**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).**

**Part 1: Background**

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| *Include in here the organisation’s name\* and location\* and number of workers. You must then go on to give a description of the main activities/products/services carried out. You must also describe the area to be risk assessed eg, whole site, and anything else that you consider relevant (approximately 150 to 200 words):*  Fire and safety Equipment LLC This is based on Abu Dhabi one of the leading construction Manpower supply contractor in United Arab Emirates.  We have owned totally 20 sites and 2 head offices, one in Abu Dhabi and another one in Dubai ,we have main branch in Abu Dhabi and 250 employees in Main branch the project like Electrical work, Fire alarm, Mechanical and Fire Fighting there are the major activities of Fire and safety Equipment LLC in Abu Dhabi,the working hour is 9am to 5pm in day shifts, no night shifts, weekdaysone day off on Friday.  I Proposed to cover my risk assessment on the Electrical and Mechanical department in Abu Dhabi based construction branch. The supervisor of the above department have the responsible to Report the HSE Manager for the further processing.Hereby the HSE manager would be taking measures to look onto the risk measures and ensure safety practice in the organisation. |
| *You must now give a brief outline on how you completed the risk assessment (approximately 200 words):*  I started to see the codes of practices for the Construction related Fire and safety Equipment, I found from <https://www.hse.gov.uk/pubns/books/hsg168.htm>the related information for my organisation was found in the source of “HSG168”Fire Safety in construction, it have enough resources, so I roughly studied about the safety measures provided in the sources and got a good understanding about codes so that it would be quite easier for me to inspect.  I planned one day to visit the construction site ,I look out the people working over their at that time i found that one guy performing drilling operation without proper safety in plug, the guy perform the work with direct cable to the socket. I consulting the issue with our HSE officer in the site, what are the safety measures we could taken fore there kind of work activity performed by the person.  He informed that our company policy have lots of work related Electrical safety Incidents/Accidents reports are their, we check to find the past Incidents reported for this issue.  To rectifying the issue is found some resources in the HSE website, I found that HSG85 (3RD Edition) Electricity at work: safe working practices <https://www.hse.gov.uk/pubns/books/hsg85.htm> |

\* 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.

**Part 2: Risk Assessment**

Organisation name:

Date of assessment:

Scope of risk assessment:

| **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** |
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| Electricity  Electric socket underimproper condition. performing Hand Grinding operation ,buy using improper socket earthed on the surface of the wall. | The worker who involves in the function performed over the socket might be get harmed.  Chance of fire with circuit board will happen due to short circuit of the electrical system.  Example 1.Grinding operation we performing 120V it shorted due to heavy power transformation. | Monthly inspection was not carried over by the Third party inspection team, only followed by the worker.  Safety signs and Hazard signs are not properly displayed or maintained due to absence of HSE professional for that site, the workers lack of awareness to concentrate.  Permit To Work system was handled by team coordinator Electrical supervisor approves it for done the work practises. | We plan to Provide third party inspection team for ensure the all electrical equipment are safe to use follow-up by a monthly basis, and sequentially Proper Inspection was carried out before the work starts by the foreman is responsible to ensure that all of the equipmentare fixed properly to start the work.  Plan to provide the caution for non-using components, equipment with proper signs, Ensure the follow-up team is available to maintain that, Reported to the HSE management for implement the staff on the site who is responsible.  Permit to work system need to improve with what are the equipment available and its condition, then what work will be performed, number of man power required for the work activity, all are enclosed and ensure with the HSE team verified to proceed the work activity after the electrical supervisor will approves it. | 1 Month  2 Weeks  1 Weeks | HSE Manager and the team,  Electrical supervisor have the responsible to take the action. |
| Work at Height  In scaffolding wooden surface one person performing the fire alarm fixing work the wooden surface is not properly fixed it seem to look it was loosen or usage of damaged or improper wooden blocks | The person who performing work on the surface of the scaffolding blocks.  Falling down from height of 8 meters lane spinal injury severe damage to body parts and may cause paralysis or even death.  Falling from height may cause Mental disorders and lack of concentration. | The safety team not inspect the tag before scaffolding workers perform the tasks  Scaffolding who involved in the function of fixing or assembling wooden box they don’t inspect the quality of material properly. | Inform to HSE Manager and the team for ensure that the workforce will perform the task with proper material safety or not, and also reported to the scaffolding supervisor for the proper functioning of work activity before take inspection report of scaffolding materials and update in HSE team with mail.  Provide a team leader for allocating the material verify with the inspection, certification and then proceed to the employees for performing the safe work.  Replacing the old wooden blocks or other components with new for damaged or unproper, unsafe equipment and also instruct with the Tool box talk, Monthly meeting about the safe material handling to be explained in meeting for performing a Safe work. | 1 Month  15 days  1 Month | HSE Manager and the team, Scaffolding Supervisor, & worker are responsible to take the action. |
| Slip / Trips / falls.  One person climbing on the Extension type single support Aluminium ladder to fix the fire fighting. He twist his body after climb up on the ladder to fix it. | The person who using the ladder back bone pain even twist will happen due to performing the task with wrong source of equipment.  Possible cause fall from the height due to overload acted on the surface by the workers functional activity and force applied on that.  Severe injury, body parts damage, lack of concentration, head injury may possible to happen, even death at rare case by nature of work and environment will happen. | Use single support extension ladder for performing installing fire fighting it is not properly inspect and use only at the time of required for the purposes. | The ladder must be with additional opposite stand for perform the safe task in the work, by next we plan to replace the single support ladder to change for double support type to performing the work task with safe, the issue was reported to the financial manager and the team for take the proper action, and we discussing them with showing the HSE regulation was follow-up by internationally.  As per the HSE website OC 200/31 - The work at height regulations 2005,The definition of ladders includes step ladders and fixed, If a fixed ladder is visibly damaged or otherwise defective, a breach under Regulation 6(3) can be alleged because the duty holder has not taken suitable and sufficient measures to prevent SFAIRP any person falling a distance liable to cause personal injury.ladders<https://www.hse.gov.uk/foi/internalops/ocs/200-299/200_31/#appendix6> | 1 Month | HSE Manager, And Financial Manager, was responsible to take the action. |
| Vibration  Happen due to block splitters instead of cut-off saws, due to improper maintenance, and blade will not be inspected or change regularly. | The worker who involves in the work operation will get harmed  The person who nearby it get harmed by splitting.  Severe cuts, More blood clotting, body parts deep & severe injury will be happen  It irritates near-by workers due to shake of parts and they poor in doing their different work activities | Due to poor maintenance in blades the cut-off saws on paving, blocks or kerbs can produce very high levels of silica containing dust with cause vibration in the mechanical functioning.  No Third party inspection will be provided for the cut-off saws and not provide proper sheds for cover the work properly  HSE inspection was carried out roughly through visual inspection only. | Allocate the technical team with proper knowledge in cutting tools and equipment to ensure before and after the work carried over safely or not what need to maintenance and replacement over there, list-out what equipment need to inspect to 3rd party.  Make a contract with leading good Third party inspection team to rectifying the issue & reported to the HSE management and the team for follow-up all the inspection records properly. | 23Days  3 Days | HSE Manager and the team Coordinator for the inspection team have responsible to take the proper actions. |
