OVERSEAS INDUSTRIAL TECHNICAL INSTITUTE
PROFESSIONAL REQUIRED TODAY.. LET'S MOVE AHEAD WITH US

NEBOSH

INTERNATIONAL GENERAL CERTIFICATE IN OCCUPATIONAL HEALTH AND SAFETY

ELEMENT 3: Managing risk – understanding people and processes

SCOPE OF LEARNING

- Health and safety culture
- Improving health and safety culture
- How human factors influence behaviour positively or negatively
- Assessing risk
- Management of change
- Safe systems of work for general work activities
- Permit-to-work systems
- Emergency procedures

3.1 HEALTH AND SAFETY CULTURE

SAFETY CULTURE

An organization's safety culture is the result of individual and group beliefs, attitudes, perceptions, competences, and patterns of behaviour that determine an organisation's commitment to, as well as the style and proficiency of, health and safety management. Organisations with a healthy safety culture have reciprocal trust-based communications, shared ideas of the importance of safety, and faith in the efficiency of preventive measures.

HEALTH AND SAFETY CULTURE AND PERFORMANCE

- The employees that make up a company with a good health and safety culture are knowledgeable and committed to the values of safety. This will affect everyone in the company, from the CEO on down. The process begins with a clear declaration of intent that permeates the organization and influences the mindsets of management and employees as well as the methods of production and precautions taken to ensure worker safety. There will be a definite determination to eliminate or mitigate risks and make the workplace safe for everyone involved.
- But, in environments with a poor safety culture, leaders and workers are more prone to implement the barest minimum of safety measures required to satisfy regulators, and even to ignore them altogether. This last scenario is quite improbable, but many businesses take health and safety very lightly. Their actions may be characterized as careless or reckless, and they appear to be willing to put themselves in harm's way on the job.

INDICATORS OF AN ORGANISATION'S HEALTH AND SAFETY CULTURE

- Level of Compliance with Rules and Procedures . High / low
- Complaints About Working Conditions . High / low
- Recurring Accidents
- Absenteeism and Sickness Rates
- Staff Turnover . High / low
- Management Commitment
- Peer Pressure . High / low
- Blame culture . High / low
- Lack of worker Participation and Consultation
- Work Pressure . High / low
- Resources. Adequate / Inadequate
- Reporting and Recording of Near miss or Accident
- Accident investigation. Followed / Not followed
- Inspections. Conducts/ Not conduct

THE INFLUENCE OF PEERS ON HEALTH AND SAFETY CULTURE

- The opinions of others often serve as a template for how we should act. People tend to conform to the norms of the group in order to feel like they belong there. This want motivates people to act in ways that are likely to be approved of by the group, whether they are aware of it or not. Because employee actions have such a direct bearing on the culture of an organization, this can have serious consequences for health and safety.

- Peer pressure could encourage a safe and healthy work environment. This means that followers will follow their leader's example if the latter thinks that working safely is the best method to complete the task at hand.

3.2 IMPROVING HEALTH AND SAFETY CULTURE

IMPROVING HEALTH AND SAFETY CULTURE

- Management Commitment and Leadership
- Use of Competent Personnel
- Effective Communication within the Organisation
- Training

WHEN TRAINING IS NEEDED?

- Induction
- Job or Process Change
- Changes in Legislation

INDUCTION TRAINING

INFORMATION TO BE SHARED IN AN INDUCTION TRAINING

1. Details of the company's Health, safety and Environment Policy.
2. Details of Company's Health and Safety Objectives
3. Details of nature of activities performed within the workplace, associated hazards and risks with various work activities or area along with details on risk assessment.
4. Details on general rules and regulations along with details of legal requirements to be fulfilled including roles and responsibilities.
5. Details on Incident reporting procedures
6. Idea of emergency preparedness and response plan related to various emergencies that may arise.
7. Details on Welfare facilities available at workplace like drinking water, washrooms, canteens, etc. including First-Aid arrangements available.
8. Details on personal protective equipment (PPE) to be used.
9. Details on how to keep the environment safe along with details on waste disposal.
10. Details on grievance procedures or complaint procedures. Details of consultation and participation arrangements at the workplace.
11. Details on legal obligations of the company
12. Details on substance misuse or substance abuse policy of the company along with disciplinary actions or consequences of not following the policy.

