|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| THIS FORM IS TO IDENTIFY PROJECT HAZARDS AND TO MINIMISE THE RISKS TO PERSONS AND/OR DAMAGE TO PROPERTY. | | | | | | |
| Project: | Test Project | Work Order No. | WO-000024 | Start Date | 21/08/2020 00:00:00 | |
| Principal Contractor: |  | Working Contractor |  | Finish date | 22/08/2020 00:00:00 | |
| Site Manager: |  |  |  | Phone | 0 | |
| Address: | Noida Sector 18,Noida,Uttar Pradesh,India,201301 | | | | | |
| Scope of Work: | test | | | | | |
| Hazardous Materials: | In wall/underground services,Restricted Access / ergonomic,Moving vehicles,Unguarded machinery,Chemical / Biological,Hazardous Manual Tasks,Noise / Vibration,Uneven / slippery surfaces, | | | | | |
| Referenced Legislation: | Workplace Health & Safety Regulation 2011,Code of Practice : Work health and safety consultation and co-operation and co-ordination,Code of Practice: Labelling of workplace hazardous chemicals, | | | | | |
| Licenses and Permits: | Coring/Penetration,Electrical(HV),Electrical(LV),Hot Works,High Access equipment permit,Work at Heights/in Ceiling/on Roof,Confined Space,Excavation,Demolition,Radiation,Blasting,Fuel Farm,Plumber,Refrigeration,Mobile Plant, | | | | | |
| Person Responsible for SWMS Compliance: |  | Date SWMS Received: | 21/08/2020 00:00:00 | | |
| What measures are in place to ensure compliance with the SWMS: | The SWMS are sent electronically via an automated system that ensures that each worker has read and signed the SWMS before the work starts | | | | | |

PPE SECTION

|  |  |  |  |
| --- | --- | --- | --- |
| PPE Required |  | PPE Required |  |
| Hard hat |  |  |  |
| Safety harness |  |  |  |
| High vis clothing |  |  |  |
| Fire Extinguisher |  |  |  |
| Breathing Apparatus |  |  |  |
| Fall Arrest/ Restraint |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| RISK LEVEL | POSSIBLE COURSES OF ACTION (Table explanation = back page) |  | CONSEQUENCES (C) | | | | |
| LIKELIHOOD (L) | 1 INSIGNIFICANT | 2 MINOR | 3 MODERATE | 4 MAJOR | 5 CATASOPHIC |
| NEGLIGIBLE | Task Supervisor / Leader to monitor | 5 Almost Certain | Medium 5 | High 10 | High 15 | Extreme 20 | Extreme 25 |
| LOW | Task Supervisor / Leader to manage by routine procedures. | 4 Likely | Low 4 | Medium 8 | High 12 | High 16 | Extreme 20 |
| MEDIUM | Manager to manage by specific monitoring or procedures. | 3 Possible | Low 3 | Low 6 | Medium 9 | High 12 | High 15 |
| HIGH | Manager to manage via detailed Task JSEA. | 2 Unlikely | Negligible 2 | Low 4 | Low 6 | Medium 8 | High 10 |
| EXTREME | Manager to manage via detailed plan to reduce risk. | 1 Rare | Negligible 1 | Negligible 2 | Low 3 | Low 4 | Medium 5 |

