**HEALTH AND SAFETY INFRASTRUCTURE**

**Manual** Operational excellence for results that matter

**H&S FORM 017**

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JERUSALEM PROJECT CENTER JMPC

TOOL BOX TALKS MANUAL

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# *Toolbox Talk No-001*

*General Site Health and Safety*

Breaching Health and Safety Law is a criminal offence

## Your Health and Safety Responsibilities

* Comply with the safety regulations, site rules and induction directions.
* You have a duty to look after yourself and others (workmates, other contractors, members of the public, etc.) affected by what you do and fail to do.
* Always report any unsafe conditions or defects that may affect safety.

## ? What duty do you have to yourself and others?

* You must comply with all instructions and training provided.
* Do not abuse or damage any PPE supplied for your safety.
* Never carry out work or operate machines unless you are trained and authorised to do so.
* You must not interfere with anything provided for your safety e.g. removing machinery guards, guardrails etc.

## ? What should you not do regarding the use of PPE?

**General Duties**

* Follow instructions given by your supervisor.
* If there is anything that you are unsure about or do not know, **ask!**
* Do not leave rubbish lying about, clean up as you go.
* Do not obstruct accesses, working platforms or stairs with tools or materials.

##  What must you remember regarding stairs, accesses and working platforms?

* Do not take shortcuts, use the access provided.
* Cables and hoses should be routed away from accesses and stairs. Where possible they should be through ducts or suspended overhead.
* An accumulation of waste material provides a good starting point for fire. Don’t let it happen, clean up regularly.

## ? What should you remember about trailing cables?

* If tools get damaged, get them repaired or replaced.
* When working at height, ensure loose items are stored and used in such a way that they cannot fall and injure someone.
* Remove or flatten nails in timber to prevent foot injuries.
* Store flammable substances, fuel, LPG etc in a safe place, **not** next to a fire exit. Stored flammables should be protected by fire retardant coverings.

## ? What should you consider when working at height?

* Always keep alert if you are near mobile plant.
* Never operate any machine unless you are trained, competent and authorised.
* Never ride on machines that do not have a passenger seat.
* Watch out for warning notices and obey them.

## ? What must you not do on machines?

* Lifting heavy objects can cause injury – think before you lift.
* Store and stack materials safely.
* Do not participate in horseplay.
* Report all accidents- however minor.
* Report near misses to your supervisor.

## ? What must you do with materials?

 *Advise workforce of any additional site rules.*

# *Toolbox Talk No- 002\**

*First Aid and Accident Reporting*

The priorities of first aid are, save life; prevent the casualty’s condition from getting worse and to evacuate to medical help as soon as possible. If you know basic first aid you could save a life.

## Before First Aid is Required

* Be sure you know where the first-aid kit is kept.
* Know who your first aiders are.
* Know where the phone (or other means of contact e.g. radio) is located and understand the procedure for calling the emergency services.

## ? What should you know about first-aiders?

**When First Aid is Required**

* + Remove the casualty from the hazard if safe to do so.
	+ Call for help e.g. first aider.
	+ Send someone to phone for an ambulance if necessary.
	+ Do not move the casualty, unless in immediate danger

## ? On finding a casualty, what is the first thing to do?

* Remain with the casualty and give reassurance.
* Make the casualty as comfortable as possible.
* Do not give drinks or food to casualty.
* Do not allow the casualty to smoke.

## ? What would you do until the first-aider arrived?

**Accident Reporting**

* Accidents and dangerous occurrences, which happen at work, must be reported **immediately**.
* You must ensure that yourself or someone else enters the details into the accident in the UNOPS H&S Manual Form 012 .
* If you do not do these things you may be unable to claim compensation for injuries sustained

## ? What must you do following an accident at work?

 Inform the workforce of the site provision for the first-aiders and first-aid kits, actions to be taken in the event of an emergency and the location of the emergency telephone or other means of contact.

# *Toolbox Talk No- 003*

*Accident Prevention and Control*

HSE figures show that accidents rates in the construction industry are still the worst in any employee group.

The industry employs approx.5.4% of the total workforce, but accounts for approx.23% of all fatalities. Do not become the next statistic

## Causes of Accidents

* + People not thinking about what they are doing.
	+ People not following instructions.
	+ People not following training they have been given.
	+ Unsafe manual handling, loading, stacking and storing.
	+ Overloading of working places, scaffolds and hoists etc.

## ? What is a cause of accidents in the workplace?

* + Incorrect use of plant and machinery
	+ Use of faulty equipment with improvised repairs
	+ Illegal removal of guards and barriers
	+ Failure to use protective safety equipment
	+ Ignoring safety signs and warning devices

## ? What is a cause of accidents regarding plant?

**The Cost of Accidents to You**

* + Pain, suffering and continuing disability
	+ Loss of earnings and extra expense due to disability
	+ Incapacity for the job and your leisure activities
	+ Unable to support family and possible family break-up

## ? What could the cost of an accident be to you?

**Accident Prevention**

* + Do not remove guards from machines
	+ Do not handle substances without knowing the hazards
	+ Do not use machines if not trained & authorised
	+ Always comply with safe working practices
	+ Wear and use PPE correctly, do not abuse it

## ? Before using substances what must you find out?

* + Do not direct compressed air at yourself or others, it kills
	+ Don’t indulge in horseplay
	+ Never use defective equipment or machinery
	+ Help to keep the workplace clean and tidy
	+ Wash and dry hands to remove substances from skin and use barrier creams

## ? Why should you not mess around on site?

* + Report unsafe conditions to your supervisor
	+ Use correct tools and equipment for the job
	+ Obey all safety rules and signs
	+ Do not leave tools lying about where they can fall or cause a tripping accident

## ? If you saw an unsafe condition what would you do?

 *Inform workforce of any site-specific rules.*

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# *Toolbox Talk No-004* Site Tidiness

A tidy site tends to be a safe site; housekeeping must be high on your list of safety priorities. Slipping and tripping accidents caused by poor housekeeping contribute significantly to our accident rates. The biggest causation for Major Injuries is slips/trips/falls.

## Before Work

* Make sure your workplace is clean and tidy.
* If you have inherited an untidy work place, don’t start, report to your supervisor.
* Identify where waste is to be disposed off, there may be environmental considerations.

## ? If you inherited an untidy workplace, what must you do?

**During Work**

* Maintain a tidy work area.
* Make sure you are not affecting walkways or other people’s workspace.
* Denail timber as you go.
* Clean up regularly not just at the end of the day.
* A bin or box at the workplace can be an effective way to control waste, particularly when working at height.
* Banding and tying wire waste are particularly hazardous materials when left around site, if you work with these, clean up as you go.

## When should you clean up?

* Don’t forget canteens, drying rooms and offices poor housekeeping in these places can lead to poor hygiene standards, or cause fires.
* In addition to a safety helmet, safety footwear and high visibility clothing, gloves must be worn when cleaning up, when working with wire, banding or other similar material that may spring up, eye protection must be worn.
* Liquid spills should be cleaned immediately, although any COSHH or environmental controls must be applied in dealing with such occurrences.

? What should be worn when cleaning up?

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# *Toolbox Talk No-005* Alcohol & Drugs

Statistics show that alcohol and drug abuse is increasing on site. This leads to accidents.

## Alcohol

* + In a high-risk industry like ours, alcohol and work do not mix.
	+ Alcohol is a depressant drug, which depresses parts of the brain function. When working on site you require to be alert at all times.
	+ If you are found to be intoxicated you will not be allowed on site.
	+ Do not get drunk the night before and expect to work safely on site the next day. Alcohol takes time to work out of your system (1 pint of beer approximately 2 hours).

## ? What effect can alcohol have on you?

* + If you drink, you don’t drive.
	+ Approx. 35% of fatal accidents are related to alcohol.
	+ Keep your head clear – leave your drinking sessions to social events when you don’t have to work the next day.
	+ Get a bad reputation for drinking and you may not get another job, as you will be seen as a liability.

