Unit I: 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*	SEPC POWER PRIVATE LIMITED
Site location*	SEPC, Thoothukudi, Tamilnadu
Number of workers	28
General description of the organisation	SEPC Power private Ltd is a power plant converts coal into electricity, electric transformers and running turbines for the process. The converted electricity is transferred to nearby districts for power supply. Inside the Power plant coal is stored in a place called coal yard and transferred through conveyors connected with junction towers to the main plant and the process done within the boiler and turbine. Some of the works undertaken that includes "hot works, moving machineries, painting, underground pipeline maintenance ,work at height, engine repairs etc. The working hour for the workers is 8 hours and the plant allows them to work under a shift schedule and is closed at the weekends. The plant runs 24 hours a day for a better production.
Description of the area to be included in the risk assessment	The risk assessment will cover the entire plant and the main work-related areas.

Any other relevant information	The Site In Charge will be responsible for Health and Safety in the workplace.

* 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.	I began to search for ILO code of practice and convention followed by the company but I found that the organisation couldn't follow such ILO convention or recommendation those are highlighted in the risk assessment column. The source which are used for carrying out this risk assessment are ILO conventions eg: C155 (Occupational Safety and Health Convention) & C174(Prevention of Major Industrial Accident Convention) 1981 and code of practices eg: CoP2.0(Personal Protective Equipment),3.0 (Occupational Noise) and 28.0 (Hot Work Operation) etc. http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312300:30 http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312319:NO http://www.adphc.gov.ae/en/legislation/code-of-practices When I entered the power plant there was site security office was available there infront of the entrance gate. The person incharge there gave me a brief information about the organization's activity and their safety culture. I couldn't get the entire information about the activities of the organisation so I decided to go inside the plant to know entire information's. While entering inside the company I met the Site-In-Charge and asked him about the work process which are carrying out presently, then he explained me about the main activities including hot work, painting, underground pipe maintenance and engine repairs. The dangers associated with the work activity and the current control measures they have been using were made clear to me as a result. In order to identify what were the accidents in the plant for past 10 months, I had gone through there accident reports, induction training records, inspection documents, maintenance records , records of housekeeping and the absence history of workers to know there were any patterns of illness. After completion of carrying out risk assessment it was showing that there are some additional control measures that need to be implemented and those are given in the risk assessment section.

Part 2: Risk Assessment

Organisation name: SEPC POWER PRIVATE LIMITED
Date of assessment: 08-08-2022
Scope of risk assessment: Work activities in the power plant

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)Hazardous substance Coal dust particles found presented in the atmosphere of coal storage area	All workers inside the power plant , and visitors in the organisation. A high quantity of coal dust is constantly present due to the frequent and routine activities that are undertaken. Coal dust particles are being inhaled by people. This can result in a range of respiratory health issues, from short-term (acute, like occupational asthma) to long-term (chronic, like occupational malignancies) Contact with	There are dust masks available, however they are not required to be worn.	• Conveyors and coal mill operations will be contained in an area with an appropriate local exhaust ventilation system. • Acquisition of dust extraction systems for use of 'on tools.' • Purchasing of face masks to go with extraction equipment, inside the coal storage area. • Use of safe masks in conjunction with extraction devices required. • If the above mentioned measures are unable to completely control the risk inside the coal storage, consider RPE. • Provide fire sprinklers	• 5 months • 3 weeks. • 1 month • 1 month • 2 days	• Finance director • Workshop manager • Stores manager • Finance director • Shift incharge

	eyes will cause (eye irritation and itching)		both the sides of coal storage to control coal flying through the air, by watering the storage area it will help control the coal dust in the air. • Safe system of work to be followed. • Eye wash facility is available. • Arrange PPE's for the workers working inside coal storage area.	• 2 months • 2 days • 1 month • 2 days	• Finance director Finance Director • Finance director • Safety office

