Unit IG2: Risk assessment

Declaration: By submitting this assessment (Parts 1 – 4) for marking I declare that it is entirely my own work. I understand that falsely claiming that the work is my own is malpractice and can lead to NEBOSH imposing severe penalties (see the NEBOSH Malpractice Policy for further information).

Important note: You must refer to the document 'Unit IG2: risk assessment – Guidance and information for learners and Learning Partners' while completing all parts of this assessment. Your Learning Partner should provide you with a copy, but it can also be downloaded from the relevant resources section for this qualification on the NEBOSH website.

Part 1: Background

You should aim to complete this section in 150 - 200 words.

Topic	Comments
Name of organisation*	Omega Builders Cochin
Site location*	Kerala, India
Number of workers	150
General description of the organisation	Omega builders is a company which specially deals in building high rise development projects such as hospitals, hotels, residential buildings, institutional buildings and industrial projects. The selected project deals with the construction of 6 storey commercial building. Major activities in the project are concrete works, carpentry, welding works, electrical wiring, excavation works and plumbing for providing pipelines. Many vehicles are been used in the site for bringing materials and loading and unloading of the materials are also been done here. Also lot of equipment are been used at site that include excavator, generators, concrete mixer, crane and power tools. The work shift of the workers are scheduled from 8:30am to 5:30pm with 1 hour lunch break. They are working for 8 hrs a day in 6 days a week. Every Sunday is given as holiday.
Description of the area to be included in the risk assessment	The risk assessment is done by considering the whole construction site and activities done there.
Any other relevant information	The Project manager has the ultimate responsibility of the health and safety and he will report to the managing director.

* If you're worried about confidentiality, you can invent a false name and location for your organisation but, all other information provided must be factual.

You should aim to complete this section in 100 - 200 words.
Note: this section can be completed after you have competed your risk assessment.

Outline how the risk assessment was carried out this should include: • sources of information consulted; • who you spoke to; and • how you identified: - the hazards; - what is already being done; and - any additional controls/actions that may be required.	For collecting data required for the risk assessment the ILO standards were referred to know about the requirements and instructions related health and safety in construction site. ILO convention and recommendations were also referred that are mentioned below 1. ILO Convention C155 (https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C155) 2. ILO Recommendation R164 (https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R164) I checked what all are the policies of the company and whether they are followed or not and if they are reviewed at regular intervals. Further I visited the construction site and observed all the activities taking place at different locations in the site and If workers are using PPE while working. I spoke with the workers to know about their daily work process and their existing safety facilities and took a feedback. I also asked them about any previous incidents that had happened. I spoke with Site Supervisors and project managers regarding the existing health and safety control measures. I checked for other sources like previous accident reports, audit reports, medical reports for any accident patterns happening frequently in specific locations of workplace and also for previous enforcement notices. With all these I identified the hazards present in the workplace and existing control measures and then I evaluated the risk and came to know some areas that required further controls. For giving further controls and meeting requirements ILO guidelines were used.

Part 2: Risk Assessment

Organisation name: Omega Builders Cochin
Date of assessment: 8th September 2024
Scope of risk assessment: The risk assessment is done by considering the whole construction site and all activities done there

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
1.Working at height Workers are doing painting and plastering works on scaffold without guard rails	Workers working at height who are doing painting and plastering works They can injured by falling from the scaffolds. Injuries like broken leg, spinal disc injury, head injuries, serious disabilities, even lead to death. Other nearby workers, visitors under scaffold can get injured by objects falling on them. Serious head injuries, shoulder injuries, any disabilities, even death	Permit to work is enabled Scaffold is been erected by a competent person Before work all scaffolds are being inspected by competent person Ladders are provided for access and excess to scaffold Workers are wearing PPE like full body harness and safety helmets	1. Scaffolds should be equipped with edge protection like guard rails to avoid fall of workers and with toe boards to avoid materials or tools from falling (guard rail structure with top rail at 95cm to 115 cm from platform level, mid rail at 48cm to 60cm from platform level and toe boards for avoiding falling of materials or tools must be ensured)	1 month	Scaffold Supervisor
			2.Safety nets should be installed under scaffold to reduce impact of fall	1 month	HSE officer
			3. Scaffoldings should be provided with safety tags of different colours for safe and unsafe one.	2 weeks	Scaffold supervisor
			4. Needed instructions and training should be provided to workers about working at height and safe working on and near scaffolds	1 month	HSE officer
			5. The working area should be barricaded and warning signs needed to be provided to prevent people going under the scaffolds and avoid unauthorised access.	2 weeks	Work Supervisor
			6. Emergency rescue team and procedures needed to be formed for working at height.	1 month	HSE officer