## ? What could be the result of being under the influence of alcohol on site?

**Drugs**

* You are far more likely to have an accident on site when you are under the influence of drugs.
* If you know somebody is on drugs, tell your supervisor.
* Signs to look for: watery eyes, pin-point or dilated pupils, running nose, constant sniffing, tight lips, sores, ulcers, trembling, fatigue and irritability. If you see it, report it.

## ? What are the signs of somebody who is on drugs?

* All drugs can affect your ability to work.
* Some effect of drugs: slow reaction times, clumsiness, poor decision-making and distorted vision.
* If you are offered drugs, report the incident to your supervisor.
* Drugs and work don’t mix.

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* + If you are taking prescription drugs, which could affect your abilities to perform certain tasks, inform your supervisor.

## ? If you took drugs, what effect could it have on your abilities to reason and react?

 *UNOPS has a policy on drink and drugs, which involves the application of strict disciplinary procedures. Don’t let them apply to you.*

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# *Toolbox Talk No-006* Fire

Fire kills more than 1000 people every year and injures thousands more. You can prevent fires

* you can also start them.

## Fire Prevention

* + Do not hang clothing over or near heating equipment including heaters in drying rooms!
	+ Do not let paper, oily rags or other rubbish accumulate.
	+ Do not smoke in prohibited areas.
	+ Use proper sealed containers for flammable liquids, not open tins or buckets.
	+ Do not overload electric sockets – ‘one socket one plug’.

## ? What should flammable liquids be stored in?

* + Handle flammable liquids at a safe distance from possible sources of ignition e.g. refuelling Plant (15m from work area).
	+ Check for flammable materials nearby before using blowlamps, welding and cutting equipment.
	+ Make sure you have a hot work permit.
	+ Stop hot works at least one hour (site circumstances may require a longer period – see Hot Work Permit) before shift end. Check area immediately and ½ hour after burning, welding etc. Check before leaving site.
	+ Bitumen boilers must be on non-combustible stands. Bitumen boilers should have 4.5m of armoured hose, fully extended, to separate the boiler from the gas bottle.
	+ Switch off any electrical equipment not in use

## ? What checks should you carry out before and after using cutting and welding equipment?

**Fire Precautions**

* + Make sure you know what to do in case of fire.
	+ Make certain that you know your escape route.
	+ Keep fire doors clear and unobstructed.
	+ Do not obstruct access to fire extinguishers.
	+ Ensure that you know how to operate the fire extinguishers in your area.

## ? Name the precautions concerning fire extinguishers and exits?

**Fire extinguishers**

NOTE: All new fire extinguishers are predominately red with 5% of surface coloured to indicate the extinguisher type.

**Water** (red) – use on paper, wood and solid flammables.

**CO2** (black sometimes Red) – use on liquids, gases and electrical fires.

**Foam** (Red) – use on flammable liquids.

**Powder** (Red ) – use on all types of fires.

## ? Which extinguisher should be used on electrical fires?

**Actions to take in the event of a fire**

* Raise the alarm and then call the fire brigade
* Close all doors and windows to prevent the spread of fire
* Fight the fire with extinguishers provided but only if it is safe to do so otherwise get out
* Do not use water to put out electrical fires
* Evacuate the building or area you are working in and report to your muster point.

## ? What actions do you take in the event of a fire?

**** *Inform the workforce of any site-specific rules.*

# *Toolbox Talk No-007* Electricity on Site

Electricity can cause death or serious injury without warning. You are an extremely good electricity conductor – don’t find out the hard way.

## Underground cables

* + Before digging, ensure that a valid permit to dig is in place and you have been briefed on its content.
	+ Before digging, use cable-locating devices (CAT and Genny) that are in good working order. Ensure that you are trained to use them.
	+ Assume all cables are live, unless your supervisor confirms that they are dead.
	+ When hand digging, using a spade or shovel, to expose cables, look for marker tape or tiles above the cables. Continue using the cable locator to establish the exact location.

## ? Name two things that must be done before digging?

* + When exposed, protect cables from damage and ensure that they are properly supported.
	+ If the cable is accidentally damaged, keep all persons clear until the electricity company has made it safe.
	+ Before back filling, ensure that marker tapes or tiles are replaced.
	+ If using power tools to break up concrete surfaces, avoid over-penetration as the cable may be directly underneath.

## ? What action would you take if you accidentally damaged an underground cable?

**Overhead Power Lines**

* + Treat overhead lines as live. Do not assume that they are only telephone wires.
	+ Ensure you know the maximum clearance distances specified by the electric company.
	+ Do not bypass ‘goal posts’, barriers or other warnings.
	+ Check your route is clear of overhead power lines prior to moving mobile scaffolding towers or mobile elevated work platforms.

## ? What information should you find out prior to working close to power lines?

* + If signalling, always keep power lines in view. Guide plant under power lines where ‘goal posts’ have been erected.
	+ Observe any special precautions laid down by the company prior to working under overhead lines
	+ If erecting scaffolding adjacent to power lines, ensure that the tubes are handled at a safe distance from the power lines
	+ Do not stack materials or operate tippers under power lines, it will reduce the safe clearance and can result in arcing.

## ? When erecting scaffolding close to power lines, what precautions must you take?

 *Inform workforce of any site-specific rules and Permit to Dig Procedure.*

# *Toolbox Talk No-008* Stacking Materials Safely

Unsafe stacking can lead to serious injury both to you, your work mates, or children who may trespass onto site.

## General Points on Stacking

* + - If it is to be manually handled, can the material be handled safely?
		- When handling materials always wear safety boots and gloves.
		- Only stack material in authorised areas. Never near doorways, access ways, or on fire- escape routes.
		- Stack on a level surface and provide packing.
		- As a general rule, stacks should be kept lower than three times the minimum base width of the stack.

## ? Where should materials be stacked?

* + - Consider the order in which materials will be unloaded prior to commencing.
		- Stack close to work area to reduce the amount of handling.
		- If material is being lowered by machine, keep hands clear of load.

## ? What should you consider before loading material in a stack?

**Bricks, Blocks and Palleted Material**

* + - Ensure base of stack is level. Only stack two packs high.
		- Ensure pack is loaded squarely on to previous one.
		- If banding is damaged or materials are displayed in the pack, do not stack other materials on top.
		- Leave sufficient space between pallets for safe removal.

## ? If you see damaged banding what should you not do?

**Timber**

* + - Racks are best for small sized timbers.
		- Joist and larger timbers should be placed on bearers.
		- Try to keep different lengths in separate stacks.

## ? What should be used when stacking larger timbers?

**Large Prefabricated Panels/Shutters**

* + - Stack flat or store securely in designed racks.
		- Do not lean against parts of semi-constructed buildings.
		- Do not lean against temporary structures/scaffolding.
		- Do not store upright where panels can be affected by wind.

## ? Where and how should panels be stacked?

**Pipes and Tubes**

* + - Where pipes are small in diameter, stack in racks.
		- If large in diameter, securely chock at the base, or preferably, place end pipes in a shallow trench to prevent rolling.
		- Do not stack in pyramids, as they can become unstable.
		- Large concrete rings must be laid flat so that they cannot be moved or rolled by any person, especially children.

## ? How should you secure large diameter pipes?

 *Inform the workforce of any site-specific rules.*

# *Toolbox Talk No-009* Compressed Gas and LPG

Compressed gas and LPG, if used safely, are a convenient and valuable source of energy. Misuse causes serious accidents and injury.

## General Safety Points

* + - * Treat every cylinder as ‘full’ and handle carefully.
			* Keep cylinders away from sun, artificial heat, flammable materials, and corrosive chemicals.
			* Avoid damage to valves and fittings. Do not use them for lifting and carrying.
			* Do not use LPG/acetylene or oxy-acetylene burning/welding gear without flashback arrestors.

## ? What should not be used for carrying a cylinder?

* + - * Do not smoke when using compressed gases.
			* Do not use cylinders as rollers for moving equipment.
			* In case of fire, call the first brigade first, then cool cylinders with water spray, **only if safe to do so!**
			* **DO NOT ATTEMPT TO MOVE HOT CYLINDERS**

## ? What would you do if a cylinder were on fire?

**Use of Compressed Gas and PLG**

* + - * Regular inspection of hoses, cylinders and valves should be undertaken before use.
			* Open cylinder valves slowly and close sufficiently to shut off gas – never use force.
			* Keep valves and fittings of oxygen cylinders free from oil and grease.