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
2) Lone worker Security staff working at the second gate, the CCTV surveillance is not available in the area.	Security staff. The security officer may face tiredness and ill health, no caring provided. Chances of intruders getting into the company, domestic violence from staffs entering through the punching gates, arguments during checking of carry bags.	Provided cabin to security staff Radio communication provided. Job rotation for security staffs.	• Provide CCTV surveillance to monitor. • Continuous supervision by the superiors. • Provide adequate rest intervals. • Provide training regarding self-defence. • Recruit and appoint physically fitted staffs as security employees.	• 1 month • 1 week • 2 days • 3 months 1 month	• Security Supervisor • Security Supervisor • Security supervisor • HR department • Safety 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)confined space Some workers going inside a fresh water tank for cleaning purpose, but no proper ventilation is provided	The water tank cleaning workers. Poor ventilation inside the water tank will eventually cause a build-up of carbon dioxide and little oxygen, which Increases your risk of experiencing headaches, weariness, and shortness of breath.	Provided illumination inside the tank. Hole watcher with login/ out sheet Oxygen meter provided to check the deficiency of oxygen in the tank.	• provide adequate ventilation system such s air blower. • Make sure there is no obstruction in the way of entrance and exit. • Give trainings on confined space works. • Make sure everyone working inside the confined space is in good physical condition. • Proper supervision required for the confined space workers.	• 2 weeks • 1 week • 1 week • 2 weeks • 1 week	• Finance manager • Site supervisor • Safety officer • Safety officer • 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
4)Work at height Few employees were doing cable tray fixing work on the top of the turbine at 10.Mtr by using mobile scaffold and they were using FBH as well. But one of the worker among them found he hasn't anchored his harness hook rather he put them on his shoulders and was doing his work	The worker who hasn't anchored his harness hooks Falling from scaffolding without safety harness may cause personal. In case of any slip or fall from the scaffold it will result in personal injuries to the worker such as fractures, injuries even fatality.	. FBH has been provided There are ladders available for secure access Guard rails on the scaffolding provided for extra safety from falling. There are tags provided to verify that the scaffold is erected and inspected properly.	• Make sure everyone working on scaffold is wearing a safety harness. • Inform workers that how to utilise the safety harness and what can happen if they don't. • Provide instruction on the precautions that should be taken when working at height. • Use all the necessary PPE's while working at height	• 4 days • 2 days • 1 week • 1 day	• Safety officer • Safety officer • HSE officer • 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
5) Noise Near the turbine generator area it was found more noise were generating in that area	All workers inside the turbine area and visitors to the site. All of these issues resulted from workers becoming more stressed out, experiencing temporary hearing loss , and maybe developing hypertension due to constant noise exposure without using ear plugs.	Machine moving parts undergo routine maintenance. In order to lessen exposure to noise , job rotation is implemented PPE's offered to workers and employers in the turbine area.	• To avoid issues brough on by unwanted sound, isolate the workspace to prevent unauthorised entry of other workers. • Provide acoustic heaven and sound controlling barriers in the area. • Use machine's with lower speed. • Notices with 'Noise prone area' written on it must place on high noise areas.	• 3 days. • 1 month • 2 weeks. • 1 day • 1 month	• Safety officer • Finance director Finance director Safety officer Site manager or shift incharge

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
			• In order to prevent noise from the machine, make sure to maintain machinery on a regular basis. • All workers and employers working in the turbine area should be given high-quality earplugs and ear muffs.	• 1 week	Supervisor or site manager

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) Fire Diesel found kept in two small cans near to the generator which is used for welding activity and a worker was doing welding work as well.	Everyone working in there could be impacted, as well as the general public. Injuries include personal burns, fatalities, and property damage are likely to result from fires started by sparks from welding work.	There is a fire extinguisher close to the work area. Adequate ventilation facilities available. Required PPE's are worn by the workers. Designated area for welding work to be provided.	• Keep all the flammable substance away from the hot work area • Inform the workforce that hot-work shouldn't be done close to a fuel storage place. • Regular inspection to be carried out by a competent person. • Establish emergency plans, minimise negative effects in the event of fire.	• 3 days • 2 days • 3 days • 1 month	• Supervisor • Safety officer • Safety officer • Site manager