3.3 HOW HUMAN FACTORS INFLUENCE BEHAVIOUR POSITIVELY OR NEGATIVELY

FACTORS INFLUENCING HUMAN BEHAVIOUR

- The Individual
- The Job
- Organisational Factors

FACTORS INFLUENCING HUMAN BEHAVIOUR

ORGANISATIONAL FACTORS

- Culture
- Resources
- Leadership
- Work Patterns
- Communications

FACTORS INFLUENCING HUMAN BEHAVIOUR

JOB FACTORS

- Task
- Workload
- Environment
- Displays and Controls
- Procedures

FACTORS INFLUENCING HUMAN BEHAVIOUR

INDIVIDUAL FACTORS

- Attitudes
- Aptitude
- Motivation
- Perception of Risk
- Errors and Violations
- Effects of Age and Experience
- Personality

3.4 ASSESSING RISK

MEANING OF -
HAZARD, RISK, RISK PROFILING AND RISK ASSESSMENT

HAZARD

An object, substance, or circumstance that has the potential to inflict injury or damage is referred to as a hazard.
Common workplace hazards include:

- Fire
- Toxic Chemicals
- Oil Spillage/Water spillages
- Working at heights
- Electricity Hazards,etc.

RISK

A risk is the possibility of harm occurring considered with severity of harm. The degree of risk is determined by the likelihood and severity of the outcome (type of injury, numbers involved etc.).

Risk= likelihood x Severity

RISK PROFILING

The risk profile of an organization affects how it leads and manages health and safety risks in every way.

Every organization's risk profile will be different. This is where the organization starts to figure out what its biggest health and safety problems are. In some businesses, the risks are clear and immediate safety issues. In others, the risks may be related to health, and it may take a long time for the illness to show up.

A risk profile takes a look at:

the type and level of threats an organization faces

- how likely it is that bad things will happen,
- how much trouble it will cause, and
- how much it will cost.
- how well controls are in place to deal with those risks

After risk profiling, the right risks will have been found and ranked in order of importance, and small risks won't have been given too much attention. It also helps decide what measures are needed to control risks.

RISK ASSESSMENT

A risk assessment is a thorough investigation of what can endanger individuals so that you can decide if you have taken sufficient precautions or whether you need to take additional ones.

RISK PROFILING PROCESS

- a summary of the organization's biggest strategic and operational health and safety risks
- quantification of these risks in terms of how likely they are to happen and how bad they could be
- figuring out what controls are in place, how well they work, and how they could be improved
- a list of any controls that aren't yet in place and any (new) risks that are coming up, along with plans for how to handle them.
- a framework for monitoring and making sure things are going well, including a prioritized action plan with suggestions for how to fix weaknesses with more controls or other measures.

Risks usually include the quality of the product or service, the environment, injury, illness, and damage to assets. Pure health and safety risks can range from low-risk events that happen often, like tripping on the floor, to high-risk events that happen rarely, like an oil refinery explosion, which is at the top of the risk profile.

The HSE says that risk profiling will lead to the following:

- the right risks have been found and ranked in order of how important they are.
- We won't worry too much about small risks.
- risk will be cut down to a level that can be dealt with.
- The least amount of paperwork and red tape will be used.
- There will be a review of performance and lessons will be learned.

PURPOSE OF RISK ASSESSMENT

The purpose of a risk assessment is to establish whether or not adequate measures have been taken to protect people from potential danger. A risk assessment's overarching goal, then, is to guarantee that no one gets hurt at work. Here, we outline the three primary goals that this model serves in risk assessment and management.

- Human Harm
- Legal Effects
- Economic Effects

SUITABLE AND SUFFICIENT

A legal risk assessment must be "suitable and sufficient," which means it must demonstrate the following:

(1) a proper check was made;
(2) you asked who might be affected;
(3) you addressed all the obviously significant risks, taking into account the number of people who could be involved;
(4) the precautions are reasonable, and the remaining risk is low; and
(5) you involved your workers or their representatives in the process.

A risk assessment's level of detail should be suitable to the task at hand and in keeping with the amount of risk involved. Unless the risk is greatly amplified or otherwise drastically altered by the work activity, it is usually acceptable to disregard trivial or everyday dangers. You are not expected to foresee dangers that cannot be reasonably anticipated, thus you should only include information you know or believe to be true in your risk assessment.