## ? What should be done before using compressed gases?

* + - * Keep gas hoses clear of traffic, hoses may get damaged.
			* Make sure you know the emergency fire procedures including types of fire extinguishers to be used.
			* Ensure fire extinguisher is always available for hot work.
			* If there is a hot work permit or procedure, follow it.

## ? What must you remember when working close to traffic?

**Storage and Transportation of Cylinders**

* + - * Always secure LPG/acetylene cylinders in an upright position.
			* Always lift cylinders from transport, do not drop or slide them.
			* Move full-size cylinders using a trolley. If not available, get assistance.
			* Transport cylinders in vehicles with good ventilation.

## ? How should cylinders be stored and transported?

 *Now inform your work force of the site policy on hot work permits or procedures.*

# *Toolbox Talk No-010* Welding

There are many hazards regarding welding from toxic fumes and ultraviolet light to fire hazards.

## Hazards

* Check whether a Hot Work Permit is required.
* Clear area of flammable materials before starting work.
* UV light, given off when arc welding, damages eyes.
* Exposure to fumes can cause respiratory problems.
* Make sure you have good ventilation when welding – do not use oxygen to ventilate confined spaces.

## ? What should you check before starting work?

* Do not leave hoses or cables where they can get damaged.
* Do not weld inside enclosed vessels unless authorised and working to specifically agreed procedures, monitoring permits, etc.
* Seek urgent help for any injuries or breathing difficulties.
* Do not weld unless you are competent to do so.
* Check for fire or smouldering material half an hour after welding. Stop welding at least one hour before the shift end and check the workplace last thing before leaving the site.

## ? When can you weld in enclosed vessels?

**Protection**

* + Check that your helmet, visor or goggles have the correct filter.
	+ Welding can produce excessive noise and give off fumes. Wear hearing protection and respirators.
	+ Ensure that items of PPE are compatible with each other.
	+ Carry a fire extinguisher suitable for materials being welded and for gases used (CO2 or dry powder).
	+ Provide screens to protect other personnel, if necessary.

## ? What should you consider regarding your PPE?

**Gas Welding**

* + Only have the required amount of cylinders at the workplace.
	+ Use a bottle trolley to secure cylinders upright.
	+ Flashback arrestors and non-return valves must be fitted.
	+ Gauges must be in good condition.
	+ Close cylinder valves before moving cylinders and when not in use.

## ? What must be fitted to valves and hoses?

* + Do not allow cylinders to become heated.
	+ If leaking move cylinder into the open air and notify supplier.
	+ Do not weld material degreased with solvents until it is dry.

## ? What would you do if you suspected cylinder leaks?

**Electric Welding**

* + Ensure cables, electrode holders and cable connections are in good condition and insulation is undamaged.
	+ Ensure welding machine is earthed correctly.
	+ Do not weld while standing in water.
	+ Do not touch live metal parts with bare skin and wet clothing.

## ? What must be earthed correctly?

 *Inform workforce of any site rules or procedures.*

# *Toolbox Talk No- 011* Signallers and Slingers

Loads are lifted around sites by cranes regularly – the potential for danger is obvious. Signallers and slingers must be over 18, trained, authorised and competent.

## Lifting Accessories

* Check lifting accessories for defects before each use.
* Chains must not be joined by means of bolts or wire.
* No lifting accessory may be used unless its SWL is marked.
* Do not use improvised slings or a single leg of a multiple sling.
* Store chains, ropes, strops and slings in dry conditions.
* When using a combination of lifting accessories, lift only to the lowest SWL.

## ? What should be marked on lifting accessories?

**Before Lifting**

* + Wear a safety helmet and high visibility clothing.
	+ Make sure you know the weight of the load to be lifted.
	+ Ensure hooks are either ‘C’ type or fitted with safety catch.
	+ Ensure you can see the crane driver – if you cannot, use radios.
	+ Ensure radios are fully charged at the start of a shift.

## ? What should you check before lifting?

**During Lifting Operations**

* + Remove hands before crane takes the load.
	+ Use approved hand signals clearly and distinctly.
	+ Protect wire ropes and slings from the sharp edges of the load with soft wood or other suitable packing.
	+ Ensure correct pin in shackle is used and screwed home.
	+ Ensure a vertical lift to stop loads swinging when raised.
	+ Ensure load is lifted just clear of the ground and is free and correctly slung before hoisting.

## ? How do you protect lifting accessories from sharp edges?

* + Always use a tag rope to steady the load.
	+ Stand well clear of load being lifted.
	+ When the crane is in operation do not leave the area.
	+ Warn crane operator of any obstructions to the load.
	+ To avoid damage to lifting accessories, loads should be landed on to timber or other suitable bearer.
	+ Back sling hooks when no load is carried.

## ? What are your duties when the load is in motion?

**Hazards**

* Never tie knots in chains to shorten them.
* Riding on loads is strictly prohibited.
* Do not use for other purposes, e.g. towing.
* Keep all persons not involved in lifting operations away from the vicinity.

## ? Name two hazardous acts regarding lifting

 *Inform workforce of the Site Rules relating to Banksman/Slingers.*

# *Tool Box Talk No. 012* Banksman / Vehicle Marshals

Several fatalities have occurred where banksmen have been crushed by the vehicle/plant they are controlling.

## General Safety Points

1. Always Wear High Visibility Vests - marked as ‘Banksman’ where it is a site requirement.
2. Identify yourself to driver and agree signals.
3. Make journey and specific route instructions through site known to driver.

## Q: What must you agree with the driver?

1. Position yourself at all times where the driver can clearly see you.
2. Before signalling reverse, check the area is clear and warn pedestrians.
3. Be aware of overhead obstructions, ground obstructions and excavations.
4. Stop all reversing movements 500mm clear of cones or TVCBs.
5. Use vehicle stops where necessary - excavations, embankments, etc.

## Q: Where must you position yourself?

**Loading Vehicles**

1. Drivers must only stay sat in vehicle where cab protection is provided. (e.g. dumpers or chip spreaders to be vacated during loading.)
2. Bucket must not pass over vehicle cab or into live traffic lanes.
3. When loading ensure no overspill can fall on live carriageways or manned work areas.
4. Do not wave vehicles past slewing plant without informing plant operator.

## Q: What must you watch when loading?

**Leaving Site**

1. Road traffic has priority at all times.
2. Only official site exits to be used.
3. No vehicles to reverse out of exits.
4. Vehicles must only leave as directed, one at a time.

## Q: Who has priority?

**Inform workforce of site procedures. Questions**

**Q: What must drivers have read?**

**Q: What distance clear of TVCBs must reversing stop?**

**REMEMBER REVERSING VEHICLES KILL!**

# *Toolbox Talk No 013* Slips and Trips

Every year many injuries occur through slips and trips. Most of these injuries are easily preventable with a little care. It is not only yourself at risk but also the general public.

## Why do they Occur?

1. Most injuries from slips and trips occur because of poor housekeeping.
2. Many items such as cables, hoses, hand tools, lengths of pipe or timber, plastic tie bands etc. left on the ground will trip someone if not deposited in a safe place.
3. Persons may slip or trip while walking and using a mobile phone on site.
4. Spilt substances such as oils and greases will form a slip hazard if not immediately cleaned up.
5. General debris can quickly accumulate and form a tripping hazard if waste is not controlled.
6. Mud on rungs of ladders vehicle steps or boots, will represent a slipping hazard.

## Q: What causes most Slips and Trips?

1. Reduced levels of light, for example during winter afternoons, will increase the tripping hazards if adequate access lighting is not provided. Tools, equipment and materials, which are visible in full daylight, might be hidden in semi-darkness.
2. Horseplay can lead to slips or trips.
3. Persons may become complacent, and not look at where they’re walking.
4. Unfinished base course/wearing course on footpath refurbishments cause trip hazards.
5. Poor or untidy access routes will also cause a trip hazard.
6. Poor underfoot conditions such as overgrown vegetation; animal holes in verges cause trips and twisted ankles.