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)Electrical hazard Steel plate cutting work were doing in the turbine area and it was found that the one end of the cutting machine's electric cable is not properly insulated. Workers working and even took maintenance without shutting down the energy sources.	Fabricator and helper Potential harm includes thermal burns from coming into contact with electric shock, cardiac arrest caused by the heart's electrical effect after the shock, and more (eg: the worker may not able to continue his work if get electrical shock due to touching non insulated cable).	Improvements in electrical installations in the turbine area by a competent electrician and a proper checking of the installation is done by the electrician recently. Each workers has received training in identifying flaws, and they are all familiar with what to do if faulty equipment is discovered in the work area. There are trained first aiders on hand who can help sufferers of minor electric shocks can prevent the entry of other workers by barricading the restricted working area.	• Isolate the machine's power source (LOTO). • Provision of MCB • Re insulate the circular cutting saw with dependable, approved cable. • Non-electrical workers will receive electrical safety training at work site. • The worker should do a pre-use inspection before beginning the work.	• 2 days • 4 days • 2 days. • 1 week • 1 day	• Fabricator/Competent person • Fabrication supervisor • Fabrication supervisor. • Safety officer. • Worker

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
8)Work at height Employees found doing guard fixing work on a machine at 12M floor of the boiler. And among them few of the employees found without hard hat and safety harness, their hard hats were left on the corner of the floor and they are working between machine's , a temporary platform must needed for safe working.	The workers that don't wear all the protective equipment that has been provided to them. Falling from height while working, the worker could sustain bruising, sprains, or more severe injuries such as internal injuries or head injury that could be fatal.	The site manager or other qualified individuals monitor work areas in power plant daily to make sure all equipment, including tools and protective gear, is available. Safety harness is provided. In the power plant, safety nets system are provided. PPE's include hard hats, eye protection glasses, safety gloves and safety boots are provided.	• Provide scaffolding with safe guarding's. • Adequate trainings on work at height procedures and safety measures while working. • Only after all necessary PPE has been worn, then the workers are allowed to begin their task. Provide instruction on how to utilise personal protective equipment at work and what can happen if you don't. Constant monitoring to ensure that everyone is	• 1 week • 1 week • 2 days • 2 days 2 days	• Site in-charge • Safety Officer or supervisor • Safety officer Supervisor Supervisor

			wearing PPE atworking.		

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
9)Manual handling A worker was discovered on the fourth floor of the building carrying a box of cements, which contained two packets of cement, weighting a total of 10KG(5kg×2). Maximum allowed to carry weight on shoulder is 5kg.	the worker that carrying cement box. Carrying items on shoulders that weight more than is permitted for shoulder carrying, It will cause musculoskeletal disorders (MSDs) such as pain and injuries to arms, legs and joints, tiredness, and repetitive strain injuries.	Used proper PPE's while working. There is a clear, well-lit pathway is available.	• Supplying of 2 hoist elevators in the building. • Elevator inspected regularly. • Decrease the load's weight • More workers should be hired for the work(increasing man-power).	• 1 month • 2 weeks • 1 week • 3 days	• Management • Safety officer • Supervisor • Site management

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
10)Electrical Hazard Welding workers were using 380v distribution panel board for doing welding work. Due to having damaged lock in the panel board door, it was kept just closed which anyone can open and have access to it. This might result unauthorized people to access to it and have a chance of getting electrocution from it.	The Welder. Contact with electricity while welding work being carried out on the panel board, cause burns, electric shock and maybe death.	Frequent inspection on panel board done by a competent electrician before each activity to ensure it is safe to use. Instructions on doing the work is provided to trained electricians.	• Barricades the area where panel board is kept to prevent unauthorized people access to it. • Ensure the availability of safety signage (no access to unauthorized persons) on panel board. • There are trained first aiders on hand who can help sufferers of minor electric shock. • Every employee is informed of the emergency procedures for incidents involving electricity.	• 3 days • 2 days a week 2 weeks	• Safety officer • Safety officer • Safety officer • Safety officer
11) Fire There is no fire extinguisher in the storage area for flammable materials. In the vicinity of the storage room for combustible materials near the turbine area, management has not provided a fire extinguisher, and the storekeeper is unaware	The water tank cleaning workers. Poor ventilation inside the water tank will eventually cause a build-up of carbon dioxide and little oxygen, which Increases your risk of experiencing	The store keeper had received training on how to utilise a fire extinguisher in the event of fire. There is sprinkler system provided in the storage room. There is emergency preparedness	• Put a fire extinguisher in the store room area. • Assign a person to do routine inspections to ensure the fire extinguisher is maintained properly.	2 days • 1 month	• Safety officer or store keeper. • HR Manager.