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
			7. The PPE that are provided like harness should follow EN361 standards and helmets should be up to the EN 397 standards	2 weeks	HSE officer
2. Manual handling loading, unloading and shifting of materials, equipment etc.	Workers who are doing loading and unloading activities Not using proper lifting techniques to lift heavy weights can lead to strains, spinal injuries like injury to disc. Working in awkward positions repeatedly can lead to shoulder injuries, rotator cuff injuries, knee injuries and even broken bones.	Weight allowed to be carried by human is limited to 15kg Job rotations are implemented and sufficient beaks are given PPE like supporting belts and pads are provided	1. Substitute manual handling with equipment such as forklifts, trolleys	3 months	Site Supervisor
			2. Make arrangements to workplace to reduce distance to carry weights manually	2 weeks	Work supervisor
			3. Trainings should be given and information on manual weight lifting techniques	1 week	HSE officer
			4. Conduct health check-ups frequently for manual handling workers	1 month	Site supervisor
			5. Protective footwear with gripped soles should be given to prevent injury to foot and toes if materials are dropped and give better grip when walking	1 month	HSE officer

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
3. Slips and trips Workplace floor is wet and slippery due to rain and materials are scattered here and there	All workers including supervisors, managers and visitors of site Walking through the slippery floor can lead people slip and fall which can cause injuries like back injuries, fractures or head injuries Scattered materials on the floor can cause people to trip and cause injuries like head injuries, back injuries	Adequate lighting is provided to make pathways visible Barricade is done at area where water is spilled Signage were used to warn about the wet floor and for scattered materials. Induction trainings are given to visitors on activities and hazards of slip and trips at site	1. Drainages should be made to allow water flow and avoid accumulation in surfaces	2 months	Site Engineer
			2. anti-slip mats should be laid on paths where surface is slippery to reduce slipping	1 month	Site supervisor
			3. Housekeeping should be done before and after work	1 month	Work supervisor
			4. Regular inspections needed to be conducted to ensure housekeeping is done correctly and pathways are clear	1 month	Work supervisor
			5 Training for workers should include correct methods to do housekeeping	1 month	HSE officer
			6. PPE like anti slip shoes should be given to ensure better grip on floor.	1 month	HSE officer
4. Electricity Machines and tools with damaged cables and torn insulations.	Workers, engineers, supervisors , using these machines for work Contact with damaged cable can lead to the person getting an	Ground fault protection are provided like GFCI or RCD Equipment have emergency shutdown buttons	1. Damaged cables are needed to be replaced with new ones with better insulation	1 week	Site supervisor
			2. Install protective covers to cables to reduce damage and use cable management to organise them	1 months	Site Supervisor

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
	electric shock causing injuries like temporary unconsciousness, muscle pain If shock is even lethal I can lead to severe burns, cardiac arrest and even death	Inspections are conducted regularly before using machines or tools in work by an electrician PPE like insulated gloves are used when using high voltage machines.	3. Training should be given to workers on handling of machines and rearranging them after work	1 month	Work Supervisor
			4. Implement a response team capable of handling any emergency situations like person getting electrocuted	1 month	HSE officer
			5. PPE like sleeves covering arm, safety shoes that have nonconductive soles so that person is fully isolated should be provided.	1 month	HSE officer
5. Movement of people and vehicles in workplace Truck are moving in and out of the site for loading and unloading materials like sand aggregates etc.	Workers in outdoor activities, visitors in the site Vehicle collide with workers or visitors that cause serious injuries like fractures, internal bleeding and can lead to permanent disabilities and even death Vehicles can collide between other vehicles	One way system is implemented with competent person escorting vehicle with needed instructions Site speed for vehicles set at maximum 10km/hr Unauthorized vehicles are strictly prohibited to enter workplace	1. Separate path for vehicle movement and people movement should be built By installing guard rails, bollards, barriers to physically separate the paths.	3 months	Site engineer
			2. Convex mirrors are needed to be placed at places with confined turns or intersections.	1 month	Site supervisor
			3. Road markings for path for people and vehicles should be marked correctly to separate paths	1 month	Site supervisor