## Q: List five Slip or Trip hazards, which may occur on site?

**What Can You Do About It?**

1. Clear up waste materials as you create them. Lightweight waste should be bagged or bundled.
2. Always maintain a three-point contact when climbing onto or off plant or vehicles, never jump off vehicles.
3. Ensure the rear of a vehicle is kept tidy and free from spilt oils and greases never use diesel as a release agent.
4. Ramp or infill changes in base/wearing course levels on footpath work areas.
5. Ensure good access is maintained on site by running hoses and cables clear of pedestrian areas. Cover/ramp cables and hoses where they cross pedestrian areas.

## Q: What do you do to ensure good access is maintained on site?

1. Do not leave tools, equipment or unused materials lying about the work or access areas, place in a safe area.
2. Never walk around site while using a mobile phone, ensure you are stationary and in a safe area before using it.
3. If the site is muddy, scrape mud off your boots before climbing on vehicles or ladders.
4. Ensure adequate lighting levels at all times.
5. Always be aware of your surroundings and underfoot conditions on.
6. Where provided use designated routes.

## Q: What should you be aware of site?

**REMEMBER** TIDY UP AS YOU GO, YOUR CARELESSNESS COULD CAUSE SERIOUS INJURIES TO YOURSELF OR SOMEONE ELSE.

# *Toolbox Talk No- 014*

*Visit To Site By Regulatory/Enforcing Authorities*

## (e.g. Police, HSE, ORR (Office of Rail Regulator), EA, SEPA or any other enforcing agency)

Often you may meet, on site, an officer from the Police, HSE, Environment Agency or similar person.

This could be following an RTA within your site when the police attend, or the HSE/EA attend an incident

It could be a roadside check on your vehicle by the Vehicle Inspectorate. Or even just to see the site and stop to have a look.

## Greeting The Enforcing Officer

1. Be courteous and polite
2. Ask to see their proof of identity
3. Write down their details: name, serial number, which agency/authority and where they are based and the reason for the visit

## Q: What should you write down upon greeting an enforcing officer?

**Discussion With The Enforcing Officer**

1. Except in the case of a genuine emergency, you must ask the officer if you can contact your supervisor or manager (tell them this is our company policy).
2. This may take some time, so could they please wait?
3. If it is an emergency or RTA you must contact your supervisor as soon as possible afterwards. The officer may insist on speaking directly to your manager on the phone or radio.
4. Tell your manager who is visiting and why. Ask your manager what actions to take next and if assistance will be sent to the site and by when.
5. If you are able to deal with the situation do the following -
	* Be co-operative and answer the questions with facts only.
	* Only answer the questions asked.
	* Don’t pass on gossip or give personal opinions
	* Don’t get into an argument with the enforcing officer.
	* Be aware that you must answer when questioned. However if the officer believes that you are party to an offence, he will stop the interview and caution you.
	* If cautioned insist on independent legal representation

## Q: What must you not get into with an enforcing officer?

**REMEMBER**

**ONLY ANSWER THE QUESTIONS ASKED, ONLY STATE FACTS THAT YOU ARE SURE OF, NEVER GIVE AN OPINION OR PASS ON GOSSIP**

*Toolbox Talk No- 015*

*Vehicle Safety/Driving of Vehicles*

**Accidents involving vehicles are very common, make sure you do not become a statistic**

1. Only qualified and authorised persons are to drive company or hired vehicles.
2. Familiarise yourself with any vehicle before attempting to drive.
3. All drivers must do a general inspection of the vehicle daily, checking for any defects and recording them in the driver’s defect book. NIL reports must be completed.
4. No vehicle is to be left running or with the keys in the ignition or on show (except where the engine is required to drive ancillary items i.e. cranes, barriers, rigs etc).
5. Where seat belts are fitted, they must be worn.
6. Before starting off, ensure that all items of equipment/materials are fully secured and, where required, sheeted.
7. Ensure vehicles are not to be overloaded.

## Q. What must you do when leaving the vehicle?

1. Ensure vehicle side panels and tailboards are secured before driving the vehicle.
2. If vehicle is fitted with a crane, ensure hook safety catch is in place and all lifting accessories (chains etc) are in good condition before use.
3. Ensure all tool box arm latches are secured before removing tools.
4. Do not ride on any part of a vehicle unless provided with a seat and seat belt.
5. You must obey the speed limits and drive within the safe conditions dictated by the road, i.e. snow/fog/ice/rain.
6. All vehicles are to be parked in a safe area with hand brake applied and locked on before exiting vehicle and, where required, use flashing beacons and hazard lights.

## Q. When removing tools from the box, what must you do?

1. When reversing vehicles on site, the driver must use a banksman except where specific instructions exempt their use.
2. All vehicles used for site works must carry a fire extinguisher and first aid box with eyewash.
3. Check for overhead services or obstructions before tipping.
4. When tipping, ensure area is level and clear of pedestrians.
5. Do not move vehicle with body raised except where permitted for surface dressing or surfacing.

## Q. What must you check before tipping?

1. No eating or drinking while driving.
2. Smoking is prohibited in vehicles.
3. No person under the influence of alcohol, drugs or substances, are to drive any vehicles. Where persons need to take medication they should seek advice from their doctor or chemist and report medication usage to their supervisor.
4. No hand-held mobile phones to be used when driving a vehicle unless the vehicle is fitted with hands free cradle-mounted vehicle kit.
5. Ensure the cabs of vehicles are kept tidy. Keep floor clear of items that may obstruct the pedals and keep the dashboard clear.

## Q. What should you do if taking medication prescribed by your doctor? REMEMBER

**IT IS THE DRIVER’S/OPERATOR’S RESPONSIBILITY FOR THE SAFETY OF THAT VEHICLE WHILE AT WORK!**

*Toolbox Talk No 016*

*Timber Boundary Fence Repairs*

Boundary fence repairs are carried out either as a result of a Road Traffic Collision or as a result of normal wear and tear (ie rotten rails/posts)

When carrying out repairs to Timber fencing it is important that the fence is reinstated with the same type of animal netting (ie buried netting for Badgers/Pigs, Barbed wire on top rail, Hunt fencing to contain Deer etc). The fence is for a dual purpose of marking the highway boundary and to provide protection to prevent stock from getting onto the motorway network.

## Repairing A Standard Post And Rail Fence

Fence consists of 75x150mm posts at 1800mm spacing, bases held in by compacted fill, with 4no 38x87mm 3.6m long rails. See drawing Below for Cross section



The rails are AL land side not from the Motorways side. This is for 2

reasons. Firstly if l they could push the nails out if they are fixed on the

WAYS fixed from the private ivestock rub against the rails escape onto the Motorway

motorway side and . Secondly, if a vehicle hits the rail that is fixed from the motorway side the rail could act like a spear and impale the driver/motorcyclist that strikes it.

## Q: How many rails are on a standard timber boundary fence?

*Toolbox Talk No- 017 Ladders*

Ladders are probably the most used and misused piece of access equipment. Painters have the third highest death rate in the industry. Why? Because a lot of their work is carried out from ladders and **ladders should only be used as a means of access, not as a working platform.**

## Checks before using ladders

* + Ladders must be stored correctly and inspected regularly.
	+ Check for splits or cracks in the stiles and rungs.
	+ Ensure that none of the rungs are missing or loose.
	+ Do not use painted ladders, paint can hide damaged parts.
	+ Report defects, label as defective and remove from site.

## ? What checks should you carry out prior to use?

**Use of Ladders**

* + Work should only be carried out from a ladder when all other forms of working platforms have been explored and where the task has been discussed and agreed with site management. (short durations of 0.5hr/day only, may be permitted).
	+ Ladders should be set on a firm base and leaning at the correct angle, which is **one** unit out of **four** units up.
	+ Ladders must be tied near to the top by the stiles and extend a safe distance above the landing stage (5 rungs), unless handhold is provided.