A GENERAL APPROACH TO RISK ASSESSMENT (5 STEPS)

Five Steps to Risk Assessment

Step 1: Look for the hazards
Step 2: Decide who might be harmed, and how
Step 3: Evaluate the risks and decide on precautions
Step 4: Record your findings and implement them
Step 5: Review your assessment from time to time and revise it if necessary

STEP 1: IDENTIFYING HAZARDS

- Sources and form of harm
- Inspection
- Job/ Task Analysis
- Manufacturer's Safety Data Sheets
- Incident History

STEP 2: DETERMINING WHO MIGHT BE HARMED

- cleaners,
- visitors,
- contractors,
- maintenance workers, etc.,
- who may not always be in the workplace;
- members of the public, if they could be harmed by your activities

STEP 3: EVALUATE THE RISKS, ADEQUACY OF CONTROLS AND ADDITIONAL CONTROLS NEEDED

RISK RATING AND PRIORITISATION OF RISK

Table 1 - CONSEQUENCE LEVELS

CL	Descriptor	Health & Safety	Environment	Production Loss	Property Damage
5	Very High	Multiple fatalities or multiple permanent disabling injuries or disease. (Fatality, LTI** or SBI)	Massive pollution with significant recovery work lasting more than 12 months. Global media interest. Significant permanent damage.	Extensive loss of production resulting in time delay > 90 days.	Extensive damage >$US 5,000,000.
4	High	Fatality or permanent disablement from injuries or disease. Long term absence. (Fatality, LTI or SBI)	Significant pollution with offsite impact and recovery work requiring 6 – 12 months to fix. Some permanent damage. National and regional media interest	Major loss of production resulting in time delay >30 days.	Major damage $US 1,000,000 – 5,000,000.
3	Moderate	Life threatening injury/major health affect to individual requiring medivac to hospital facilities. Short term absence from work. (LTI, SBI or RDI)	Pollution with some offsite impact and recovery work lasting 1 – 6 months. Possible outside assistance required to contain. Some local media interest	Significant loss of production resulting in time delay > 7 days.	Significant damage $US 50,000 – 1,000,000.
2	Low	Injury and illnesses requiring treatment by medically qualified person. Complete recovery. No lost time. (RDI or MTI)	Minor pollution, slight or negligible impact, negligible remedial / recovery work lasting less than 1 month. Full recovery possible.	Minor loss of production resulting in time delay > 1 day.	Minor damage $US 5,000 – 50,000.
1	Very Low	Injury which may or may not require first aid treatment. Slight health effect not affecting performance or causing absence. (FAI or No Treatment)	Minimal pollution affect, contained locally. Complete recovery possible immediately.	Slight loss of production of up to 1 day.	Slight damage <$US 5,000.

** ***Codes:*** *LTI = Lost Time Injury; SBI = Serious Bodily Injury; MTI = Medical Treatment Injury; RDI = Restricted Duties Injury; FAI = First Aid Injury*

Table 2 - LIKELIHOOD LEVELS

LL	Descriptor	Personal**	Project	Company	Probability
5	Almost Certain	More than once / year	More than once / month	More than once / project	90-99%
4	Likely	At least once in 3 years	At least once in 3 months	At least once in 3 projects	65-89%
3	Probable	At least once in 10 years	At least once in 6 months	At least once in 10 projects	35-64%
2	Occasional	At least once in 30 years	At least once in 12 months or more than once / project	At least once in 30 projects	10-34%
1	Unlikely	Less than once in 30 years	Less than once / project	Less than once in 30 projects	<10%

** **Note:** Includes members of the general public.

STEP 3: EVALUATE THE RISKS, ADEQUACY OF CONTROLS AND ADDITIONAL CONTROLS NEEDED

PRIORITISING RISKS

Table 3 - RISK LEVEL MATRIX

Almost Certain 5	5	10	15	20	25
Likely 4	4	8	12	16	20
Probable 3	3	6	9	12	15
Occasional 2	2	4	6	8	10
Unlikely 1	1	2	3	4	5
Likelihood / Consequence	Very Low 1	Low 2	Moderate 3	High 4	Very High 5

STEP 3: EVALUATE THE RISKS, ADEQUACY OF CONTROLS AND ADDITIONAL CONTROLS NEEDED

PRIORITISING RISKS

Note: *Risk Levels can be further described as below:*

Risk Range	Tolerance Descriptor	Risk Level
16 - 25	Unacceptable / Intolerable	U
10 – 15	Substantial	S
6 - 9	Moderate to Acceptable with Review	M
3 - 5	Tolerable	T
1 - 2	Acceptable to Trivial	A