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	leading to large property loss and injuries to people operating vehicles like fracture or worst case death.	Ensuring no obstructions are present on path of vehicle movement Drivers are competent to drive large trucks	4. Signage like warning signs for people and vehicles should be fixed at needed locations.	1 month	HSE officer
			5. Periodic inspection of vehicles and periodic maintenance should done correctly	1 month	Work supervisor
			6. Workers and drivers should be given training vehicle movement, allocated parking area and information regarding different signage in the workplace	1 month	HSE officer
			7. Workers near to the vehicle moving area should be given high visibility jacket to increase their visibility	1 month	HSE officer
6. Fire Welding and cutting work using oxygen and acetylene with damaged hoses	Workers, Supervisors, workers nearby Damaged hoses can cause leakage and gases can come in contact with substance that can ignite a fire These can lead to injuries like severe secondary and tertiary	Flammable materials are removed from welding work area Cylinders are mounted on trollies for keeping them in upright position Work area is well barricaded with all signage placed at locations	1. Upgrade to electric arc welding which have lower fire risk.	3 months	Site supervisor
			2. New hose should be bought and old one must replaced	2 weeks	Work supervisor
			3. To reduce exposure to smoke ventilations should be provided so that smoke and fumes can be removed, additionally local exhaust system can be installed	1 month	Site supervisor

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	burns and sometimes leading to death. Fire can cause suffocation to workers nearby due to excessive smoke from fire causing coughing, headache and carbon monoxide poisoning.	DCP fire extinguishers are setup near the work area workers are trained to use firefighting apparatus Emergency response team is ready in dealing with emergencies in hot work PPE such as Flame resistant clothing, welding helmets, protective gloves and safety boot are been provided	4. Hot work permit system should be established	1 month	Site supervisor
			5. Regular inspection of equipment before start of work and regular maintenance of them to reduce malfunctions	1 month	Work supervisor
7. Work equipment and machinery Worker is using a grinding machine with safety guard not attached	Worker using the grinding machine, workers nearby and helpers Worker can get injured by his hand getting contact with rotating disc of grinding machine leading to cut injury or amputation Without guards when grinding machine is	Workers are given instructions to turn off power supply and disconnect plug from sockets during disc change Equipment connection are done at plug with ELCB protection PPE such as safety googles or face shields, ear mufflers, protective gloves are provided.	1.Replace existing machines with machines with better safety features like, without guard machine will not turn on	2 months	Site Supervisor
			2. Training and information regarding working of grinder, use guard and its adjustments should be given	1 month	HSE officer
			3. Regular inspection by safety checklist should be done before using the machine to look for any defects	1 month	Work supervisor

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
	used there is chance of kickback of small pieces cutting material towards the worker face, leading to cut injury and creating eye injury.		4. Maintenance should done periodically of machines.	1 week	Site supervisor
			5. Improve Supervision to ensure workers are following safety measures as given.	1 week	Work Supervisor
8. Hazardous substance (chemical) Dust particles coming from activities like drilling, cutting of concrete blocks , bricks etc.	Workers including supervisor, engineers and any visitors all are exposed to the dust Inhalation of dust particles from concrete can cause respiratory issues like coughing, wheezing and suffocation. Dust particles contain silica crystals which when inhaled can cause lung	Ventilations are provided around the workplace Water is used to supress the dust formed during the work Unauthorized entry is prohibited and it is shown by showing needed signage and barricades thereby reducing exposure Regular housekeeping is done before and after work	1. Dust extraction systems must be installed at source of dust generation	3 months	Site supervisor
			2. Activities in which high dust conditions can happen need to be scheduled in times such that there are lesser number of workers in site thereby minimise the exposure	1 month	Site supervisor
			3. Provide training to the workers in regarding hazards dust exposure and how to use the control measures	1 month	HSE officer