## ? At what angle should a ladder be placed?

* + For added safety, the base of the ladder should be staked or buried to prevent slipping.
	+ Ensure your footwear is free from excessive mud before you climb up the ladder.
	+ Use both hands on stiles, up and down. Always face the ladder.
	+ Do not over-reach from a ladder, always move it.
	+ If using extension ladders, each section must overlap:
		- 2 rungs – for ladders up to 5 metres (closed length)
		- rungs – for ladders between 5-6 metres (closed length)
		- rungs – for ladders over 6 metres (closed length)

## ? How can the stability of a ladder be improved?

**Hazards**

* + Do not stand a ladder on an unstable base e.g. a drum, a box, or loose bricks.
	+ Never attempt to repair broken ladders.
	+ Never carry loads up ladders – hoist it up.
	+ Ladder rungs must not be used as improvised ramps or run-ups.
	+ When using metal or metal-reinforced ladders, make sure there are no electrical hazards in the vicinity.

## ? What precautions should you take when using a metal ladder?

Inform workforce of any site-specific rules and Permit to Dig Procedure.

# *Toolbox Talk No 018* Scaffolding

Falls from heights over 2 metres account for approx. 50% of deaths in the construction industry

## Access

* + Do not climb up or down scaffolding, use ladders or stairs provided.
	+ Make sure the ladder is at the correct angle, **one** unit out **four** units up.
	+ Ensure the ladders are tied in at both stiles, not the rungs, and extended a safe distance above the landing stage (5 rungs).
	+ Remove access ladders at the end of the day or board them up to prevent children playing on them.

## ? At what angle should the access ladder be placed?

**Loading**

* Do not overload scaffolding. Distribute load around the standards as they are the load bearing members, not in the centre bays.
* When stacking materials, always leave a passageway at least two boards wide for other people to pass.
* Ensure materials are stacked correctly and cannot fall. Use brick guards or netting where required.
* Do not leave tools or materials lying about on the platform.

## ? Where would you stack materials on scaffolding and why?

**Hazards**

* Obey signs.
* Guardrails and toeboards are an absolute requirement for scaffolds and **must** be fitted where a person is liable to fall and suffer an injury.
* The gap between any guardrail, or guardrail and toe board, **must not** exceed 470mm.
* Do not use incomplete scaffolding.
* Do not remove or interfere with ties, guardrails, bracing, toe boards and ladders. Alterations must only be made by competent persons.
	+ Do not throw, drop or tip materials from heights – either lower them, or dispose of them, through a chute.

## ? When should guard rails and toe boards be fitted?

**Inspection**

* Carry out a visual inspection at the start of each shift prior to use.
* Report all faults or defects immediately.
* Scaffolding should be inspected, by a competent person every seven days, and after adverse weather or modification. The details of the inspection should be recorded on the “Scafftag” and in the site register.

## ? What action would you carry out on noticing defective scaffolding?

 *Inform workforce of any site-specific rules.*

# *Toolbox Talk No 019* Mobile Scaffolding Towers

There are many different types, therefore mobile towers must be erected in accordance with the manufacturer’s instructions by competent persons **(PASMA certificated or equivalent)**

## Before Erection

* + Check that the ground firm is firm, level and capable of supporting the scaffold when fully loaded.
	+ Check all components are in good condition.
	+ Check wheels, do they turn?
	+ Check brakes and locking devices work correctly.
	+ Prior to erecting towers on suspended floors, ensure bearing capacity of floor is sufficient for the planned load.
	+ Ensure that you have manufacturer’s erection procedures.

## ? What must be checked before erecting a tower on a suspended floor?

**Before Use**

* Ensure that the tower is vertical and square.
* Towers must not be used unless the wheels are locked.
* Check that outriggers are set correctly and secured.
* Ensure the platform is fully boarded out and guardrails and toe boards are fitted, these should be fitted at any height where someone could fall and be injured.

## ? When should toe boards and guardrails be fitted?

**Stability**

* Never climb up the outside of a tower – use the stairway or ladder on the inside.
* Follow manufacturer’s instructions on smallest base to height ratio. General guide: 3:1 outside, 3:5 inside.
* Hoist materials up from the inside of the tower.
* Do not move the tower if persons or materials are still on the platform. Do not pull tower along while standing on it.

## ? How would you hoist materials on to a working platform?

**Hazards**

* + Do not exceed manufacturers SWL for the tower.
	+ When moving towers, ensure that there are no potholes, obstructions or overhead power lines in the way.
	+ When working, ensure access hatch is closed on platform.
	+ Never use ladders or steps on a scaffold platform.
	+ Towers must only be used on firm surfaces. Where the ground is soft, adequate support must be provided.

## ? What hazards must be considered when moving a tower?

** *Inform workforce of any site-specific rules*

# *Toolbox Talk No 020*

*Mobile Elevating Work Platforms (MEWPs)*

## Before Use

* + You must be trained for the type of MEWP you are using.
	+ Ensure that the ground is suitable before siting unit and ensure that the unit is stable.
	+ Put traffic management in place to prevent collision.
	+ Ensure that stabilisers/outriggers are used when required.
	+ Ensure adequate clearance of boom adjacent to traffic or other potential striking hazards.
	+ No part of machine to be within 15 metres of overhead cables.
	+ Moving parts and mechanisms must be guarded.

## ? What must you do to prevent possible collision by vehicles?

**During Use**

* + Safety harnesses must be used at all times.
	+ The operator must check the machine daily before starting work.
	+ Do not allow loose materials to accumulate on the platform.
	+ If there is any danger of falling materials e.g. tools, prevent access below.

## ? What must always be used?

* + Do not overload – keep to the SWL.
	+ Be aware of possible traps between platform and fixed obstructions.
	+ Do not travel with outriggers or stabilisers out, unless designed for use in this way.
	+ Do not travel with platform raised in unsuitable ground conditions.

## ? What must always be observed?

* + Wherever possible the platform should be square onto the work.
	+ Do not use for the transfer of materials.
	+ Do not use as jack, prop or tie.
	+ Do not use the platform as a means of access.
	+ Ensure unit is left safely parked and immobilised when not attended.
	+ Ensure machine is not used in wind speed exceeding that quoted for the machine.

## ? How should the platform be positioned?

 *Inform workforce of any site-specific rules.*

**H&S FORM 017**

# *Toolbox Talk No 021*

*Working in Mast Climbing Platforms*

Mast climbing platforms are used extensively in the modern construction industry, useful if properly used, potential for serious injury if abused.

## Before Use

* + Only personnel trained and competent are authorised to use the equipment.
	+ A copy of the operating procedures must be available.
	+ If more than one platform is in use, they must not be within 300mm of each other.
	+ The Safe Working Load must be on the platform.

## ? What must be available?

**During Use**

* + Always access the platforms at ground level.
	+ Be aware of projecting balconies/open windows.
	+ Ensure guardrails are in use at all times.
	+ If materials are stacked on a platform, use brick guards, ensure loads are within the SWL of the machine and evenly distributed.

## ? Where must you access platforms?

* + Never move the platform horizontally whilst in a raised position.
	+ Whilst working, check the ties into the structure. If any ties are loose, stop work and inform a supervisor.
	+ The Safe Working Load must not be exceeded.

## ? What must you check whilst working?

 *Inform the workforce of any site-specific rules.*

**H&S FORM 017**

# *Toolbox Talk No- 022* Working in Cradles

## Before Use

* + Only personnel trained and competent are authorised to use the equipment.
	+ Check roof rig and cradles before first use, or after being left unattended for any period of time.
	+ Check controls are in good order and if applicable pendant controls are fixed to the handrail.
	+ The Safe Working Load (SWL) must be on the cradle.

## ? What must be checked after being left unattended?

**During Use**

* + Ensure stops and overrides are operating.
	+ Power cradles must have secondary supporting wires.
	+ Be aware of any emergency procedures.
	+ Ensure wires are secured and free of kinks.
	+ Ensure that the apparatus has been inspected within the preceding seven days. This must be recorded in the statutory register.

## ? What must power cradles have?

**Access and Use**

* + Ensure stops and overrides are operating.
	+ Access should be made at ground level, if this is not possible e.g. over water, clip on harness before accessing.
	+ Do not climb wires.
	+ Do not use in wind conditions above those specified by the manufacturer/supplier.
	+ It may be necessary to tie the cable to the structure for stability.