Table 4 - RISK MANAGEMENT ACTION

Risk Level	Descriptor	Risk Level Range	Risk Management Action Required	Timeframe
U	Unacceptable / Intolerable	16 – 25	Work should *not* start or continue until the risk has been reduced. If it is impossible to reduce the risk, then the work shall remain prohibited.	Immediate Action by Senior Mgmt.
S	Substantial	10 – 15	Work should *not* start *or continue* until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves work in progress, urgent action should be taken.	Urgent Action by Senior Mgmt.
M	Moderate to Acceptable with Review	6 – 9	Efforts should be made to reduce the risk, but the costs of prevention should be carefully measured & limited. Where the moderate risk is associated with extremely harmful consequences, further assessment may be necessary to establish more precisely the likelihood of harm as a basis for determining the need for improved control measures.	Action by Due Date (Timely Action) by Line Mgmt.
T	Tolerable	3 – 5	No additional controls are required. Consideration may be given to a more cost-effective solution or improvement that imposes no additional cost burden. Monitoring is required to ensure that the controls are maintained.	Action (if any) by Routine Procedures (eg. maintenance) by Relevant Personnel.
A	Acceptable to Trivial	1 – 2	No action is required other than normal task supervision.	None

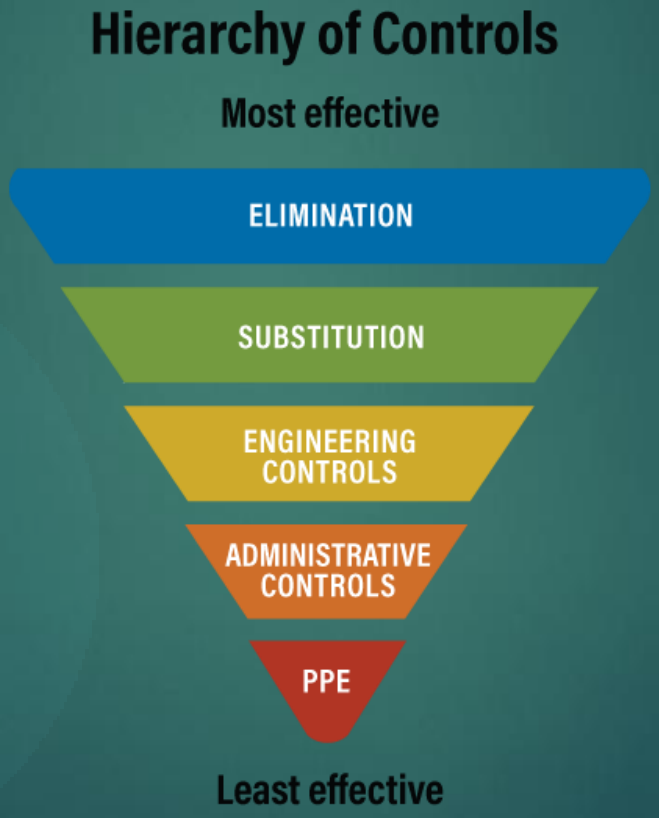
PRINCIPLES TO CONSIDER WHEN CONTROLLING RISK

The International Labour Organisation has some basic principles on controlling the risk which are as follows:
(a) be adapted to the hazards and risks encountered by the organization;
(b) be reviewed and modified if necessary on a regular basis;
(c) comply with national laws and regulations, and reflect good practice; and
(d) consider the current state of knowledge, including information or reports from organizations, such as labour inspectorates, occupational safety and health services, and other services as appropriate.

PRACTICAL APPLICATION OF THE PRINCIPLES- APPLYING THE GENERAL HIERARCHY OF CONTROL

• Elimination: Get rid of the task or risk/hazard. This is the best choice because it is a permanent solution.
• Substitution: This is when the source of the hazard or risk is changed for one that is less dangerous. This control basically cuts down on the possible effect, but not on how likely it is to happen.
• Engineering controls: With engineering controls, the work process or work environment is changed or redesigned (such as by isolating the hazard) to prevent or reduce exposure to the hazard. In general, these controls make it less likely.
• Administrative controls: These controls include things like:
- Changing jobs to limit exposure. - Controlled or limited access to dangerous areas.
- Appropriate and good supervision
- Programs for training, education, and instruction
- Procedures for preventive maintenance
- How to keep your house clean - Warning signs
• Personal Protective Equipment (PPE): PPE protects the person by putting up a barrier between them and the danger. Whether or not this works depends on:
- How well the PPE is chosen and used; - How the person wearing it acts.

PRACTICAL APPLICATION OF THE PRINCIPLES- APPLYING THE GENERAL HIERARCHY OF CONTROL



RESIDUAL RISK

The risk that remains after controls have been implemented is referred to as residual risk.

ACCEPTABLE/TOLERABLE RISK LEVELS

An acceptable or tolerable level of risk is one that has been reduced to the minimum feasible level.