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
	diseases. Long term exposure of dust causes conditions like bronchitis and emphysema	PPE are provides which include respirators, dust masks, face shield and safety goggles	4. Health check-ups should be conducted once a month for people exposed to dust to analyse for any health issues	1 month	Site Supervisor
9. Health welfare and work environment Workers are working under high temperatures	All workers working under sunlight Workers exposed to extreme temperatures of heat can get injuries like heat stroke, heat rashes due to dehydration and can cause dizziness sometimes temporary unconsciousness	Adequate shelter rooms are provided throughout the workplace Many water coolers setup in different locations of site and inside shelters In summer time outdoor works causing direct sunlight exposure are called off between 12pm to 4pm as per the laws and regulations Near to each shelter first aid rooms also provided	1. Schedule needed work to morning or evening at low risk times to eliminate heat exposure	1 week	Site Supervisor
			2. For indoor activities install air conditioning and use fan to improve air circulation	1month	Site Supervisor
			3. Create changes in worker shift pattern during summer times	1 week	Site Supervisor
			4. Implement Emergency response team for high heat exposure emergencies	1 week	HSE officer
			5. Training for workers to identify heat stress, recognizing symptoms of heat stroke should be given	2 weeks	HSE officer
			6. Health camps should be conducted to monitor worker's health	1 month	Site Supervisor

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
			7. PPE such as cooling apparels, heat resistant vests should be provided	1 month	HSE officer
10.Noise Workers are exposed to excessive noise produced by generators	Workers, visitors and public nearby the workplace Excessive noise exposure can lead to stress, lack concentration in work. Prolonged exposure to noises above 80 dB can develop tinnitus or permanent hearing loss	Workers are having 30 minute rest break in between work Daily instructions and training are given about working in loud noise exposure and use of PPE PPE are provided like ear plugs and ear mufflers according to EN 458 standards	1. Low noise or noise free equipment should be used such as solar generators, inverter generators, electric generators	3 months	Site supervisor
			2. Generator should be placed inside noise proof enclosures	3 months	Site supervisor
			3. Machines should properly service or maintained and lubrications for moving parts should done periodically to avoid unwanted noise	1 month	Work supervisor
			4.Job rotation should be implemented To reduce exposure	1 month	Site Supervisor
			5. Adequate breaks should be given workers near generator to reduce exposure	2 weeks	Work Supervisor

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title
			6. Supervisors should make sure that workers are using ear plugs and mufflers during work as per the training given to them.	1 month	Work Supervisor
11. Vibration Workers are using vibration induced heavy pneumatic jack hammers, grinding machines for a long time	Workers exposed to excessive vibrations by using equipment like grinders, jack hammer. Prolonged exposure too vibrations can cause Hand-Arm vibration syndrome, muscle and joints injuries like dislocations and musculoskeletal injuries, it can lead to back pain, strains uneven blood flow and headaches.	Equipment are regularly inspected by competent person Tools are maintained and serviced to ensure lesser vibrations Workers educated on hazards from vibration and importance of safety measures Workstation is provided to reduce vibrations and provide comfort to workers Anti-Vibration gloves, ear plugs and ear mufflers are provided	1. Substitute high vibration tools with lower ones wherever possible	2 months	Site Supervisor
			2. Use latest equipment with lesser vibration features like vibration dampening handles	2 months	Site Supervisor
			3. Use vibration sensing equipment to measure the amount of vibration to check if it's under limit for protecting worker and other equipment	1 month	Site supervisor
			4. Work rotation need be done to reduce exposure	1 week	Site Supervisor
			5. Sufficient breaks shall be allocated to reduce continuous exposure	1 week	Work supervisor
			6. Use full body padded clothing to reduce vibration impact on the body	1 week	HSE officer

Hazard category and hazard	Who might be harmed and how?	What are you already doing?	What further controls/actions are required?	Timescales for further actions to be completed (within …)	Responsible person's job title

Part 3: Prioritise 3 actions with justification for the selection

Suggested word counts
Moral, general legal and financial arguments for all actions: 300 to 350 words
For EACH action:
Specific legal arguments: 100 to 150 words
Likelihood AND severity: 75 to 150 words
How effective the action is likely to be in controlling the risk: 100 to 150 words

