|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.N.** | **ACTIVITY** | **HAZARD** | | **CAUSES OF HAZARD** | | **RISK EVALUATION** | | | **RISK LEVEL** | | **IMPLEMENTED CONTROL MEASURES** | | **RESIDUAL RISK** | | | | | | **ACCEPT Y/N?** | |
| **P** | **S** | | **H/M/L** | | **P** | | **S** | | **H/M/L** | |
|  | Use of electrical | Exposure to live electricity | | Electrical shocks | | 2 | 4 | | 4 | | * Inspection of electrical tools * Competent person to use this tool * HSE Talks on electrical tools and safe use | | 1 | | 1 | | 1 | | Y | |
|  | Asbestos Removal | Inhalation of dust or fibres | | Inhalation diseases | | 2 | 4 | | 4 | | Work strictly to method statement   * Only trained operatives be engaged * Use personal protection provided * Use site-changing facility * Report defects found in P.P.E | | 1 | | 1 | | 1 | | Y | |
| Skin irritation | | Skin infections | | 2 | 4 | | 4 | | * Work strictly to method statement * Only trained operatives be engaged * Use personal protection provided * Use site-changing facility * Report defects found in P.P.E | | 1 | | 1 | | 1 | | Y | |
| Eye irritation | | Loss of sight | | 2 | 4 | | 4 | | * Work strictly to method statement * Only trained operatives be engaged * Use personal protection provided * Use site-changing facility * Report defects found in P.P.E | | 1 | | 1 | | 1 | | Y | |
| Manual handling | | Back strains | |  |  | |  | | * Work strictly to method statement * Only trained operatives be engaged * Use personal protection provided * Use site-changing facility * Report defects found in P.P.E | | 1 | | 1 | | 1 | | Y | |
|  | Palletized Bricks – Storage and Stacking | Falling loose bricks | | Injuries/ property damage | | 2 | 4 | | 4 | | * Plan stacking area * Fit brick guards to scaffold * Do not overload scaffold * Stack neatly * Only trained forklift drivers to drive | | 1 | | 1 | | 1 | | Y | |
| Stacks collapsing or sinking | |  | |  |  | |  | |
| Obstruction to vehicles | | Property damage | |  |  | |  | |
| Untrained forklift drivers | | Accidents | |  |  | |  | |
| Danger to children | | Accidents | |  |  | |  | |
|  | Palletised Bricks – Storage and Stacking | Falling loose bricks  Stacks collapsing or sinking | | Injuries/damage to property  Injuries | | 2 | 4 | | 4 | | * Plan stacking area * Avoid soft uneven ground * Keep stacks to 2 high only * Only trained forklift drivers to drive * Construction, Health, Safety & Welfare Regulations 1996 | | 1 | | 1 | | 1 | | Y | |
| Obstruction to vehicles | | Incidents | |  |  | |  | |
| Untrained forklift drivers  Danger to children | | Accidents | |  |  | |  | |
|  | |  | |  |  | |  | |
|  | Block Laying – High Density | Manual handling | | Ergonomics | | 2 | 4 | | 4 | | * Use good lifting procedures * Ensure hop-ups are adjusted to suit * Ensure scaffolds are complete and toe boards are in position * Use additional personnel to lift over 25 kg | | 1 | | 1 | | 1 | | Y | |
| Back injuries | | Permanent disablement | |  |  | |  | |
| Trapping fingers | | Disabling injuries | |  |  | |  | |
| Strain on arms, wrists | | Disabling injuries | |  |  | |  | |
| Falls from heights | | Disabling injuries | |  |  | |  | |
| Falling materials | | Incidents | |  |  | |  | |
|  | Carrying Plumbing Tanks, Boilers, Radiators, Lead Rolls etc | Falling down stairs | | Incidents | | 2 | 4 | | 4 | | * Site storage container at ground level * Keep clear walking space in container * Seek help for heavy or awkward loads | | 1 | | 1 | | 1 | | Y | |
| Slipping or tripping | | Injuries | |  |  | |  | |
| Dropping load on feet | | Injuries | |  |  | |  | |
| Manual handling of heavy loads | | Disabling injuries | |  |  | |  | |
