't bring employees on board with the notion that risk management is everyone's job.

The most successful risk management is a general approach, one that covers company culture, one that recognizes the vast benefits of assessing and managing risk and one that sees the potential risks of failing to address the threats to a business.



# UNIT STANDARD



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## SOUTH AFRICAN QUALIFICATIONS AUTHORITY REGISTERED UNIT STANDARD:

### Conduct a continuous risk assessment in a workplace

| SAQA US ID                                     | UNIT STANDARD TITLE                                 |                           |                       |                      |
|--|---|---------------------------|-----------------------|----------------------|
| 120330   | Conduct a continuous risk assessment in a workplace |                           |                       |                      |
| <b>ORIGINATOR</b>                              |   |                           |                       |                      |
| SGB Occupational Health and Safety             |   |                           |                       |                      |
| <b>PRIMARY OR DELEGATED QA BODY</b>            |   |                           |                       |                      |
| -  |   |                           |                       |                      |
| <b>FIELD</b>                                   |   | <b>SUBFIELD</b>           |                       |                      |
| Field 09 - Health Sciences and Social Services |   | Preventive Health         |                       |                      |
| ABET BAND                                      | UNIT STANDARD TYPE                                  | PRE-2009 NQF LEVEL        | NQF LEVEL             | CREDITS              |
| Undefined                                      | Regular-Fundamental                                 | Level 3                   | NQF Level 03          | 4                    |
| REGISTRATION STATUS                            |   | REGISTRATION START DATE   | REGISTRATION END DATE | SAQA DECISION NUMBER |
| Reregistered                                   |   | 2015-07-01                | 2018-06-30            | SAQA 10105/14        |
| LAST DATE FOR ENROLMENT                        |   | LAST DATE FOR ACHIEVEMENT |                       |                      |
| 2019-06-30                                     |   | 2022-06-30                |                       |                      |

In all of the tables in this document, both the pre-2009 NQF Level and the NQF Level is shown. In the text (purpose statements, qualification rules, etc), any references to NQF Levels are to the pre-2009 levels unless specifically stated otherwise.

This unit standard does not replace any other unit standard and is not replaced by any other unit standard.

#### PURPOSE OF THE UNIT STANDARD

Persons credited with this unit standard will be able to:

- Explain the legal and specified requirements for conducting continuous risk assessments.
- Prepare to conduct a continuous risk assessment.
- Conduct a continuous risk assessment.
- Initiate remedial action and follow up on Continuous Risk Assessment.

#### LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

- Communications at NQF Level 2
- Mathematical Literacy at NQF Level 2

#### UNIT STANDARD RANGE

NB: All the Specific Outcomes and Assessment Criteria are assessed in accordance with legal and specified

requirements and - where applicable - consequences to health and safety.

Specified requirements include legal and site-specific requirements and are contained in one or more of the following documents:

Legal:

- Mine Health and Safety Act
- Occupational Health and Safety Act
- Chief Inspector of Mines' Directives

Site-specific:

- Health and safety agreements
- Codes of practice
- Standards
- Standards task procedures
- Risk Assessments procedures
- Occupational Health and Safety Risk Management Programme
- Managerial Instructions
- Mine Standard Procedures
- List of Recorded OH&S Risks
- Working Guides / Permits
- MSDS
- Equipment and Materials Specifications

**Specific Outcomes and Assessment Criteria:**

**SPECIFIC OUTCOME 1**

Explain the legal and specified requirements for conducting continuous risk assessments.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**

The continuous risk assessment process is explained.

**ASSESSMENT CRITERION 2**

The relevant documentation required for conducting a continuous risk assessment is named.

**ASSESSMENT CRITERION RANGE**

Types of documentation include, but are not limited to:

- Pre use checklists
- Planned task observations forms
- Critical parts inspection form
- Structured inspection checklists
- Mine Standards
- Procedures
- Task directives
- Analyses

**ASSESSMENT CRITERION 3**

The relevant hazards and risks likely to be encountered during a specific continuous risk assessment are named.

**ASSESSMENT CRITERION 4**

The importance of conducting continuous risk assessment in a manner that fosters teamwork and avoids conflict is explained.

**SPECIFIC OUTCOME 2**

Prepare to conduct a continuous risk assessment.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**

Appropriate documentation appropriate is selected.

### **ASSESSMENT CRITERION 2**

Various physical and environmental conditions which could exist are evaluated.

### **ASSESSMENT CRITERION 3**

The persons, tools and the materials required to conduct the continuous risk assessment are verified as fit for purpose and available.

### **ASSESSMENT CRITERION 4**

Consequences for not conforming to legal and specified requirements in preparing for risk assessment are explained.

### **SPECIFIC OUTCOME 3**

Conduct a continuous risk assessment.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

Hazard identification is conducted correctly.

#### **ASSESSMENT CRITERION 2**

Significant hazards are systematically identified, utilising the elected hazard identification technique.

#### **ASSESSMENT CRITERION RANGE**

Techniques include, but are not limited to:

- Pre use checklists
- Planned task observations
- Critical parts inspections
- Structured inspections

#### **ASSESSMENT CRITERION 3**

Relevant documentation is completed.

#### **SPECIFIC OUTCOME 4**

Initiate remedial action and follow up on Continuous Risk Assessment.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

Remedial action for hazards is implemented accordingly.

#### **ASSESSMENT CRITERION 2**

Follow-up action on continuous risk assessments is implemented accordingly.

#### **ASSESSMENT CRITERION 3**

The consequences of non-compliance to the procedures for initiating remedial action and follow-up on continuous risk assessment are explained.

### **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS**

- Anyone assessing a learner against this unit standard must be registered as an assessor with the relevant ETQA or ETQA that has a Memorandum of Understanding in place with the relevant ETQA.
- Any institution offering learning that will enable achievement of this unit standard must be accredited as a provider by the relevant ETQA or ETQA that has a Memorandum of Understanding in place with the relevant ETQA.
- Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures.

### **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE**

N/A

**UNIT STANDARD DEVELOPMENTAL OUTCOME**

N/A

**UNIT STANDARD LINKAGES**

N/A

**Critical Cross-field Outcomes (CCFO):**

**UNIT STANDARD CCFO IDENTIFYING**

Solve problems. By doing the continuous risk assessment, the individual will be required to embark on remedial action, which requires problem solving.

**UNIT STANDARD CCFO WORKING**

Work effectively with others as a member of a team / group / organization / community. The individual will have to take reasonable care of oneself and other's safety in the workplace, which shows concern for entire team and not only oneself.

**UNIT STANDARD CCFO ORGANISING**

Organise and manage oneself and one's activities responsibly and effectively. As part of the team, the individual will take into account the activities around him/her and ensure that his/her actions are complementary.

**UNIT STANDARD CCFO COLLECTING**

Collect, organize and critically evaluate information. When doing the continuous risk assessment, the individual will have to collect and organise information in such a way that he/she will be able to evaluate it and make decisions.

**UNIT STANDARD CCFO COMMUNICATING**

Communicate effectively using visual, mathematics and language skills in the modes of oral and written presentations. Remedial action resulting from doing the continuous risk assessment, must be communicated to all relevant persons.

**UNIT STANDARD CCFO SCIENCE**

Use science and technology effectively and critically (showing responsibility toward the environment and health of others). Science and technology are used at the appropriate level, e.g. in interpreting data.

**UNIT STANDARD CCFO DEMONSTRATING**

Demonstrate an understanding of the world as a set of related systems. He/she must understand the impact of his/her or others' actions in the overall objectives of the workplace.