STEP 4: RECORD YOUR SIGNIFICANT FINDINGS

- An explanation of the procedures/activities evaluated, including a list of the most dangerous potential outcomes.
- Identifying any at-risk departments or employees.
- Assessing the Potential Dangers (quantified where possible).
- Identifying the efficacy of current control mechanisms and developing strategies to roll out any additional safeguards that may be required.
- The identity of the competent person conducting the assessment, as well as the date of the assessment and, if applicable, the date of the next review.

STEP5: REVIEW AND REVISE

In cases where there is uncertainty, or if there has been a change in knowledge or conditions that could render the initial assumptions unreliable, a new risk assessment should be conducted. A re-evaluation of pertinent hazards may also be required under a variety of conditions that may be outlined in an organization's safety policy.

Some circumstances that could trigger an automatic review include:

- A shift in the law.
- New methods of regulation.
- Any major shift in how things are done in the workplace.
- The putting in place of new tools and machines.

RISK ASSESSMENT TEMPLATE

HSE

Health and Safety Executive

Risk assessment template

Company name: **Assessment carried out by:**

Date of next review: **Date assessment was carried out:**

What are the hazards?	Who might be harmed and how?	What are you already doing to control the risks?	What further action do you need to take to control the risks?	Who needs to carry out the action?	When is the action needed by?	Done

More information on managing risk: www.hse.gov.uk/simple-health-safety/risk/

Published by the Health and Safety Executive 10/19

3.5 MANAGEMENT OF CHANGE

MANAGEMENT OF CHANGE

A management of change process seeks to improve workplace occupational health and safety by reducing the introduction of new risks and hazards as changes take place (e.g. with technology, equipment, facilities, work practises and procedures, design specifications, raw materials, staffing, standards or regulations). The company can utilise the relevant methodology(ies) (such as design review) depending on the planned change's nature to evaluate the change's potential benefits and hazards for OH&S.

TYPICAL TYPES OF CHANGE FACED IN THE WORKPLACE AND THE POSSIBLE IMPACT OF SUCH CHANGE

Changes are obvious to organisations and changes can happen at various aspects of the Organisation. There are various changes that may happen at the workplace which are as follows:

- A change in construction,
- A change in work process,
- A change in Work equipment,
- A change in working practices, etc.

MANAGING THE IMPACT OF CHANGE

- Communication and Co-operation
- Risk Assessment
- Appointment of competent person
- Segregation of work areas
- Amendment of emergency procedures
- Welfare provision

REVIEW OF CHANGE (DURING AND AFTER)

It's crucial to have a system in place for reviewing the proposed modifications on a frequent basis to ensure that any potential threats to health and safety are mitigated. As said before, this assessment is an integral aspect of the coordination and dialogue between all involved parties. Also, any applicable risk assessments will require scrutiny and, if necessary, an update.

When the modifications are finished, it's time for a review. This can be helpful for two primary reasons: (a) it can help you deal with any issues or missed opportunities that have arisen as a result of the change, and (b) it can help you improve your change management processes for the future.

3.6 SAFE SYSTEMS OF WORK FOR GENERAL WORK ACTIVITIES

SAFE SYSTEMS OF WORK

A safe system of work is a formal technique that is founded on a systematic analysis of the activities involved in a working process in order to determine all potential risks. It specifies techniques of operation that do away with or significantly lessen the effects of such dangers.

WHY WORKERS SHOULD BE INVOLVED WHEN DEVELOPING SAFE SYSTEMS OF WORK

Even a capable person needs help to complete the task. He or she will have to collaborate closely with the employees who are currently performing or will be conducting the work. People should actively participate in all phases of developing and evaluating safe systems of work. They are an invaluable resource for information regarding the types of hazards, especially any unexpected ones, and strategies for avoiding them due to their practical experience and proficiency in the duties. Users can also contribute by evaluating designs and written materials and giving comments on how well the system works in actual use.

By participating in this way, workers can better understand the risks and hazards that exist as well as how the safe system of work would reduce those risks. This strengthens adherence to the system and contributes to the development of the safety culture.

WHY PROCEDURES SHOULD BE RECORDED/WRITTEN DOWN

The safe system of work must be correctly implemented and understood by all employees as well as any other parties that may occasionally be engaged (such as contractors). Effective communication is required for this to take place, and established procedures should serve as its foundation.

In order to give every operator a clear reference, every system must be adequately documented. It could be brief notes and instructions about what to do if the toner in the photocopier needs to be changed posted on the wall next to it, or it could be manuals outlining precisely how to carry out more complicated and time-consuming procedures, like calibrating and setting up grinding wheels for use. This will serve as the framework for the training programmes. They are probably going to come with checklists that employees can use as a guide to make sure all the proper steps are followed and to check off specifics before moving on to the next phase or starting operations.