|  | Cement Mixing, Silo Operation Ready Mix | Trained operatives to operate mixing plant | |  | | 2 | 4 | | 4 | | * Keep hands away from moving parts * Use barrier cream * Wash frequently * Close safety gates * Refer to C.O.S.H.H. assessment | | 1 | | 1 | | 1 | | Y | |
| Manual handling  Skin contact with dry and wet cement | | Skin infections | |  |  | |  | |
| Dust and noise | | Lung infections and Hearing loss | |  |  | |  | |
|  | Cement Mixing, Silo Operation Ready Mix | Trained operatives to operate mixing plant | |  | | 2 | 4 | | 4 | | * Keep hands away from moving parts * Use barrier cream * Wash frequently * Close safety gates * Refer to C.O.S.H.H. assessment | | 1 | | 1 | | 1 | | Y | |
| Manual handling  Skin contact with dry and wet  Disabling injuries  cement | Skin infections | |  | |  |  | | |
| Dust and noise  Lung infections and Hearing loss | | Lung infections and Hearing loss | |  |  | |  | |
|  | Concrete – Scabbling | Noise, dust, working from scaffolds | | Lung infections and Hearing loss | | 2 | 4 | | 4 | | * Only trained operatives to be used * Check scaffolds are properly constructed * Ensure personal protective equipment is worn * Use anti-vibrating equipment and carry out assessment | | 1 | | 1 | | 1 | | Y | |
| Manual handling | | Disabling injuries | |  |  | |  | |
| Flying particles | | Injuries | |  |  | |  | |
| Dropping equipment | | Injuries | |  |  | |  | |
|  | Lifting Loads with Cranes | Overhead electrical services | |  | | 2 | 4 | | 4 | | * Documentation must be inspected prior to lifting i.e. Certificate of past inspection within 14 months, Certificate of Lifting Appliance within 6 months and Drivers Certificate of Competence. Also, check SWL of chains, slings, etc. * A trained conversant with lifting and slinging activities must be appointed to be in charge of the lifts. The Banksman must be able to signal to the crane drivers by hand signals * Fence off an area to prevent members of the public coming into the hazard area and display warning notices   Take into consideration, areas where traffic could be at risk with an overhead load. If necessary, set up a traffic management system | | 1 | | 1 | | 1 | | Y | |
| Underground services | | Explosive, fire, flooding, toxic atmospheric contamination | |  |  | |  | |
| Slinging of loads | | Back Injuries | |  |  | |  | |
|  | Crosscut Saw | Contact with blade | | Hazardous to eyes and respiratory system | | 2 | 4 | | 4 | | * Only trained operatives to use * Check guards are in position * Ensure extraction is working * Ensure emergency stop is functioning * Ensure lighting is up to standard * Wear personal protection | | 1 | | 1 | | 1 | | Y | |
| Noise, dust | | Lung infections and Hearing loss | |  |  | |  | |
| Flying particles | | Eye Injuries | |  |  | |  | |
|  | Rip Saw, Planing Machines | Contact with saw blade | | Cuts and injuries | | 2 | 4 | | 4 | | * Keep work areas clear of materials * Only trained operatives to use * Ensure ventilation hood is operating * Carry out vibration assessment * Use anti-vibration equipment * Wear personal protection | | 1 | | 1 | | 1 | | Y | |
| Tripping | | Injuries | |  |  | |  | |
| Noise and dust  Vibration | | Lung infections and Hearing loss | |  |  | |  | |
|  | |  | |  |  | |  | |
|  | Cutting with Stihl Saw | Disc disintegrating | | Spinal fusion/Surgery | | 2 | 4 | | 4 | | Refer to Woodworking Machinery Regulations  C.I.T.B. manual  H.S.E. information sheets 1-10  Eye protection, ear protection, overalls safety footwear, dust mask | | 1 | | 1 | | 1 | | Y | |
| Flying particles | | Environmental air Pollution | |  |  | |  | |