## ? What must be worn?

* + Do not allow rubbish to build up on the platform.
	+ Do not let ice build up on the platform in winter.
	+ Ensure that tools are secured to the platform.
	+ Ensure that the Safe Working Load (SW**L) is not exceeded. After Use**
	+ Never move roof rigs without your supervisor’s permission.
	+ Always secure cradles at night/end of shift.
	+ Ensure all electrical supplies are isolated.

## ? What must be done at night?

 *Inform the workforce of any site-specific rules.*

# *Toolbox Talk No- 023* Goods Hoists

A goods hoist is a useful piece of plant to move materials up to the work area quickly and safely, but, in the wrong hands, can be extremely hazardous.

## General Safety Points

* + Hoists must be erected and tested by competent persons before being taken into use.
	+ The hoist or hoist way must be protected by a substantial enclosure and the base of the hoist requires a two-metre enclosure.
	+ Gates should be minimum of 2 metres high and cover the hoist opening completely.
	+ A thorough examination must be carried out every six months for a rope hoist and three monthly for a rack and pinion type. A certificate must be available on site for these tests.
	+ The hoist must be inspected every seven days by a competent person and the results must be recorded in the site register.
	+ Gates should be fitted with effective interlocks which prevent the hoist from moving when the gate is open and which prevent the gates being opened until the hoist reaches the platform.

## ? How high should the gates be to cover access completely?

**Instructions to Operators**

* + Operators must be over 18 years of age and trained in the use of hoists.
	+ Ensure you carry out daily operator’s checks prior to use.
	+ Operate from one position only, where you can see the platform throughout it’s travel, and always from outside the hoist way.
	+ Check that the ‘SWL’ and the ‘Carriage of Persons Prohibited’ signs are displayed on the platform.
	+ Do not exceed the SWL displayed on the hoist.

## ? From where should the hoist be operated?

* + Secure all loads so that they do not move when the platform is operating.
	+ Ensure nobody rides on a goods hoist.
	+ Keep landing stages free from obstruction by materials or plant.
	+ All signals must be clear and distinct.

## ? What must you do when placing a load on a hoist?

* + Place barrows on the platform, with handles facing the landing gate.
	+ Do not leave hoist unattended with the motor running or the power supply connected.
	+ Report all defects immediately to site management.
	+ At the end of a shift, ensure hoist is effectively immobilised.
	+ Operators must be aware of the emergency action required to stop the hoist.

## ? What must you do to the hoist at the end of a shift?

 *Inform the workforce of any site-specific rules.*

# *Talk No- 024* Stepladders

Stepladders are often misused resulting in many accidents

## Stepladders

* **Do not use if a mobile scaffold tower or MEWP can be used instead.**
* Check treads, stiles, hinges and restraining rope before using a stepladder.
* Damaged stepladders – either destroy them or return to supplier.
* Use on a firm, level base – do not level up with loose bricks or similar.
* Do not work higher than two thirds up a stepladder.

## ? What should you consider before using steps?

* Do not use boards between treads of steps to provide a working platform, they are not designed for this loading.
* Do not paint wooden steps. Paint hides defects.
* Do not lean outwards or sideways from the steps. Move them into position.
* Ensure steps are fully extended before you mount them.
* Report any damage immediately.

## ? Why should you not use boards on step treads?

 *Give site-specific rules for use of stepladders.*

# *Toolbox Talk No 025* Roof work

Over 50% of major injuries on construction sites involve falls from heights, approx. 50% of falls over two metres result in fatalities. Safe working at height must be high in your priorities.

## Before Working on Roofs

* Before any work or access onto a roof, fragile materials should be identified and a safe system of work agreed. Roof lights can present a particularly high risk.
* Roof edge protection (or scaffolds) must be erected to prevent people and materials falling.
* Safety nets, or similar, must be provided below any leading edge, or under fragile areas where someone can fall.
* Access ladders must extend a safe distance above the stepping-off point and must be secured
* A safe intermediate platform must be provided where access ladders rise above nine metres
* Fire extinguishers must be provided where flammable materials are being used.

## ? What should be identified before working at height starts?

**Hazards of Working on Roofs**

* If you can fall more than two metres, double guardrails and toe boards must be erected. Risk assessment may require edge protection at a lesser height.
* Hazards resulting from adverse weather conditions must be anticipated and suitable precautions taken.
* LPG cylinders should be located no less than four metres away from heat source. Spare bottles to be kept to a minimum.
* Do not allow rubbish to accumulate as this is liable to cause injury. Use a chute or lower materials properly.
* Wet, windy or icy weather can seriously affect safety.

## ? Above what height must edge protection, toe boards and guardrails be erected?

**Safe Working on Roofs**

* Only competent operatives may be used for roofing works.
* Crawling boards or ladders must be provided and used where the roof is liable to collapse under a person’s weight or where the roof is sloping with a pitch greater than ten degrees.
* Where work is of short duration and the provision of guardrails and toe boards is impracticable, safety harnesses must be used with suitable anchorage points provided. Work of this nature must be discussed and agreed with site management.
* Bitumen boilers, if used, require a drip tray.
* Openings must be covered or guarded. If removed for passage of workers or materials, replace immediately.

## ? When must crawling boards or ladders be used?

 *Inform workforce of any site-specific rules.*

**H&S FORM 017**

# *Toolbox Talk No. 026* Use of Harnesses

Harnesses should always be considered as the last option after working platforms, scaffolding, mobile towers, MEWPs, etc. have been considered and cannot practicably be provided. In any case harnesses may only be used for short-term operations.

* + Do you know how to don a harness? You must be trained on the manufacturer’s instructions for use including:
		- Fitting of harness.
		- Adjusting harness.
		- Selecting a suitable anchorage.
	+ The harness must be fully inspected before use or after a fall, to include:
		- Webbing and leather – check for cuts, cracks, tears, or abrasions, heat or chemical damage.
		- Hooks or Karabiners – damage, distortion or faulty catches.
		- Stitching – broken, cut, worn or failed.
		- Lanyards – damage, wear or signs of an arrested fall e.g. strengthening or unravelling.

## ? Name two checks that should be carried out as part of your inspection.

* + Every harnesses must be marked with the following information:
		- The EN number.
		- The name of the manufacturer.
		- The date of manufacture.
		- The maximum permissible drop e.g. two metres.
		- The type of harness e.g. fall arrest or rescue. N.B. Only a fall arrest harness may be used in a potential fall situation!

## ? Name two pieces of information, which must be marked on a harness?

* + A competent person must inspect all harnesses every three months; a record must be kept.
	+ Scaffolders who require to wear harnesses under the “NASC” Guidance should attend a prescribed course.
	+ Wet harnesses should be hung to dry naturally.
	+ A secure anchorage, preferably above head height, anchorages below the height should be discussed and agreed with your supervisor.
	+ Do not loop your lanyard around small items or sharp edges, the lanyard could fail in a fall situation.
	+ A shock-absorbing lanyard should not be used in conjunction with an inertia reel block.

## ? How often should a competent person inspect a harness?

**H&S FORM 017**

# *Toolbox Talk No 027*

*Personal Protective Equipment (PPE)*

PPE is an essential part of your work equipment. Failure to use it could result in injury or prosecution. You have a legal duty to wear and look after any PPE issued to you.

## Head Protection

* A safety helmet is provided for your protection and must be worn in all designated areas of the site.
* Make sure your helmet is properly adjusted to your size; an ill-fitting helmet may not protect you, as it should.
* Check the condition of your helmet on a regular basis; heavily scratched or dented helmets must be replaced. Any helmets over two years old may be weakened and should also be replaced.
* Painting, writing on, applying sticks to, and drilling holes in helmets are all, illegal. The only stickers to be applied are those supplied by the company e.g. induction or nameplate stickers.
* In high winds, or when working aloft, always wear a chinstrap.