Moreover, written records give the employer a record of the steps taken to comply with the law. This could be crucial if there is a law enforcement inspection or any legal action following a workplace accident.

THE DIFFERENCES BETWEEN TECHNICAL, PROCEDURAL AND BEHAVIOURAL CONTROLS

- Technical controls, also called engineering controls, are those that are put right on the hazard itself to reduce the risk.
- Procedural controls tell how work should be done to avoid the hazard. They will say exactly what needs to be done, in what order, and what safety steps and checks need to be taken.
- Behavioural controls have to do with how the operator or groups of workers deal with the risk. They will have to do with things like not using drugs or alcohol at work, not being in a hurry or taking shortcuts, always reporting problems or defects, cleaning up spills, etc.,

DEVELOPING A SAFE SYSTEM OF WORK

Developing a safe system of work

- Analysing Tasks, Identifying Hazards and Assessing Risks
- Introducing Controls and Formulating Procedures
- Instruction and Training in the Operation of the System

SAFE SYSTEM OF WORK

MONITORING AND REVIEWING THE SYSTEM

The safe systems should be checked on a regular basis to ensure that they are still working properly. Even if the system is functioning properly, it is possible that more can be done to lower the amount of risk. Just because a system is effective does not mean it is performing optimally. Where it is not, there are two possible explanations: the conditions have changed, or it was never proper in the first place. When workers find systems impracticable, they frequently figure out how to work around them, either with little effect or at a higher level of risk (which they may find acceptable in the circumstances).
In any situation, adjustments to any of the technological, procedural, or behavioural restrictions may be required. It should be noted that this may need strengthening instructions, training, and supervision to ensure compliance with behavioural restrictions.

3.7 PERMIT-TO-WORK SYSTEMS

PERMIT-TO-WORK

Permits-to-work are official papers that say what work needs to be done and what safety measures need to be taken. Work can't begin until safe procedures have been set up and written down. The permit is a clear written record, signed by an officer in charge, that all possible risks have been thought about and all necessary steps have been taken. Before work can start, the person in charge of the operation must have it in their hands.

WHY PERMIT-TO-WORK SYSTEMS ARE USED?

- A more formal approach
- the work must be evaluated, and safety must be double checked
- The workers must sign the permission to attest that they are aware of the dangers involved and will take the appropriate safety measures.
- Permits serve as an important line of communication between project managers, plant managers, and the workers themselves
- Hot work like welding, entering a vessel, cutting into pipes carrying hazardous substances, and work that requires electrical or mechanical isolation are all examples of high-risk jobs that may require a formal "permission to work" protocol.

HOW PERMIT-TO-WORK SYSTEMS WORK AND ARE USED

- Hazard Evaluation
- Precaution Planning
- Instructing Supervisors and Operators
- Issuing the Permit
- Before Work Starts
- Checking and Cancelling Permits

THE APPLICATION OF PERMITS

- Permit title and number.
- Inclusion of other pertinent permissions or isolation certificates.
- The location of the job.
- Identifying plants.
- A description of the job to be done as well as its limits.
- Hazard identification, including residual risks and work-related hazards.
- Precautions required
- Any protective equipment required for the job.
- Authorisation
- Permit expiration date and time.
- Acceptance
- Extension/shift hand-over procedures
- Hand-back
- Cancellation

WHEN TO USE A PERMIT-TO-WORK SYSTEM

- Hot Work
- Work on Electrical Systems
- Machinery Maintenance
- Confined Spaces
- Working at height on or above 2m
- Heavy material lifting using Crane
- Other safety critical jobs

LIMITATION OF PTW

A GOOD PTW SYSTEM IS ONLY GOOD AS THE PERSON USING TO IT.

ONLY AUTHORIZED PERSONS SHOULD ISSUE THE PERMIT.

PERMIT ISSUERS MUST BE FAMILIAR WITH THE HAZARDS OF THE WORKPLACE AND THE JOB.

STAFF MUST BE TRAINED AND COMPETENT.

PRECAUTION MUST BE CHECKED BEFORE PERMITS ARE AUTHORIZED.

ALL PERMITS CONDITIONS MUST BE ADHERED.

THE SYSTEM MUST BE MONITORED TO ENSURE THAT IT IS EFFECTIVE.

THE PTW SYSTEM MUST BE APPROPRIATE FOR THE NATURE OF THE BUSINESS E.G.A BAKE REQUIRE A LESS COMPLEX SYSTEM THAN AN OIL RIG.