| Wear personal protection | | Gloves and googles Safety control measure | |  |  | |  | |
|  | Cutting with Stihl Saw | Disc disintegrating | |  | | 2 | 4 | | 4 | | * Trained operatives to mount disc * Use correct start up procedure * Use correct grade and type of disc * Use protective equipment * Use vibration suppressed equipment | | 1 | | 1 | | 1 | | Y | |
| Flying particles | | Environmental air Pollution | |  |  | |  | |
| Dust, noise, fumes | | Lung infections, Hearing loss and fire | |  |  | |  | |
| Contact with revolving disc | | Contact with body parts like finger resulting in Amputation | |  |  | |  | |
|  | : Demolition | Overhead electrical services | | Fatality and death | | 2 | 4 | | 4 | | * Only trained and experienced operatives to be employed * Fence off area and display warning notices * Install temporary shoring as required * Provide suitable edge protection as required * Work to the method statement | | 1 | | 1 | | 1 | | Y | |
| Underground gas services | | Explosives and fire | |  |  | |  | |
| Flammable | | Damage to property and Injuries | |  |  | |  | |
| materials – dust, fumes etc. | | Lung infection and damage to property | |  |  | |  | |  | |
| Toxic wastes | | Environmental Pollutions | |  |  | |  | |
| Asbestos, lead, lead paint  Vessels, tanks, | | Lung infection and flames | |  |  | |  | |
|  | |  | |  |  | |  | |
| flues  Falls from heights | | Injuries and Death | |  |  | |  | |
| Struck by falling materials | | Damage to property and incidents | |  |  | |  | |
| Noise, collapse of  structures | | Hearing loss and environmental distractions | |  |  | |  | |
|  | |  | |  |  | |  | |
|  | |  | |  |  | |  | |
|  | |  | |  |  | |  | |
|  | Demolition Surveys | Weakened floor | | Chronic diseases | | 2 | 4 | | 4 | | * Check history of building * Do not survey alone * Take a good flash lamp * Avoid obvious weakened floors, stairways etc. | | 1 | | 1 | | 1 | | Y | |
| Holes in floor | | Injuries | |  |  | |  | |
| Dark areas | | Injuries | |  |  | |  | |
| Dust or chemicals | | Harmful | |  |  | |  | |
| Flammable residues | | Damage property and injuries | |  |  | |  | |
| Toxic residues | | Food intake resulting in Health problems | |  |  | |  | |
|  | Diamond Cutting | Contact with revolving | | Cutting resulting as injuries | | 2 | 4 | | 4 | | * Work from a safe platform e.g. scaffold * Ensure ladders are secured * Seek assistance with heavy objects * Check guards are in position * Vibration suppressed equipment | | 1 | | 1 | | 1 | | Y | |
| components | | Financial risk, Liquidity, Exchange risk | |  |  | |  | |
| Manual handling | | Injuries | |  |  | |  | |
| Noise, dust  Falls from heights | | Harmful | |  |  | |  | |
| Vibration | | Ergonomic related Injuries | |  |  | |  | |
|  | Dumper Operations | Dumper falling into trench | |  | | 2 | 4 | | 4 | | * Only trained drivers up to C.I.T.B standard to operate machines * Regular maintenance and servicing * Drivers route to be planned and marked * Fit stop blocks at trenches | | 1 | | 1 | | 1 | | Y | |
| Speeding and careless driving | | Fatal accidents | |  |  | |  | |
| Overloading the skip | | Safety Hazard | |  |  | |  | |
| Noise and fumes | | Hearing Loss | |  |  | |  | |
|  | Electric Arc Welding | Inhalation of fumes | | Dizziness, nausea, throat irritation and Lung Cancer | | 2 | 4 | | 4 | | * Only trained operatives to use * Ensure local exhaust ventilation is working * Wear recommended personal protection * Keep area clear of combustible materials * Use flash screens | | 1 | | 1 | | 1 | | Y | |
| Weld flash | | Blindness | |  |  | |  | |
| Radiation burns | | Gastrointestinal: Cramps, Nausea, vomiting, | |  |  | |  | |