## ? - What stickers are permitted on helmets?

**Safety Footwear**

* Safety footwear with steel toe cap and midsole must be worn at all times on site.
* Defective or damaged footwear must be reported to your supervisor.
* Safety footwear with exposed toecaps may not be worn in environments where there is a fire risk e.g. refineries or certain chemical works.
* When working in wet concrete, wellington boots with a steel toecap and midsole must be worn.

## ? - What must you do if your footwear is damaged or defective?

**High Visibility Clothing**

* All personnel on site, where plant and machinery is operating, must wear high visibility clothing, vest or similar.
* When working in live traffic situations the standard of high visibility clothing to be worn may be higher i.e. Appendix G jacket.
* Make sure your high visibility vest is visible, it is not uncommon for workmen to don wet weather clothing over their high visibility vest.
* Any high visibility clothing, which has been adversely affected by contamination or natural fading, must be replaced.

## ? - What is the minimum requirement for high visibility clothing?

**H&S FORM 017**

## Gloves

* It has been proven that wearing gloves can prevent or reduce the severity of hand injuries.
* It is company policy for mandatory glove wearing - there are very few operations where gloves cannot be worn, the exception rather than the rule.
* Gloves are available in various types and sizes to suit most jobs, make sure you have the correct type.
* Carry gloves with you at all times, if you don’t have them, you won’t use them.
* When gloves become worn or defective replace them, your old gloves should be returned. By assessing the condition of returned PPE its suitability can be also assessed.

## ? - What effect can wearing gloves have on injury causation?

**Eye Protection**

* Eye protection is available on site and must be worn when required, e.g. using cartridge tools. Abrasive cutting and grinding tools, working with hammers and chisels, etc.
* When working on site where light eye protection is a requirement e.g. BP, this level of protection is not sufficient for work as quoted in the previous list. Goggles or screen to EN166B must be worn as a minimum standard.
* Scratched or damaged eye protectors must be replaced.

## ? -What is the minimum standard for goggles?

**Hearing Protection**

* Earplugs and muffs are available to be used when noise levels are excessive and could be harmful.
* Ear plus must only be inserted as shown on the packaging, ensuring your hands are clean.
* Muffs independent or helmet mounted must be in good condition, seals soft and flexible, no cracking or damage. Ensure they fit properly over the ears.
* When do I need to wear hearing protection? If you have to raise your voice to be heard over a distance of 1 metre, you require hearing protection.
* Noise information on plant and equipment is posted on the notice board; any figure over 80dB(A) is a potential risk.

## ? -How should plugs be inserted?

**Respirators**

* Respirators are provided in various forms for various risks, the type to be used will be specified in the Risk or COSHH Assessments.
* Make sure any respirator is in good condition, is adjusted for a good seal, taking account of facial hair, glasses, etc. Face fit testing should be carried out to ensure that good seal is achieved (provided on request to safety adviser)
* Damaged or spent respirators must be replaced.

## ? -Where will I find information on respirator types to be worn?

 *Inform workforce of any site-specific PPE requirements.*

# *Toolbox Talk No 028* COSHH

Hazardous substances can be used in or created by the construction process. Protect yourself today against the long-term effects of workplace exposure to hazardous materials.

## Risk Assessment

* + Management must carry out a risk assessment to find out whether:
		- Exposure to a substance can be eliminated.
		- Alternative work method can reduce exposure.
		- A less hazardous substance can be used.
	+ Any substance with a hazard-warning label has the potential to cause harm; the risk must be assessed before using it.

## ? Before using a substance, what should be considered?

**Hazards**

* + You could be affected by a hazardous substance by:
		- Ingestion – eating contaminated food.
		- Inhalation – breathing harmful dust or fumes.
		- Absorption – chemicals entering through the skin or cuts.
	+ Examples of hazardous substances on construction sites:
		- Contaminated ground.
		- Concrete.
		- Cement.
		- Solvent fumes.
		- Hardwood dust.
		- Resins.
		- Epoxy based paints.
		- Welding fumes.
		- Paints.
	+ Do not mix chemicals or substances.

## ? Name the three ways a substance can enter your body Effects of Some Substances

* + Hardwood Dust – Nasal cancer.
	+ Cement Dust – Dry – lung disease. Wet – burns.
	+ Isocyanate (2 pack) paints – occupational asthma.
	+ Solvents, skin contact – Dermatitis. Inhalation – respiratory problems.

## ? What effects can cement, dry and wet have?

**Control Measures**

* + When using hazardous substances, wear the correct PPE.
	+ Know how to look after and use PPE correctly.
	+ Know where washing and first aid facilities are on site.
	+ Ensure hazardous substances are put back into a secure location after use and not left out on site.
	+ Store hazardous substances as specified on the COSHH Assessment.
	+ Dispose of unused materials or empty containers safely.

## ? Where should substances be put at the end of the shift?

**Use of Substances**

* + Make sure you are trained to use hazardous substances.
	+ Read and comply with the information of the COSHH Assessment sheet.
	+ Do not eat, drink or smoke when handling substances.
	+ Do not expose anyone to fumes, dust, gas or other dangers from hazardous substances due to your work.
	+ Always wash as the end of each shift and before eating.

## ? Where can you obtain information about the hazardous substances you are using?

 Inform workforce of site COSHH procedures.

# *Toolbox Talk No- 029* Protection of Skin

Dermatitis accounts for over half of all working days lost through industrial sickness. Some types of dermatitis, if not treated, can lead to cancer.

## Contact Hazards to Skin

* Mineral oils, including fuel and mould oils, can give you bad skin conditions, or even cancer.
* Constant skin contact with oily rags in overall pockets can lead to cancers in the scrotum.
* Chemicals, including alkalis, acids and chromates can penetrate the skin causing ulcers and dermatitis.
* Cement can cause chronic dermatitis. Wet cement becomes more alkaline and more harmful to the skin causing severe burns, severe enough in at least one case to require amputation of a leg.

## ? What hazards are there from contact with mineral oil?

* Solvents and degreasers, including paraffin and thinners, dissolve natural oils in the skin leaving it open to infection.
* Tar, pitch and bitumen products can cause blisters and dermatitis. They can cause tar warts, leading to cancer.
* Epoxy resin hardeners, glass fibre, some hardwoods and fungicides irritate the skin and can lead to dermatitis. Some fine hardwood dusts have been linked to nasal cancer.
* Extremes of sunshine, temperature and humidity make the skin more susceptible to dermatitis and other skin problems. Keep your shirt on, on sunny days,

## ? What effect do solvents have on your skin?

**Precautions to Protect Your Skin**

* Avoid skin contact with hazardous substances.
* Wear the correct personal protective equipment.
* Keep your skin clean and use after wash skin cream.
* Keep your workplace clean.
* Get first aid for cuts and grazes and keep them covered.

## ? What can you wear to protect your skin?

* Do not use abrasives or solvents to clean your skin.
* Do not let synthetic resins or glue harden on your skin.
* Examine your skin for the appearance of warts, especially on the scrotum (if applicable).
* Never wear oil-contaminated clothing next to your skin.

## ? If you notice rashes or warts what would you do?

 Inform the operatives of the company policy regarding skin care.

**H&S FORM 017**

# *Toolbox Talk No- 030* Vibration White Finger

Vibration White Finger also known as Hand Arm Vibration Syndrome.

## Caused By

* Use of tools producing high levels of vibration, e.g. breakers, rock drills, pokers, scabblers, chainsaws, disc cutters and hand held grinders.
* May also damage bones and muscles.
* You may lose flexibility and strength of grip.
* You may find it more difficult to work with hand held tools.
* May affect ability to enjoy hobbies such as swimming, gardening, or angling, where your fingers can get cold.

## ? What may happen to your grip?

**Symptoms**

* Usually set off by cold.
* First sign often an occasional attack when the fingertips become white.
* Continued work with vibrating tools will cause affected area to get larger.
* During attack there may be numbness or “pins and needles”.
* Attack may end with whiteness changing to deep red flush, which is often very painful.

## ? What is often the first sign?

**Action to Reduce Risk**

* + Keep warm at work, wear warm gloves.
	+ Smoking affects blood flow and therefore increases the risk of vibration white finger.
	+ Exercise hands and fingers to improve blood flow.
	+ Use the right tool for the job.