Steps-table Section

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item | Task & or Category of Hazard(Delete & Add items that are / not relevant) | What are the Specific Hazards? | Area of Impact | Risk | Before | Controls | Methods of Controlling Hazards | Risk | After | Controls | Who is responsible |
| L | C | S | L | C | S |
| 1 | Pre-start inspection of equipment, PPE and work area | Electricity - Energised electrical equipment, Exposure to hazardous chemicals, slip trip and falls on objects on the ground. RISKS: - Electric shock/electrocution - Poisoning, skin irritation - Muscular stress/ Musculoskeletal Disorder - Fractures and / or dislocations - Sprains and strains - Cuts, lacerations, puncture wounds - Abrasions, bruises and contusions. | 1. Equipment problems being detected and receiving maintenance attention before they escalate into costlier issues. 2. Maintenance managers having better information for planning preventative maintenance. 3. Recurring equipment problems being identified so that their causes can be corrected. 4. Personnel taking better care of equipment because regular inspections hold them accountable. 5. Procurement of better equipment due to the information being gathered about equipment durability and performance. | 7 | 12 | 84 | Inspect all equipment to be used for the job.  Ensure: - Pump spray unit is in good condition and power cords are not damaged or have exposed wires - Electric leads/extension cords are not placed in areas where they could be damaged, run-over or pose a tripping hazard - RCD/safety switches are provided for electrical equipment  - Pump unit and leads to be tagged, tested and in date. Ensure:  - Restricted access to work area by using barriers and place caution signs as needed   - Work area is clear of any unnecessary obstructions   - PPE is available and is being used as required    - SDS are available for all paint, and cleaning chemicals being used   - Hand tools in safe working order.   - Rubbish to be removed from work area and placed in bins  provided. | 9 | 10 | 90 | Site Manager |
| 2 | Arrive on site and set up exclusion zones with suitable access points for material and plant delivery. | Public access to site Risk of injury to the public and site visitors. Poor planning of suitable access to site. Poor site storage of materials. | fire protection systems have been designed to help protect the building and its occupants during a fire. ... Ultimately these systems compartmentalize a building into sections to help contain and slow the spread of the fire and smoke, while helping to guide occupants safely out of danger | 7 | 11 | 77 | Set up suitable exclusion zones including signs to provide access and protect the public. Establish a site specific management plan (as required) for site deliveries. Store materials in accordance with SDS on site. | 5 | 10 | 50 | Site Manager |
| 3 | Inspection of work area | Slip, trip and falls on objects on the ground and slippery uneven surfaces. RISK:  • Fractures and / or dislocations • Sprains and strains • Cuts, lacerations, puncture wounds • Abrasions, bruises and contusions. | fire protection systems have been designed to help protect the building and its occupants during a fire. ... Ultimately these systems compartmentalize a building into sections to help contain and slow the spread of the fire and smoke, while helping to guide occupants safely out of danger | 9 | 11 | 99 | Follow traffic management plan of the Principal contractor. Assess intended site.  Ensure: - Adequate lighting - Sufficient room for delivery of materials  o Located away from traffic/vehicles/pedestrians (develop appropriate traffic management plan if required – include physical barriers, caution signs, etc) | 4 | 10 | 40 |  |
| 4 | Protect all surfaces from vermiculite overspray. | - Dust  - Hazardous Manual Tasks - lifting, carrying, putting down objects, repetitious movements, vibration, pushing, pulling, awkward, twisting, bending positions, Contact with falling object.   - Hazardous substances RISKS: - Fractures and / or dislocations - Sprains and strains - Abrasions, bruises and contusions - Muscular stress/ Musculoskeletal Disorder. | Wet Systems. This is the most common and effective way of getting rid of any fire that starts. ... Dry Sprinkler Systems. In these types of sprinklers, pressurized nitrogen is filled in the pipes and not water. ... Fire Pumps. ... Sprinkler Heads. ... Stand Pipes. | 7 | 11 | 77 | - Materials are to be delivered as close to work area as possible. - Follow safe sanding techniques - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward equipment   - Provide Safety Data Sheets and follow PPE requirements for the application of vermiculite spray in use. | 9 | 11 | 99 | Site Manager |
| 5 | Mix and apply vermiculite spray to all structural steel members form floor level using an extension tube to apply at height from floor level. | - Dust inhalation  - Hazardous Manual Tasks - lifting, carrying, putting down objects, repetitious movements, vibration, pushing, pulling, awkward, twisting, bending positions, Contact with falling object. RISKS: - Dust  - Muscular stress/ Musculoskeletal Disorder. | Active fire protection systems include hoses, water spray, deluge, sprinklers, firewater monitors, and steam rings around flanges. In most cases the principal firefighting medium is water. However, other agents such as carbon dioxide can also be used. | 7 | 12 | 84 | - Wear allocated PPE when mixing dry ingredients - Follow safe spraying techniques - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward equipment - Regular breaks. | 9 | 11 | 99 |  |
| 6 | Remove protective sheeting and clean up work area and load excess materials and equipment into vehicles or storage. | - Dust - Hazardous manual tasks - lifting, carrying, putting down objects, repetitious movements, pushing, pulling, awkward, twisting, bending positions. RISKS: Muscular stress/ Musculoskeletal Disorder. | The high installation and maintenance cost is the main , the may not work properly when a fire occurs. Therefore Passive Fire Protection (PFP) is typically the answer. Zero maintenance once applied, no annual inspections and no service call backs | 7 | 12 | 84 | - Wear dust mask P1or P2 type - Wear allocated PPE - Follow safe painting techniques - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward equipment - Regular breaks. | 9 | 11 | 99 |  |
| 7 | Demobilise the site for restoration of public access. | Slip and trip hazards. Poor housekeeping. - Poor client communication | fire hazard posed by substance; toxicity of substances and the smoke produced; inventory size; frequency of hazardous operations; distance to other hazardous installations; available access to fight fire; fire fighting capability of on site emergency response team; response time of nearest fire brigade; resources available to fire brigade. | 7 | 11 | 77 | - Ensure that all trip hazards are removed and slip surfaces dried or left with warning signs. - Ensure client is informed that works are complete | 5 | 11 | 55 |  |