SUFFICIENT TIME MUST BE ALLOWED TO ENSURE PERMITS ARE ISSUED CORRECTLY, AR TRAINED TO APPRECIATE THIS.

CONTRACTORS, FOR EXAMPLE, MAY BECOME STRESSED PROCESS IS TIME-CONSUMING, BUT MUST APPRECIATE THAT THEY ARE REQUIRED TO AD THE SYSTEM.

3.8 EMERGENCY PROCEDURES

WHY EMERGENCY PROCEDURES NEED TO BE DEVELOPED

Any workplace is at risk for emergencies, such as those involving physical harm to employees, fire, explosion, chemical spills, poisonous gas release, vandalism, flooding, and even riots and terrorist attacks. Injury and property loss can be drastically cut down on if people take the time to prepare for and respond to potential emergencies.

The primary goal of emergency plans is to keep personnel safe throughout the crisis and reduce property damage as much as possible.
In the event of an emergency, there should be a predetermined plan in place outlining the steps to take immediately and appropriately.

The emergency process should detail the fundamental actions required to deal with potential workplace situations.

WHAT TO INCLUDE IN AN EMERGENCY PROCEDURE

- Consider what could occur and how the alarm will be sounded. Don't neglect to account for night and shift work, weekends, and times when the business is closed, such as holidays.
- Plan your actions, including how you will contact emergency services. Help them by marking your property plainly from the road. Consider creating a simple map of the hazardous materials' locations.
- If you have more than 25 tonnes of hazardous materials, you must notify the fire department and post warning signs.
- Determine where to go to reach a secure location or obtain rescue equipment. You are required to provide sufficient emergency lighting.
- You must ensure that there are sufficient emergency exits for everyone to rapidly evacuate, and that all emergency doors and escape routes are unobstructed and clearly marked.

WHAT TO INCLUDE IN AN EMERGENCY PROCEDURE

- Nominate competent individuals to assume leadership (a competent person is someone with the necessary skills, knowledge and experience to manage health and safety).
- Determine which additional essential personnel are required, such as a designated incident controller, a person who can provide technical and other site-specific information if necessary, and first-aiders.
- Plan essential actions such as emergency plant closure, process isolation, and safety measures. Clearly label essential items such as shutoff valves and electrical isolators, etc.
- Everyone must be trained on emergency protocols. Don't overlook the needs of disabled individuals and vulnerable labourers.
- Work should not recommence after an emergency if a grave threat still exists. If you have any doubts, contact the emergency services for assistance.

WHY PEOPLE NEED TRAINING IN EMERGENCY PROCEDURES

- This training is essential to preventing additional disruption of business operations and ensuring that everyone involved knows what to do and when to do it.
- Personnel may experience fear without training; with training, they will respond appropriately and resume work as soon as possible.
- There is no time for preparation or education during a life-or-death situation. An emergency plan is only as good as the individuals who carry it out in a timely and effective manner.
- Employees can respond more successfully in the event of an emergency if they have had a chance to practise their plan of action in the face of possible or actual danger.
- In addition, constant rehearsal shows flaws in the plan that can be fixed before the moment of truth.
- Emergency drills help to ensure that everyone is ready for the worst-case scenario. The ability to act swiftly in a crisis is essential.
- Anxiety during a real emergency can be lessened by knowing what to expect beforehand.

WHY PEOPLE NEED TRAINING IN EMERGENCY PROCEDURES

- The responder gains the confidence via practise to deal with the potentially harmful scenario. Staff members who have received sufficient training in crisis response are more likely to feel confident in their abilities and to act accordingly.
- Those involved will receive useful training from these procedures, which should lead to a faster, more efficient response to workplace incidents.
- This is useful for identifying potential threats in the workplace. With this information, you can formulate a strategy that takes into account safety, the environment, property, and company continuity while making the most of available resources, skilled employees, and best practises in the industry.
- Preparing for any kind of catastrophe at work requires regular reviews of equipment and drills in emergency procedures.
- Workers can be trained in how to dial emergency numbers in an emergency. They can easily locate the necessary assistance resources and call the proper numbers in a hurry.
- During times of crisis, rapid decision-making is essential. It is simple for first responders to handle any crisis as soon as feasible.
- It's also useful for boosting morale in a crisis among employees. Staff morale is boosted as a result, and they feel better prepared to handle any emergency that may arise.
- The commitment of a business to its employees' safety can be seen in how seriously it takes emergency drills. In the event of an emergency, this will be helpful to your staff.