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
of the potential consequences if there is no fire extinguisher available in the case of fire.	headaches, weariness, and shortness of breath.	available to lessen the severity of a fire disaster.	• display sign boards near the extinguisher.	• 2 days	• Safety officer
12) Slip and trip Water was accumulated on the floor in the painting work area, which could cause someone to trip and fall. Water came from the sprinkler line leakage.	Anyone who is doing the painting work and anyone who might enter the room. Injuries include fractures and bruising are likelyto result from slipping on a damp floor.	Workers are using appropriate PPE, And they are using the proper equipment inside the work area. Workers were instructed to keep their workplaces clean, but on thatparticular day ,they didn't followthose directions	• Make sure to practice good housekeeping in the painting area. • The sprinkler pipeline leakage should be arrested and the leakage repaired. . Give the first aid box provision at the painting work location • Set first aid care to the workers at the site. Availability of adequate identification signage on the work entrance .	• 1 week • 3 weeks Before the workstarts • 1 week 1 week	• Housekeeping supervisor • Site incharge Safety Officer • Safety officer Safety 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

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
13) Vibration Grinding work at the boiler area.	Continuous use of grinders could lead to vibration white finger or even hand-arm-vibration-syndrome (HAVS).	Provided trainings on hand-held tools. There is a maintenance schedule in place for all hand-held devices, including vibrating devices.	• To ensure that vibration tools are not used for an extended period of time, a monitoring system must be installed. • Consider establishing a	• 1 month • 5 months	• Workshop manager • Finance director

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
	Workers working in workshop. .		health monitoring programme for all impacted workers. • Create a formal purchase policy to make sure that only appropriate equipment is brought to lower the risk of HAVs.	• 1 month	• Finance director
14)movement of people and vehicle The moving vehicles across the road is bit faster than the speed limit set for the power plant, pedestrians are not aware of these fast-moving vehicles.	Pedestrians (workers, employers or visitors) Passing the road while vehicles are moving, may cause serious injuries, hit by vehicles, or even death to the personnel.	Speed limit set for moving vehicles inside the company is 20km/h	• Provide bridges for crossing, for a safe passage to the both sides of the road. • Safety sign boards, speed limit warning boards should be implemented. • Recruit Well trained drivers and all instruction on road safety should be followed by the drivers.	• 1 month. • 1 week • 2 weeks	• Finance director • Safety officer • Site incharge or Safety 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
			• Wear seat belts while driving and maintenance of the vehicle been checked by the competent vehicle repairing department.	• 1 week	• Driver and vehicle repair department

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	The moral duty of Sepc Power Private Ltd. Is to guarantee the wellbeing of all workers. Nobody wants to hurt themselves or other people. Workers merely perform their duties for daily wages; they do not incur significant debt that their families cannot afford. Long-term illnesses and injuries also have a possibility to focus attention on the mental health of our employees. If by doing this, bystanders could be exposed to serious injury to other workers. The company follows the legal standards that meets or exceed the minimum standards set out in C155 and R164. The company might discover that personnel who were harmed at work could file civil lawsuits against them. After the employee has left Sepc Power Private Ltd's employ, some of these claims may be made. A significant amount of compensation may be due in civil cases, and in addition, there may be significant legal costs (attorneys, court costs, etc.). I should add that many of these expenses would not be recoupable from the insurance provider. If these minimal legal requirements are not met, the authorities may take enforcement action or file a lawsuit. Successful prosecution can result in a fine and, in many countries, incarceration for offending parties. If any accidents occur, the organisation will be subject to legal proceedings from the enforcement authorities, including prosecution, prohibition (the stopping of all work on certain activity), and fines from criminal courts. This could result in a significant loss for the business and harm its reputation. When an accident occurs because of dangerous conditions, the organisation will be responsible for both direct and indirect costs. The following list of direct costs associated with accidents are:

	• Injured person (sick pay, emergency care, compensation for the victim that is likely to be covered by insurance, raising in insurance rates as a result, and costs related with the injured workers rehabilitation and return to work). • Fines accessed by criminal courts. • Any building's damaged equipment should be repaired or replaced. Indirect costs associated with accidents caused by the aforementioned three circumstances include the following: • Staff time taken away from productive tasks so that employees can investigate the accident, write reports, visit patients in hospitals, deal with injured person's family, and attend legal processes. • Decrease in the staff morale. • Damage to the reputation of the public and the business. • Recruitment and training expenses for temporary or replacement staff. • Industrial losses that could trigger strike action.

Justification for action 1

Action	Keep hot work areas separate from the fuel storage area **(hazard category 'fire')**
Specific legal arguments	According to ILO convention 1988 Article no.C167, Sepc power private Ltd. Is required to fulfil a number of specific requirements. In accordance with the factories act of 1948 and ILO's convention, 1988 No. 167 Article 29 paragraph 2, management is required to provide adequate and proper storage facilities for flammable liquids, solids, and gases in order to prevent the start of fires due to combustible substances. The ILO codes of practice (cop) says that, hot work should only be done under proper supervision, according to hot work safety regulations, in order to limit the risk of fire from welding, flame cutting, and hot work, all safety precautions should be implemented while performing the task.
Consideration of likelihood AND severity	Due to proximity of the welding operation to a fuel storage area and the **Likelihood** of welding sparks igniting a fire, this condition is more likely to result in a fire. When we consider the implications or severity of this issue, we see that its highly serious because it occasionally results in fatalities among workers and the general public.

	When considering the **severity**, I set 4 categories: • Minimal: no injury or damage occurred • Minor: injury requiring first-aid and/or slight damage caused to plant/equipment/buildings • Major: injury requiring hospital treatment /stay and/or significant damage caused to plant/equipment/buildings • Catastrophic: death and/or irreparable damage to plant/equipment/buildings The risk's **severity** level has been set to 'major to Catastrophic,' according to the rating system. That means resulting from the fire at the fuel storage will cause serious injury or death to the affected person. People get harm while working near the fuel storage. From total 28 people in the organisation, the chances of getting hurt by people is so high , that means the cause of fire may affect several number of workers at the organisation, the severity level of harm is catastrophic and the workers may get burns, internal and external injuries and death also.
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 separation of hot work from the fuel storage area, the risk with formation of fire can be eliminated from the space, and avoid the injuries, fatality, and burn occurred by the fire. I have provided a time frame of three months, the fuel storage must be isolated and no hot works to be carried out without proper isolation and without information. It is intended that this project will be finished in the allotted three months. The action will control the fuel storage from fire incidents by partially by the removal of hot work from the area, there will be no fire created by the contact with welding sparks, the area should be well maintained and inspected regularly for help preventing fire ignition source created at the fuel storage.