| Hot sparks, fire, burns from hot metal | | Rough handling and use exposing, the bare metal of conductor | |  |  | |  | |
| Electric shock | | Shocks and Burns | |  |  | |  | |
|  | | Operation of Elevated Work Platform | Fall from platform | | Injuries and permanent disablement | | 2 | 4 | 4 | | Only trained and experienced personnel to operate the machine  Harness should be secured  Keep work platform clean  Ensure hand tools are prevented from falling  Fence off work area and post warning notices | | 1 | | 1 | | 1 | | Y | |
| Fall of materials | | Fall on person resulting as injuries | |  |  |  | |
| Crushing from overhead obstructions | | Trapping and Crushing Injuries people in the platforms | |  |  |  | |
| Uneven ground and drain covers  Injuries to other | | Strips and Trips from obstacles hazard e.g. uneven floors | |  |  |  | |
| contractors, public | | Public liability Insurance and Leases | |  |  |  | |
|  | |  | |  |  |  | |
|  | | Excavations | Unsupported | | Collapse of unsupported excavation causing damage to property and Fatality | | 2 | 4 | 4 | | * Work in proximity of overhead electrical power lines * Refer to C.I.T.B. Manual, Section 20, 24, 25 * H.S.E. Guidance note GS 6   Refer to C.I.T.B manual  H.S.E. Guidance note GS6 | | 1 | | 1 | | 1 | | Y | |
| Battered back  Benched Down | | Should not be left open overnight | |  |  |  | |
| Support System | | Material fall onto people working and vehicle fall into excavation | |  |  |  | |
|  | | Forklift side Loader | Striking against operative | | Injuries to Pedestrian | | 2 | 4 | 4 | | * Only trained and certificated operatives to drive * Ensure adequate lighting * Regular maintenance of machines | | 1 | | 1 | | 1 | | Y | |
| Overturning forklift | | Permanent Injuries or Death | |  |  |  | |
| Hazardous stacking | | Long term Health problems | |  |  |  | |
| Noise | | Hearing Loss | |  |  |  | |
|  | | Forklift Counter Balance and Telescopic Rough Terrain | Striking against operatives  Overturning | | Injuries or Death | | 2 | 4 | 4 | | * Only trained and certificated operatives to drive to C.I.T.B standard * Ensure adequate lighting * Regular maintenance of machines | | 1 | | 1 | | 1 | | Y | |
| forklift  Hazardous stacking | | Injuries | |  |  |  | |
| Noise | | Hearing loss | |  |  |  | |
| Soft Ground | | Falls that result in disablement | |  |  |  | |
|  | | Installation of Glazing at Low Level | Tripping when carrying panels | | Serious Injuries | | 2 | 4 | 4 | | * Keep work area clear of rubbish * Lift panels evenly, no sudden movements * Ensure trestle scaffolds are even * Use only 110v tools | | 1 | | 1 | | 1 | | Y | |
| Falls from trestle scaffold  Dropping a panel | | Personal Injuries | |  |  |  | |
|  | |  | |  |  |  | |
|  | | Stripping Out Existing Glazing (Low Levels) | Breaking glass | | Injuries | | 2 | 4 | 4 | | * Barricade work area * Experienced operatives only to be engaged in this activity * De-nail timbers * Keep work area clear of broken glass | | 1 | | 1 | | 1 | | Y | |
| Falling glass | | Head Injuries | |  |  |  | |
| Falling frames | | Injuries | |  |  |  | |
| Falls from trestles | | Injuries | |  |  |  | |
| Electrical hand tools | | Electrical shocks | |  |  |  | |
| Dust from drilling  Nails in timber | | Respiratory problems | |  |  |  | |
|  | | Grinding with Twin Shaft Grinder | Contact with revolving stone | | Human Respiratory Tract | | 2 | 4 | 4 | | * Only trained operatives to use * Ensure guards are in place and secure * Dress stones regularly * Set tool rest as near as possible to the stone * Ventilation to capture dust at source | | 1 | | 1 | | 1 | | Y | |