WHY EMERGENCY PROCEDURES NEED TO BE TESTED

- In order to assess whether or not an organisation can effectively mitigate the effects of a major incident, it is important to review and test the organization's Emergency Preparedness Plan on a regular basis
- The effectiveness of the site management team's response to a disaster is evaluated and reported on in the Emergency Preparedness Tests.
- Important measures to prevent, prepare for, and lessen the impact of significant accidents must be in place, and all site staff must be well-trained and informed of their responsibilities in the case of an incident.
- The evaluation and scenario combine the many elements of an emergency situation, providing a controlled environment in which the emergency response team's performance may be evaluated.
- The goal of the testing phase is to reveal any flaws, blind spots, or ineffective components of the plan. If the emergency plan has any flaws that could prevent it from working in practise, recommendations for remedial action, including assignment of responsibility for fixing those flaws, will be supplied.
- Putting your emergency plans to the test gives you piece of mind and lessens the blow an event could otherwise have on your business or home.
- Modifications to the strategy will have a positive effect on risk, safety, compliance, and business continuity.

THINGS TO CONSIDER WHEN DECIDING ON FIRST AID NEEDS IN A WORKPLACE

- The nature of the work
- The competency & distribution of the workforce (The number of workers).
- The general or significant risk/hazard level of the workplace.
- Previous Accident/ Incident history.
- Presence of Vulnerable persons.
- Work patterns and shift systems.
- Workplace location (geographic).
- The spread of the workplace.
- The history and consequences of injuries
- The remoteness of the site from the hospitals / emergency services, including location, terrain and weather conditions
- Working on shared or multi-occupied sites
- Holidays and other absences of first aiders
- The presence of trainees and members of public(including visitors , vendors , suppliers etc.)* The possibility of medical conditions or allergies* Legal Requirement

References

How to use power of peers to promote health and safety in the workplace.

https://ng.opera.news/ng/en/health/8578a26ea2655ee387fa7e02e653ff29

Organisational focus

https://www.hse.gov.uk/humanfactors/organisational.htm

What are 'organisational factors' and how to they affect health and safety?

https://stockwellsafety.com/how-do-human-factors-affect-health-and-safety/

HOW PERSONALITY INFLUENCES SAFETY-RELATED WORK BEHAVIOR

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.hoganassessments.com/wp-content/uploads/2012/01/SS_Behavior_Whitepaper_NL.pdf

Risk profiling

https://www.hse.gov.uk/managing/risk-profiling.htm#:~:text=A%20risk%20profile%20examines%3A,place%20to%20manage%20those%20risks

Risk profiling

https://app.croneri.co.uk/feature-articles/risk-profiling

HSG 65: Managing for Health and Safety

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.hse.gov.uk/pubns/priced/hsg65.pdf

References

A 5 STEP GUIDE for employers, workers and their representatives on conducting workplace risk assessments

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_232886.pdf

Guidelines on occupational safety and health management systems and health management systems ILO ILO OSH 2001

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107727.pdf

5 levels of hazard controls in ISO 45001 and how they should be applied

https://advisera.com/45001academy/blog/2015/09/02/5-levels-of-hazard-controls-in-iso-45001-and-how-they-should-be-applied/

The health and safety toolbox How to control risks at work

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.hse.gov.uk/pubns/priced/hsg268.pdf

Why Is It Important To Practice Emergency Procedures?

https://www.hseblog.com/why-is-it-important-to-practice-emergency-procedures/#:~:text=It%20is%20important%20to%20practice%20emergency%20procedures%20regularly%20in%20order,when%20faced%20with%20an%20emergency.

END OF SESSION QUIZ

1. Which of the following is an Indicator of Negative Health and Safety Culture?

(Choose the correct option)

1. Decreases Sales/Profit
2. High Level of Compliance with rules and procedures
3. Recurring Incidents of same type
4. Reduced Absenteeism and sickness

END OF SESSION QUIZ

The term 'Risk' can be represented by which of the following?

(Choose the correct answer)

1. Risk = Likelihood x probability
2. Risk= Likelihood x severity
3. Risk= severity x consequence

END OF SESSION QUIZ

'Permits-to- works can be authorised by a responsible officer and issued in an office without physical verification of workplace conditions'

(Choose the correct option)

1. True
2. False

END OF SESSION QUIZ

How many steps do you need to follow to complete a Risk Assessment?

(Choose the correct answer)

1. Three
2. Four
3. Six
4. five

END OF SESSION QUIZ

Which of the following would you consider while reviewing the First Aid needs at the workplace?

(Choose the correct answer)

1. Number of Engineers
2. Insurances
3. Relative distance from the hospital
4. All of the above