## ? What can you do to improve blood flow?

* + - Do not use more force than necessary whilst operating tools – gripping too tightly increases the problem.
		- Avoid long periods of use – short bursts are better. (Check tool vibration charts on notice boards for safe time usage) - Rotate jobs.
		- Keep tools in good working order – if defective report it to your supervisor.
		- Do not ignore symptoms – if you think vibration could be affecting your fingers, see your doctor.

## ? What increases the problem?

 *Inform workforce of any site rules or procedures.*

**H&S FORM 017**

# *Tool Box Talk No. 031* Contaminated Land

There are many areas where we work where we may find a large variety of contaminants on or in the ground.

Some contaminants may have immediate effects on us but the majority build up in the body over a period of time.

Contaminants may enter the body through skin absorption, cuts, ingestion or inhalation.

## Protect the Skin by:-

1. Wearing boots, overalls and gloves provided.
2. Overalls should be worn outside boots.
3. Use barrier creams provided.
4. Have even the slightest cut or scratch thoroughly cleaned by a first aider and covered with a waterproof dressing.
5. If you get any tar-like or other substances on your skin, wash them off immediately - inform supervisor.

## Q: How should overalls be worn?

**Protect against Ingestion by:-**

1. Do not eat, drink/smoke in contaminated areas, and only eat/drink in the designated site welfare facilities.
2. Always wash before eating, drinking or smoking and at the end of the shift.
3. Never take contaminated clothing home for washing.

The Golden Rule is observe good hygiene

## Q: What must you never do in contaminated areas?

**Plant**

1. Prevent build up of contaminants on plant.
2. Make sure all fitters are briefed on the dangers of the contaminants on site.
3. Fitters to wear full PPE as required by site rules.
4. All plant is to be fully cleaned of any soil/contaminants before leaving site.
5. All equipment, augers/casings etc are to be fully cleaned before leaving site.

## Q: What must we ensure before plant leaves site?

**General**

1. Any headaches, rashes, burning eyes, stomach aches etc., must be reported immediately to your supervisor.
2. Report strange smells immediately, e.g. rotten eggs.
3. Report immediately the presence of thick black tar-like material, blue or yellow powders or any other suspicious substance.
4. Report immediately any signs of fire in the soil.
5. Do not touch, but report immediately, any containers of substances.

## Q: What do you do if you find a drum of chemicals?

Inform workforce of any site specific rules.

## Questions

**Q: How might contaminants enter the body?**

**Q: What must you never do with contaminated clothing?**

**REMEMBER AVOID CONTACT**

# *Toolbox Talk No- 032* Hot Weather Working

Working in Hot Weather is not an excuse for a reduction of risk controls and PPE. Further controls to protect the workforce may be necessary.

Too much sun can lead to skin cancer.

## Advice When Working In Hot Weather

1. Take short breaks every (say) 2 hours)
2. Take breaks in a shaded area (where possible)
3. Park the vehicle in a shaded area (if legal to do so)
4. Drink water throughout the day.(Before, during and after work)
5. Understand the signs of dehydration (see below)
6. Sun cream is provided – but not prescribed – (consult your doctor for allergies before use)
7. Anti – glare ppe glasses are available.
8. Wear ppe as prescribed in the Risk Assessment, but suggest light weight alternatives.
9. Wear cotton clothes under your ppe, and ensure the body and the clothing is properly cleaned regularly.
10. Extremes of sunshine, temperature and humidity make the skin more susceptible to dermatitis and other skin problems.

## Life Style Issues

1. Taking alcohol the night before your work will dehydrate the body,
2. Coming to work with drugs or alcohol in the body will lead to disciplinary action.
3. Drinking water before you feel dehydrated is the best course of action.
4. Keep your skin clean and use after-wash skin cream.
5. Never wear dirty clothes next to your skin.

## Questions

**Q: What is the best way to avoid dehydration?**

**Q: Where should I take my breaks?**

**REMEMBER**

**IF THE SKIN DOES NOT HEAL AFTER SUNBURN SEE YOUR FAMILY DOCTOR AT ONCE**

**Dehydration Chart**

**(based on urine color)**

|  |  |  |
| --- | --- | --- |
| Body has plenty of fluids. | Clear |  |
| Body has adequate fluids. | Light yellow |  |
| Body is low on water. | Dark yellow |  |

# *Toolbox Talk No -033* Weil’s Disease

## Weil’s Disease – What Is It?

* 1. Weil’s disease, which is also known as Leptospirosis, is a kind of jaundice.
	2. The disease enters the body through breaks in the skin, and through the lining of the mouth and nose.
	3. It is caused by contact with water contaminated by the urine of rats and other small mammals such as mice and voles, most commonly found in sewers.
	4. It starts as a mild illness which can easily be cured if treated early enough.
	5. If left untreated, it becomes more serious and can be fatal.
	6. The problem is that the initial symptoms are very similar to flu and it is possible that you could ignore the symptoms or be treated for the wrong illness.

## Q: How can you catch the disease?

**What Can You Do About It?**

1. Don’t encourage the presence of vermin; carefully dispose of waste food especially on sites that are wet or adjacent to rivers and lakes.
2. Do not handle the carcasses of dead rats or other small mammals.
3. If you are at risk, cover all cuts and abrasions with a waterproof dressing and wear appropriate protective clothing especially gloves.
4. If you frequently work near water and particularly sewers, carry a card or tag saying that you may be at risk of catching the disease.
5. Be aware that you can catch the disease if you get water in your mouth and nose after falling in.
6. See you doctor immediately if you think you are infected.

## Q: If you have flu – like symptoms after coming into contact with water that may be contaminated, what should you tell your doctor?

**Who is at risk?**

1. All operatives who may come into contact with contaminated water.
2. Particularly operatives who work regularly in or near water, such as those engaged in:
	* work on sewers and other drainage systems
	* work on streams, rivers, canals and similar conservation projects
	* work in tunnelling

## Do you have any questions?

**REMEMBER PREVENTION IS BETTER THAN CURE!**

*Toolbox Talk No- 034*

*Sharps and Needle stick Injuries*

1. ‘Sharps’ is the generic term for Hypodermic needles and syringes. ‘Sharps’ can be found anywhere on the highway, in our depots and any public place. Sharps have been found is in Salt bins, Salt heaps, Chipping dumps and even inside cigarette packets or drinks containers.
2. ‘Needlestick Injuries’ is the generic term for any scratch or puncture to the skin caused by a ‘Sharp’.

## Q. What is a needlestick injury?

1. Contact with a sharp can result in a needlestick injury and can cause infection and spread disease.
2. Some common diseases are Hepatitis, HIV and AIDS.
3. The risk of infection depends on the needle user being infected

with the above viruses and how much of the infected material enters the bloodstream.

## Q. What diseases can be contracted through needle stick injuries?

**Q. In which areas do you think needles are likely to be found?**

1. If you find a needle DO NOT TOUCH IT unless you have been trained to do so.
2. Ensure that everyone on the site knows about it’s location.
3. Mark and protect the area around the needle.
4. Contact the DMSER to arrange removal.

## Q. What do you do if you find a needle?

In the unlikely event of a needlestick injury occurring:

1. Do not panic but gently squeeze the area around the wound to encourage bleeding.
2. Do not suck the wound.
3. Clean the wound under running water (if water is not available, cleansing wipes provided in first aid kits should be used.
4. Cover the wound with a dry plaster or dressing.
5. Keep the needle that caused the injury in a safe place, it may be needed by the doctor to identify any possible disease
6. Seek medical advice and treatment immediately – contact the nearest Accident and Emergency Department.
7. Formally record the incident including details of the action taken on Accident Report form

## Q. What do you do if you find a needle?

**REMEMBER**

**IF YOU SUFFER A NEEDLESTICK INJURY AND DO NOT FOLLOW THIS GUIDANCE, YOU COULD BE EXPOSED TO THE HIV VIRUS, HEPATITIS B OR HEPATITIS C - AT BEST, VERY UNPLEASANT, AT WORST, FATAL.**