Moral, general legal and financial arguments for ALL actions

Moral, general legal and financial arguments	**Moral Reasons** Omega builders as an employer should have moral obligation to ensure that they are providing the health and safety measures for their workers. Employees have worked hard to give each success in every milestone of the company. These employees are coming for livelihood through the work, they do not want to get hurt or get into an accident. The workers they have families their livelihood and economic stability depends on the worker. Accident to worker cause problems to financial stability of the family, worker have children whose education can get stopped due financial issues. If the accident leads to any kind disability in which worker can't work anymore or death happens to the person the livelihood of the family affected negatively. It is the workers right that they get to their homes safely. Worker getting into accident can cause fear and mental issues to other co-workers, this will affect the overall productivity in the work, so employer should provide health and safety measures and ensure the workers safety to get better production in work. **Legal Reasons** As per the ILO Convention (C155) and Recommendation (R164) it is the employer's duty to provide safe workplace. The workplace should be safe and there is no risk of injury to workers there. Violating the law can lead to accident in the workplace which causes enforcement raids in the site. This can lead to improvement notices or if severe violation are detected, fines can be imposed on company, also managers can get arrested for violating the law leading to imprisonment under civil law or criminal law in court, causing a bad business reputation **Financial Reasons** In case of financial causes any accident occurring in workplace can lead to huge financial loss to company in terms of various ways. These are termed as direct and indirect costs.

	Direct costs • The first aid treatment and medical expenditures should be given to the worker in case of accident • During time after injury worker needs to payed with sick pay • Property loss like damaged machine, tools. They need to be repaired or new should be bought. • Worker injuries means shortage in number of workers so production loss can happen Indirect costs • Injury of worker can create mental disturbance too co-workers so staff morale decreases which affects in their quality and efficiency in work leading to delay and loss in production • Production delay causes orders to be late creating negative impact on customer goodwill • Worker injuries if needed should be replaced with new ones so the recruitment and training for new workers can cause losses • Damage to public image and business reputation happens leading to loss of new orders, contact cancellation, companies refusing to do partnerships which causes loss to company • Damage to industrial relations leading to actions like strike causing production loss Company can handle some of the costs under insurance. Some like property loss, workers compensation, and medical costs can be handles via insurance. On other case production delay cost, criminal fines, sick pay can't be insured. If insurance claim is used next premium will be costlier, Also most of the insurance companies doesn't give insurance to companies with bad business reputation due work accidents. So by providing a safe workplace with all the control measures company can avoid accidents and avoid all kind of losses and make profitable future.

Justification for action 1

Action (Taken from column 4 of risk assessment)	Scaffolds should be equipped with edge protection like guard rails to avoid fall of workers and with toe boards for avoiding objects from falling (**Hazard category: Working at Height**)
Specific legal arguments	According to the ILO Convention C155 and Recommendation R164 it is the responsibility of Omega builders to provide a safe workplace to the workers. They should provide protective equipment,

	machinery all of these to the workers to ensure their safety. Although scaffolds are provided, scaffolds not having with guard rails or toe boards shows that the workplace is not fully safe. As per ILO convention C167 Article 14 Scaffoldings should be constructed in accordance to the national laws and regulations, also it must also be inspected by a competent person. So the existing scaffolds must be safe in accordance with the laws and regulations. So to fulfil these legal terms Scaffolds should be equipped with Guard rails and toe boards avoid risk of people falling and materials or tools falling from above.
Consideration of likelihood AND severity • types of injury or ill health • number of workers at risk • how often the activity is carried out • how widespread the risk is	The likelihood of injuries happening by working at height is very likely. Severity can categorized into 4 **Minor:** Injuries like body scrapping against rough surface, muscle pain and wounds which can heal with a first aid treatment **Major**: Injuries like joint dislocations, bone fractures and concussions which require medical treatment like surgery **Severe**: spinal injuries like fractures which can cause paralysis, damage to internal organs under impact which need complex treatments **Fatal:** falls from significant height which can cause death of the person Working at height without protection can cause injuries like fractures to the arms and legs, spinal injuries leading to chronic pain or even paralysis, fall from height can cause internal bleeding, also if injury is severe it can cause permanent disability and worse case death of person 15 workers are regularly working on scaffolds doing different works at different heights also 20 workers are working near the scaffolds. Many people move here and there sometimes under the scaffolds also are at risk Risk is widespread to workers working on scaffolds at different height with chance of falling from height and to workers working near the scaffoldings. People unknowingly standing under the scaffold have risk of tools or materials fall from height on them.