Justification for action 2

Action	To prevent injury when transporting heavy weighted objects by hand, purchase 2 hoist elevators **(hazard category 'manual handling')**.
Specific legal arguments	Article 3 of ILO's C127/1967 and the 1948 factories act, no worker shall be asked to manually move any burden that, due to its weight, is likely to endanger his health or safety, as stated in paragraph one. The ILO rules of practices for safety when lifting, lowering, and carrying objects by hand mandate the use of mechanical lifting aids, such as conveyors, hoists, telehandlers, or cranes, to minimise or completely eliminate risk from manual handling hazards.
Consideration of likelihood AND severity	Because handling aids are not readily available in power plants, there is a very high risk of injury from manual handling of materials, including internal injuries (bruising crush injuries fingers, ankles, and feet), external injuries (ankle, knee, muscle, and shoulder injuries), and cumulative injuries (slipped disc). The likelihood of injuries occurred by the work after inspecting the area is likely. The severity rating indicated for the hazard is 'major', it means that after resulting the injury the injured person should get first aid provision. damage to the building also likely to be happen. Not affected only to the manual handling workers, there are other workers they can get hurt by falling materials. The severity level of harm is major, causing hand injury, leg injury and back pain and may hospitalised after the injury.
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.	By the use of hoist elevator's, the chances of injuries by carrying materials by hand will be completely prevented and materials will be easily moved by the elevator. I've given a time limit of 2 months for purchasing an elevator, I will give my maximum output to clear the project within given timescale. The action will fully control the hazards related in the work, after installing hoist elevator the risk factors will be eliminated. By stopping the manual handling work, the hazards affected to the person will be abolished.

Justification for action 3

Action	To avoid contact with electricity, provide MCB to prevent the electric hazards **(hazard category 'electrical')**
Specific legal arguments	Article 2 of ILO's Recommendation no.164/1981 and the factories act, any type of work that contains hazard should be eliminate at the source, has been stated in the para 3. The LOTO system implementation while any over load of electricity or poor insulation. Article 9 of ILO's convention no. 174/1993, maintenance and routine inspection on the installations in the system, insulated electric cables, proper switch boards, adequate power supply, instructions and trainings, and well-trained electricians to be provided for eliminating the electric hazards in the workplace.
Consideration of likelihood AND severity	The likelihood of electric shock while working with uninsulated cables will be very likely, the electric cables are layered at the walkways, so the risk of getting electric shock is very high and the steel plate cutting employers are unaware of it and they also get electric shock in contact with the uninsulated cable. The severity level in this situation is set as 'major', because getting hospital treatment is must for a person harmed by electric-shock. Damage to the equipment they are working with. The other workers working under the organisation can be get into the walk-ways (the improper isolated electric cable area), some of the people may get electric shock. The severity level of harm to the workers is major, and result in electric shocks, burns or cardiac arrest. may hospitalised after an electric 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.	The isolation of power supply will completely terminate the current supply and no one is affected by the uninsulated cable. 1 month time limit for the completion of the project, no electrical works to be carried out without safe-guarded machine's, well isolated cables, and barricading is required for any type of work, routine inspection to be carried out. Maintain the risk controls and effective measures on risk factors to be eliminated. The risk is controlled as much as the work area is following a safe system of work and the electrician works on safety instructions by the company, routine inspection and maintenance of the electrical panel boards and power supply testing is provided.

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**	If no accidents or modifications to the work process occur, the next review date should be done after 10 months. Because the control actions I have suggested are likely to eliminate risks, I have chosen this review date. Therefore suggest scheduling the next review for June 8,2023.
How the risk assessment findings will be communicated **AND** who you need to tell	By scheduling safety meetings with managers from all levels (top, middle and bottom), I will inform them of results of the risk assessment by graphic presentation and also verbal. I will ask them to follow and implement the recommendations I have already mentioned in the aforementioned three priorities and I will explain what might happen if they don't implement the aforementioned recommendations. The next day, when I give tool box talk to the workers, I will outline the risks that already exist in their workplace and the steps that management has taken to mitigate those risks. I will conclude by outlining all the steps they need to do.
How you will follow up on the risk assessment to check that the actions have been carried out	I will give a deadline for the actions that must be done about 20 days in advance. In case any changes in the assessment before the given timeline, additional reviews will be made. I will assist employee representatives to ensure that the steps taken to reduce or eliminate the hazards are carried out correctly, and I will present my key findings and the management's actions regarding the assessment in the notice board that is available in the organisation's entrance using pictures as well. If I observe employees failing to carry out the tasks they were instructed to do within the allotted time, I will alert the finance director to take further action.