| Flying particles | | Eye Injuries | |  |  |  | |
| Inhalation of dust | | Human Respiratory Tract | |  |  |  | |
| Exposure to noise | | Hearing loss | |  |  |  | |
|  | |  | |  |  |  | |
|  | | : Breaking out concrete with Kango Chisel or similar tool | Noise, dust  Flying particles  Falls from heights | | Hearing loss, Human Respiratory Tract, Eye Injuries | | 2 | 4 | 4 | | Use only 110v equipment  Check equipment is in good condition  Work only from safe access platforms | | 1 | | 1 | | 1 | | Y | |
|  | |  | |  |  |  | |
| Falls of concrete cuttings | | Injuries | |  |  |  | |
| Dropping the tool | | Injuries | |  |  |  | |
| Electric shock | | Burns | |  |  |  | |
| Vibration | | Permanent disablement | |  |  |  | |
|  | | Work from Ladders | Falls from heights | | Fatality and death | | 2 | 4 | 4 | | Use only ladders without defects  Ladder should extend 3’6” above the work platform  Safe angle of use 1:4  Secure at top or bottom  Foot ladder | | 1 | | 1 | | 1 | | Y | |
| Falling materials | | Injuries | |  |  |  | |
| Carrying materials | | Ergonomics /Spinal cord injuries | |  |  |  | |
| Ladder slipping | | Injuries | |  |  |  | |
|  | | Laying slabs and kerbs | Manual handling | | Injuries | | 2 | 4 | 4 | | Lift correctly  Seek help for very heavy slabs or kerbs  Use personal protection provided  Keep materials close to the job | | 1 | | 1 | | 1 | | Y | |
| Trapping fingers | | Injuries | |  |  |  | |
| Trapping toes | | Injuries | |  |  |  | |
| Dust from cutting disc | |  | |  |  |  | |
| Noise | | Hearing loss | |  |  |  | |
|  | | Lead Work – Roll and Sheet | Ingestion of lead particles | |  | | 2 | 4 | 4 | | Wash hands before eating or smoking  Seek assistance for heavy rolls or sheets  Ensure roof ladders and edge protection is in place  Ensure scaffolds are complete and secure | | 1 | | 1 | | 1 | | Y | |
| Manual handling of rolls and sheets | | Injuries | |  |  |  | |
| Working on roofs and sloping surfaces | | Fatality | |  |  |  | |
| Working form ladders  Working from scaffolds  Dust and fumes | |  | |  |  |  | |
|  | |  | |  |  |  | |
|  | | Man Made Insulation – Working with | Contact with fibre (irritant) | |  | | 2 | 4 | 4 | | * Prevent skin contact * Wear personal protection | | 1 | | 1 | | 1 | | Y | |
| Inhalation of fibre (Long irritant) | |  | |  |  |  | |
|  | | Oxy-Acetylene Cutting/Welding | Explosion | | Fire and burns | | 2 | 4 | 4 | | Only trained operatives to use  Ensure valves and gauges are properly fitted  Ensure there are no leaks from valves , tubes or torches  Ensure flashback arrestors are fitted  Use recommended protective clothing  Ensure adequate ventilation at work area | | 1 | | 1 | | 1 | | Y | |
| Fire  Burns | | Injuries | |  |  |  | |
| Inhalation of fumes | | Lung infections | |  |  |  | |
|  | |  | |  |  |  | |
|  | | Painting | Falls from ladders and trestles | | Injuries and damage property | | 2 | 4 | 4 | | Ensure ladders are in good condition and properly secured  Ventilate areas by opening windows etc  Use barrier creams  Avoid confined spaces | | 1 | | 1 | | 1 | | Y | |
| Inhalation of vapour | | Lung infections | |  |  |  | |
| Skin contact with paint and thinners | | Skim infections | |  |  |  | |
|  | | Painting - Spray | Explosive mixtures  Fire, toxic fumes | | Flammable | | 2 | 4 | 4 | | * Exhaust ventilation * FLP Lighting * Fire proof store * Personal protection * No smoking or naked lights | | 1 | | 1 | | 1 | | Y | |
| Skin irritation | | Skim infections | |  |  |  | |
| Inhalation of fumes | | Lung infections | |  |  |  | |
| Manual handling | |  | |  |  |  | |