How effective the action is likely to be in controlling the risk. This should include: • the intended impact of the action; • justification for the timescale that you indicated in your risk assessment; and • whether you think the action will fully control the risk	Installing guard rails with toe boards can very largely reduce the risk of working at height, guard rails are installed at certain height ranging from 95cm to 115 cm which prevents workers standing to edge of scaffolding from falling. The toe boards place at lower portion prevents materials tools from falling down. The time given for installing guard rails is 1 month as the installation guard rails, firstly needed to be infirmed to top managers, fund allocation, ordering goods needs and there installation have to be considered. This action along with a supervision on work to check correct use of PPE like full body harness, regular inspection of scaffold and providing training to workers can control the risk to the minimum level.

Justification for action 2

Action (Taken from column 4 of risk assessment)	Damaged cables are needed to be replaced with new ones with better insulation **(Hazard category: Electricity)**
Specific legal arguments	Omega builders has responsibility to provide safe workplace to employees by implementing control measures as per the ILO convention C155 and recommendation R164. Article 16 of C155 mandates that employers should ensure safe workplace, machinery, equipment and processes in the site without risk to the workers. Damaged cables with torn insulation are not according to the standard, it can cause a risk of electrical shock or fire, failing to provide a safe workplace. Employers must ensure that equipment are maintained in safe condition, damaged cable shows inadequate maintenance of equipment which again shows signs of not providing safe workplace.
Consideration of likelihood AND severity • types of injury or ill health • number of workers at risk • how often the activity is carried out • how widespread the risk is	Likelihood of workers being exposed electricity is very likely, Machines are connected to power supply via these cables and are been used daily. For Severity it can set into 3 categories: **Minor:** Electrical shocks or burns which can treated with first aid or basic medical help **Major:** Serious electrical shocks causing short term unconsciousness or burns which require hospitalization **Severe:** fatal electrical shocks of high voltage which cause severe burns with permanent disability and even death

	Contact to live wires passing high voltage can cause severe burns and cardiac issues. Due to electrical shock muscle cramp can happen in which muscle control is lost and worker can't remove hand from exposed wire and cause more burns even worse death. At least 10 to 15 workers work daily by using equipment with a damaged cable regularly for 5 to 6 hours depending on the work time. Daily operation with damaged cable means risk is higher as live voltage is exposed in these cables. Risk is High as it affects ant worker using the machine with damaged cable or other worker walking by these cables can accidentally step them, getting an electrical shock.
How effective the action is likely to be in controlling the risk. This should include: • the intended impact of the action; • justification for the timescale that you indicated in your risk assessment; and • whether you think the action will fully control the risk	Removing damaged cable and replacing it with new ones with better insulation removes the potential hazard like electrical shocks and burns. It avoids exposure of live voltage or live wires to workers or others nearby. Also electrical faults to machines due to damaged cables are also reduces. Timescale given to provide the new cables is 1 week. Until damaged cables are replaced, existing ones show a severe risk to electrical hazards. Replacing or installing new cables can be done in day which ensures no production lag if immediate action is taken to comply with the standards Replacing the damaged cables with new ones ensure that there is no unwanted leakage of current. Reducing the risk of workers getting electric shocks while working. Also with regular inspection of cables and electric systems before starting the work can fully control the risk

Justification for action 3

Action (Taken from column 4 of risk assessment)	Dust extraction systems must be installed at source of dust generation **(Hazard category: Hazardous substance- Chemical)**
Specific legal arguments	According to the ILO convention C155 it is the responsibility of omega builders to provide safe workplace to the workers. By Article 16 It is the employer's responsibility that workplaces, machinery, equipment and process under their control are safe and without risk to health. Employer should ensure that chemical, biological and physical substances and agents under their control are without risk to health. By ILO convention C148 Work Environment article 10 employer should provide the protective clothing like workwear which avoid accumulation of dust and protective equipment like masks or respirators to prevent risk of accidents or adverse effects on heath due to the exposure to dust particles in air.