|  |  |  |  |
| --- | --- | --- | --- |
| # | Name of Employee | Signature | Date Signed |
|  | con3 con3 | &&con3\_con3\_2200 | &&Signcon3\_con3\_date\_2200 |
|  | &&Employee2\_Name | &&Emp2\_Signature | &&Signature2\_Date |
|  | &&Employee3\_Name | &&Emp3\_Signature | &&Signature3\_Date |
|  | &&Employee4\_Name | &&Emp4\_Signature | &&Signature4\_Date |
|  | &&Employee5\_Name | &&Emp5\_Signature | &&Signature5\_Date |
|  | &&Employee6\_Name | &&Emp6\_Signature | &&Signature6\_Date |
|  | &&Employee7\_Name | &&Emp7\_Signature | &&Signature7\_Date |
|  | &&Employee8\_Name | &&Emp8\_Signature | &&Signature8\_Date |
|  | &&Employee9\_Name | &&Emp9\_Signature | &&Signature9\_Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| LIKELIHOOD | DESCRIPTION | | | | |
| PERCEPTION (PE) | ANECDOTAL (AN) | FACTUAL (FA) | OPPORTUNISM (OP) | PROBABILITY (PR) |
| 1 RARE | May occur only in exceptional circumstances. | - | - | - | Less than 1% (e.g. less than 1% chance of occurring during the project period). |
| 2 UNLIKELY | Is not expected to occur. | No recorded incidents or anecdotal evidence. | No recent incidents in associated organisations, facilities or communities. | Little opportunity, reason or means to occur. | % |
| 3 POSSIBLE | Might occur at some time. | Few, infrequent, random recorded incidents or little anecdotal evidence. | Very few incidents in associated or comparable organisations, facilities or communities. | Some opportunity, reason or means to occur. | 5% |
| 4 LIKELY | Will probably occur in most circumstances. | Regular recorded incidents and strong anecdotal evidence. | - | Considerable opportunity, reason or means to occur. | 20% |
| 5 ALMOST CERTAIN | Is expected to occur in most circumstances. | High level of recorded incidents and / or strong anecdotal evidence. | Strong likelihood the event will recur. | Great opportunity, reason or means to occur. | 100% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CONSEQUENCES | IMPACT | | | |
| HEALTH AND SAFETY | ENVIRONMENT | COMMUNITY | OPERATIONS |
| 1 INSIGNIFICANT | Near Miss Incident or Minor Injury requiring first aid treatment only. | Brief spill incident. No environmental damage. | No impact, issues or delays. | No impact, issues or delays. Staff able to function at 100%. |
| 2 MINOR | Medical Treatment only | Minor spill. Pollutant on site. No environmental damage | Minor impact, issues or delays easily resolved. | Minor impact, issues or delays easily resolved. Staff able to function well. |
| 3 MODERATE | Lost Time Injury | Escape of pollutant causing environmental damage. | Moderate impact, issues or delays. | Moderate impact, issues or delays. Staff inconvenienced and ability to perform duties is impacted. |
| 4 MAJOR | Death or permanent disability | Significant pollution on and off site < $500k. | Major impact, issues or delays. | Major impact, issues or delays. Staff seriously impacted and have difficulty in performing duties. |
| 5 CATASTROPHIC | Multiple deaths | Long term environmental damage. | Significant impact, issues or delay. | Significant impact, issues or delay. Staff unable to perform their duties. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| RISK LEVEL | POSSIBLE COURSES OF ACTION |  | CONSEQUENCES (C) | | | | |
| LIKELIHOOD (L) | 1 INSIGNIFICANT | 2 MINOR | 3 MODERATE | 4 MAJOR | 5 CATASOPHIC |
| NEGLIGIBLE | Task Supervisor / Leader to monitor | 5 Almost Certain | Medium 5 | High 10 | High 15 | Extreme 20 | Extreme 25 |
| LOW | Task Supervisor / Leader to manage by routine procedures. | 4 Likely | Low 4 | Medium 8 | High 12 | High 16 | Extreme 20 |
| MEDIUM | Construction Manager to manage by specific monitoring or procedures. | 3 Possible | Low 3 | Low 6 | Medium 9 | High 12 | High 15 |
| HIGH | Construction Manager to manage via detailed Task JSEA. | 2 Unlikely | Negligible 2 | Low 4 | Low 6 | Medium 8 | High 10 |
| EXTREME | Construction Manager to manage via detailed plan to reduce risk. | 1 Rare | Negligible 1 | Negligible 2 | Low 3 | Low 4 | Medium 5 |