|  | | : Demolition Activities in Refurbishing Buildings | : Demolition Activities in Refurbishing Buildings  Prior to cutting or disturbing load bearing components | | Demarcations signs | | 2 | 4 | 4 | | Warning notices require to be displayed and temporary fencing may be required  Dust from demolition should be treated as toxic and toxic grade masks be provided  Wash hands prior to eating. DO NOT WEAR dust-laden clothing in eating areas | | 1 | | 1 | | 1 | | Y | |
| Ensure if storage tanks are present that contents are identified before removal | | Safe working Procedure | |  |  |  | |
| Seek advice from safety consultant as soon as possible | | Compliance and Regulations | |  |  |  | |
|  | | Road repairs, Environmental improvements | Road transport and vehicles | |  | | 2 | 4 | 4 | | * Set up traffic management system * Fence off work areas and excavations * Carry out noise assessment * Use cable detection equipment | | 1 | | 1 | | 1 | | Y | |
| Protection of members of the public | | Environmental | |  |  |  | |
| Noise  Underground services | | Hearing loss | |  |  |  | |
|  | | Work on roofs | Falls from heights | | Property damage | | 2 | 4 | 4 | | * A prepared method statement is required * Scaffolds and edge protection to be adequate for the risk * Ladders to be of adequate length, set to a proper angle 1:4 and properly secured * Suitable toeboards and brickguards to be fitted * Only suitably trained operatives to be engaged in this work | | 1 | | 1 | | 1 | | Y | |
| Materials falling | | Property damage | |  |  |  | |
| Storage and stacking of materials | | Safety Signs | |  |  |  | |
|  | | Bench Saw | Contact with blade  Noise, dust  Flying particles | | Injuries, hearing loss and lung infections | | 2 | 4 | 4 | | * Only trained operatives to use * Check guards are in position * Ensure extraction is working * Ensure emergency stop is functioning * Ensure lighting is up to standard * Wear personal protection * Ensure rear table 1.2m is in position | | 1 | | 1 | | 1 | | Y | |
|  | | Work on scaffolds | Removal of components | | Falling objects resulting as injuries | | 2 | 4 | 4 | | * Use only certificated erectors * Choose scaffold type to suit i.e. tube & fittings or system scaffold * Ensure scaffold is complete and handover certificate obtained * Inspect scaffold regularly * Replace any missing components * Complete 7-day inspection register | | 1 | | 1 | | 1 | | Y | |
| Falls from heights | | Fatality and death | |  |  |  | |
| Overloading platforms | | Injuries | |  |  |  | |
| Falling materials | | Injuries | |  |  |  | |
| Falls from ladders | |  | |  |  |  | |
| Scaffold collapse | | Permanent Disablement | |  |  |  | |
|  | | Work from tower scaffolds | Falls from heights | | Fatality and death | | 2 | 4 | 4 | | * Ensure assembly is complete before | | 1 | | 1 | | 1 | | Y | |
| Falling materials | | Injuries | |  |  |  | | * mounting scaffold * Ensure overhead electrical supplies are isolated | |
| Overturned scaffold | | Injuries | |  |  |  | |
| Electric shock | | Shocks and burns | |  |  |  | |
|  | | Entry into sewer/confined spaces | Where possible open manhole on either side of the one to be entered  Ensure this is | | Injuries | | 2 | 4 | 4 | | * If gas is detected NO ONE must enter the sewer or manhole. Seek help from Head Office. | | 1 | | 1 | | 1 | | Y | |
| carried out prior to entering the manhole  Methane CH is lighter than air  Hydrogen Sulphide H2S is heavier than air  Carbon Monoxide CO i | | Air Contamination | |  |  |  | |
| s heavier than air  Carbon Dioxide CO2 is heavier than air | | Respiratory problems | |  |  |  | |