	Also recommendation R 164 supplements C155 by providing detailed guidance to comply the policies in C155. Workers should be provided protective measures to work in air polluted condition like dust and it is the duty of employer and right of every worker.
Consideration of likelihood AND severity • types of injury or ill health • number of workers at risk • how often the activity is carried out • how widespread the risk is	**Likelihood** of workers to be exposed to dust is likely Considering **Severity** I categorise it into 3 **Minor**: small breathing irritations manageable with first aid treatment or basic medical treatment **Major**: significant breathing problems like asthma, bronchitis which needs more medical treatment facilities **Severe**: severe conditions like silicosis severe chronic lung diseases which can cause long term disability or can become threat to life. Inhaling dust particles from concrete and bricks can lead respiratory problems like coughing wheezing. Fine crystal particles contain silica which cause silicosis to the lung causing inflammation of tissues in lungs. Approximately 30 to 40 workers work for 8 hrs daily according to the shift so regular exposure to dust can cause health issues as they are doing the work regularly. The risk here is large one as workers are been directly affected while doing work from source itself, also dust spreads through the air to nearby surroundings creating air quality problems to other parts of work site
How effective the action is likely to be in controlling the risk. This should include: • the intended impact of the action; • justification for the timescale that you indicated in your risk assessment; and • whether you think the action will fully control the risk	The control measures are there to largely reduce the amount dust produces at the source itself so that dust is removed before it exposed to workers or being mixed in air to surroundings. So we are reducing significant amount worker exposure to dust and improved air quality for all workers with safe healthy workplace, thereby reducing any cases of respiratory problems like asthma, silicosis. To install the extraction system it would take at least 3 months for it be functional. Procedures include approval after discussing with top managers, fund approval and allocation, selection of suitable extraction system for the site, ordering parts of the extraction system, installation and giving training to give maintenance of machine, all operations will take at least 3 months complete. Extracting systems at the source of the dust particles is very effective to control dust hazards, catching dust before exposure and mixing in to the environment ensures that this risk can be fully controlled ensuring safer workplace.

Part 4: Review, communicate and check

Suggested word counts for each section:

- Planned review date or period and reasoning for this: **50 - 100 words**
- How the risk assessment findings will be communicated and who needs to know the information: **100 - 150 words**
- Follow up on the risk assessment: **100 - 150 words.**

Planned review date/period with **reasoning**	As per the company policy Omega Builders does review of risk assessment annually. The next review date is 7th September 2025. If any other conditions like, changes to workplace in design, new work type are introduced, new officer take charge of site, latest technologies like new machinery are bought to the workplace, an accident occurs and modification of laws happen, In all these conditions risk assessment should be reviewed.
How the risk assessment findings will be communicated **AND** who you need to tell	The report will be discussed with the project managers and managing director after the evaluation talking about the viability and control strategies to improve the current situation by bringing policies. Then I will appoint a meeting with project managers with safety officers, site engineers and site supervisors to discuss about the further improvements needed in the site. They will discuss about holding safety meetings and toolbox talks with staffs. Discussions with work supervisors about improvements in training and inspection methods. Participant data will collected to ensure all have attended and recording of meetings will be taken. Periodic meeting will be done project manager will be done to update everything. Copy of the risk assessment will send to the top authorities by email and on notice boards for public view.
How you will follow up on the risk assessment to check that the actions have been carried out	Setting up reminders I will follow up to check on the updates. I will create document consisting of intend actions, there deadlines, names and designations of responsible people for action and current status of each action on how much is it finished by conducting a site visit after 3 weeks. If any hurdles are identified, I will personally check on the matter and discuss with managing director and ensure the needed assistance is given and needed resource is provided. If any action is delayed due to any individuals delaying task or neglecting it then serious actions will be taken by reporting to the managing director. All in all I will ensure that the actions are completed on time.