| Noise  Excessive noise from Sprinkler pipe cutting operation. | worker who involves in the work operation without proper safety measures like Ear plug, Ear buffer will might be get harmed  Others workers also disturbed and feel irritate due to the sound.  Loud noise can create physical , Mental stress and Permanent hearing Loss.&It reaches the exposure level at 85 Db(A) so it is harmful noise | Ear plugs is being given to the workers who work in the place of which contains more noise pollution so thereby their health won’t be get affected.  Warning signs also have been provided to the workers so that excess noise issue can be handled efficiently. | Frequent Inspect / Meeting have to be conduct  Instead of the old machine need to erect new machine with latest technology( Deward cordless hammer drill) to reduce noise and increase quality of work  Provide medical check up for the workers once in a month | 1 Month  1 Month  10 days | HSE officer  Site Engineer, Supervisor  HSE officer |
| Confined space  Person travelling to the confined space toclean the water should be safeguarded | The person who went to clean gets harm.  Sufficient oxygen supply Won’t be available so the breathing of the worker who went down gets struggle | To overcome this issue frequent checking of the oxygen availability should be done properly  Work permit should be provided to the person who went down to the confined space  Unauthorized worker shouldn’t be allowed inside the confine space . The authorization of worker is a must and so unauthorized person are not allowed inside the confined space | Emergency procedure must be provided in a fast and efficient manner thereby to reach the person inside the confined space without fail.  Emergency ventilation support should be given to the worker who went inside the confined space thereby safeguarding the person's life.  we allot a contractor labour force who have well experienced in confined space for inspect before starting the work that is going inside the confined space. | 1 Month  3 weeks  1 Month | HSE Engineer  HSE officer  Supervisor,  Site Engineer |
| Health, welfare and work environment  During summer season it will be hot in construction site | All Workers who work in construction site may get harmed.  Hot environment results in allergic skin, headache, stress and often sweating also | Provided air coolers in worker's rest area to reduce the heat.  Allocate separate rest area and smoking area for workers.  Required PPE's like helmets, gloves and sun glasses are provided. | We provide Welfare facilities like toilet, cool water and hand wash liquid.  Provide increase in rest time for workers during summer season from 12:30 pm to 3:30 pm.  Provide heat awareness training For employees. | 3 weeks  10 Days  1 week | HSE Engineer  Safety Management / Supervisor  HSE officer |
| Manual load handling equipment  Shifting fire fighting materials with the help of trolley. Trolley was not properly maintained | Manual workers are may get harmed because of material shifting  manual workers are getting severe back pain, repetitive strain injuries and musculoskeletal disorder | Instructed regarding manual load handling to workers.  Provided Personal Protective Equipment to workers like helmet, safety boots and hand gloves. | Training to employees for proper manual handling techniques.  Two hrs rest give to every manual handling workers who works continuously.  Change alternate task for manual handling workers.  Advance machine is used to lift overloads instead of using workers | 1 weeks  10days  15 days  1 month | HSE Officer  Supervisor  Site engineer  Senior Engineer |
| Hazardous Substances  Cement Dust  High concentration of dust is release from Concrete Mixer | All workers and visitors may get harmed  Concentrate mixing can cause skin irritation, inhalation of dust will cause long term serious health conditions.  dermatitis and lung disease | Complete medical check up for workers done.  Housekeeping was being carried out and vacuum cleaners were placed to minimise the dust.  Instructions to workers through tool box talk was given by HSE officer. | Proper inspection /Maintenance are carried on a in week to ensure the safety and the supervisor.  Provide dust mask to workers.  First aid provision must be provided.  To Maintain good housekeeping at all emergency exits.  Provide usage of hand gloves ,foot wear ,waterproof trousers and spectacles along with the PPE(personal protective equipment).  For more information kindly go through this below link  <https://www.hse.gov.uk/construction/healthrisks/hazardous-substances/cement.htm> | 2 weeks  Immediately  1 week  Immediately  10 Days | HSE officer  Supervisor  Site In charge  Housekeeping  Supervisor  HSE officer |
| Fire Hazard  One person involving in welding activity nearby to that diesel is filled to that Machinery so will happen in fire accident. | Welders and who person involve in filling diesel to machinery might be get harmed  welding activity and diesel filling activity happens parallel. When the diesel gets contact with the person body can cause skin irritation happens as well as asthma a respiratory problem occurs. | Fire extinguisher has kept near by the Welding area.  Warning signs are provided.  Provided the closed system for welding area | Tool box talk arranged before start the job  Proper training have been provide for the welder regarding handling the equipment.    Risk assessment should be explained  Full time supervision required in the work place.  PTW system should be ensured. | Immediately  15 Days  1 Month  Immediately  1 week | Supervisor  Site Engineer  HSE Officer  Supervisor  Foreman and Supervisor |
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**Part 3: Prioritise three actions and justification for the selection**

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| *You must pick the* ***three highest priority/most urgent actions*** *and justify your choice. Your justification* ***must*** *include moral, legal and financial arguments (500 to 700 words); consideration of likelihood and probable severity of injury, ill-health and/or harm (150 to 250 words); description of how effective each action is likely to be in controlling the risk (250 to 350 words).*  The further actions that I am prioritizing are |

**Part 4: Review, communicate and check**

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| *You must now give a review date for your risk assessment and say why you have chosen this date (10 to 50 words).* |
| *You must now indicate how the risk assessment findings will be communicated (including who needs to know the information) (100 to 150 words).* |
| *You must now indicate how you will follow-up on the risk assessment to check that the actions have been carried out (100 to 150 words).* |