|  | | Foundation shutters | Manual handling | | Injuries | | 2 | 4 | 4 | | * Seek assistance for heavy or awkward lifts * Maintain clear access to work place * Separate work area if necessary * Provide banksman for mechanical lifts * Only experienced and trained operatives to be used * Work to manufacturers’ instructions * Report damaged components to supervisor | | 1 | | 1 | | 1 | | Y | |
| Falls of material | | Damage to property | |  |  |  | |
| Falls of persons (low level) | | Injuries | |  |  |  | |
| Excavation collapse | | Accidents | |  |  |  | |
| General site conditions | | Harmful to environment | |  |  |  | |
| Wet concrete | | Tripping and Slippery resulting as injuries | |  |  |  | |
|  | | Vertical or System Shutters | Falls from heights | |  | | 2 | 4 | 4 | | Work to design features  Work to manufacturers’ instructions  Provide banksman to control lifts  Separate work area if practical  Experience and trained operatives to be employed on this type of work  Provide suitable access ladders  Provide suitable work platforms or scaffolds | | 1 | | 1 | | 1 | | Y | |
| Manual handling | | Injuries | |  |  |  | |
| Falls of material and components | | Injuries | |  |  |  | |
| General site conditions | | Harmful to environment | |  |  |  | |
| Weather conditions | | Accidents | |  |  |  | |
| Wet concrete, shutter oils | | Accidents | |  |  |  | |
|  | |  | |  |  |  | |
|  | | Site Transport (Muck shifting) | Vehicle collisions | | Damage to property | | 2 | 4 | 4 | | Mark out safe route – tapes, notices  Advise all drivers  Define safe speed  Do not overload vehicles  Ensure reversing audible alarm is working | | 1 | | 1 | | 1 | | Y | |
| Falling materials | |  | |  |  |  | |
| Collision with personnel | | Injuries | |  |  |  | |
| Overturning vehicles | | Injuries | |  |  |  | |
| Reversing vehicles | | incidents | |  |  |  | |
|  | | Form work | Poor lifting for forms | | Fracture | | 2 | 4 | 4 | | * Provide mechanical lifting tools to move cement. * Provide training or working at heights * Develop and implement a fall protection plan * Inspect all ladders and scaffolds and follows the procedure. * Only competent persons to work under supervision. * Provide guards on the form work where there’s a risk of falling. * Provide gloves to all works, * Defective word must be replaced and discarded. | | 1 | | 1 | | 1 | | Y | |
| Exposure to collapse | | Fatality | |  |  |  | |
| Working at heights | | Fatality | |  |  |  | |
| Wood work | | Cuts | |  |  |  | |
|  | | Paving works | Defective tools | | Hand cuts | | 2 | 4 | 4 | | * Provide hand tools and inspections done * HSE Talks on handling on tools * Provide ears protection * Where possible provide non vibration * Competent person to operate a compactor * Dust control | | 1 | | 1 | | 1 | | Y | |
| Compactor | | NIHL, and Vibration Syndrome | |  |  |  | |
| Excavator | | Dust inhalation | |  |  |  | |
|  | | Operating a TLB | Exposure to Noise | | NIHL | | 2 | 4 | 4 | | * Provide ear protection and service equipment * Implement and develop excavation plan. * Only Competent person can use the Machinery | | 1 | | 1 | | 1 | | Y | |
| Falling of TLB on trenches | | Fatality and PD | |  |  |  | |
|  | |  |  | |  | | 2 | 4 | 4 | |  | | 1 | | 1 | | 1 | | Y | |
|  | |  |  | |  | | 2 | 4 | 4 | |  | | 1 | | 1 | | 1 | | Y | |
|  | |  |  | |  | | 2 | 4 | 4 | |  | | 1 | | 1 | | 1 | | Y | |
|  | |  |  | |  | | 2 | 4 | 4 | |  | | 1 | | 1 | | 1 | | Y | |

|  |
| --- |
| Persons in danger |
| * Workers undertaking the work |
| * Persons passing the site location/ truck routes, e.g. members of the public and persons in the Vehicles. |
| Personal protective equipment |
| * Safety Helmet, Gum Boot, Proper Gloves & Safety Goggles |
| Information, instruction and training |
| * All personnel in the team are to be made aware of the safe systems of work. |
| * Ensure that good housekeeping standard is maintained throughout. * Training and experience for personnel to use electrical equipments and vibratory equipments. * Educate the personnel to handle chemicals such as concrete… |
| Emergency procedures |
| * Site emergency procedures should make provision for the rescue of individuals from heights. |
| * First-aid facilities should be available to cope with any significant injuries that may arise from the work. |
| Monitoring and review |
| * Work should be monitored by Foreman and charge hand who are trained to ensure that any additional precautions or equipment required are provided. |

**RISK ASSESSMENT COMMITTEE**: Project Manager/ Project Engineer

Safety Manager/ Safety Officer

**Reviewed by:** (Safety Officer) **Approved by:** (Project Manager)

**RISK MATRIX**

**Risk Rating (RR) – Severity x Likelihood**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LIKELIHOOD**  **(PROBABILITY)**  **(P)**  **SEVERITY**  **(IMPACT)**  **(S)** | | **Rare**  Remote possibility (once every 3 years or more)  **1** | **Unlikely**  Could happen but rare (typically once in a year)  **2** | **Possible**  Could happen occasionally (on average quarterly)  **3** | **Likely**  Could happen often (on average once a month or more)  **4** | **Almost certain**  Could happen frequently (once a week or more)  **5** |
| **Insignificant** | **1** | **Low**  **1** | **Low**  **2** | **Low**  **3** | **Low**  **4** | **Medium**  **5** |
| **Minor** | **2** | **Low**  **2** | **Low**  **4** | **Medium**  **6** | **Medium**  **8** | **Medium**  **10** |
| **Moderate** | **3** | **Low**  **3** | **Medium**  **6** | **Medium**  **9** | **Medium**  **12** | **High**  **15** |
| **Significant** | **4** | **Low**  **4** | **Medium**  **8** | **Medium**  **12** | **High**  **16** | **High**  **20** |
| **Major** | **5** | **Medium**  **5** | **Medium**  **10** | **High**  **15** | **High**  **20** | **High**  **25** |

**RISK BASED CONTROL PLAN**

|  |  |
| --- | --- |
| **RISK LEVEL** | **ACTION AND TIMESCALE** |
| **1-4**  **Low** | Quick, easy controls should be implemented immediately and further action planned for when resources permit. Monitoring required ensuring controls are maintained. Manage through routine procedures. Go for economic improvements where possible. Incident report must be completed. |
| **5-12**  **Medium** | Aim to reduce risks but costs of prevention may be limited. Undertake a risk assessment of the situation / task and implement the appropriate actions. Actions should have a timescale and should be monitored. Where the risk involves work in progress undertake a risk assessment as soon as possible to ensure the safety of the situation or task. **Work should not start until the risk is reduced to an acceptable level.** Considerable resources may have to be allocated. Contact your Manager and Risk Manager by telephone about the actions that should be taken to reduce the risk/s. incident report must be completed. Incident must be added to service risk register. |
| **15-25**  **High** | **Do not commence the activity until** a risk assessment has been completed to ensure the safety of the situation or task. If it is not possible to reduce or eliminate the risk even with unlimited resources, work must remain prohibited. Inform your relevant Director, your Manager and the Risk Manager immediately by telephone. Incident report must be completed. Incident must be added to service risk register. |