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|  | **Fire Risk Assessmets** |  |

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| **FACILITY** |  | **RISK ASSESSMENT NO:** |  |
| **ACTIVITY** |  | **ASSESSMENT TEAM:** |  |
| **ASSESSMENT DATE:** | **REVIEW DATE**: | **ASSESSMENT APPROVAL**: |  |

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| **TASK** | **HAZARD** | **HAZARD EFFECT (CONSEQUENCE)** | **C** | **L** | **RISK (C x L)** | **MITIGATED BY** | **C (Reduced Consequence)** | **L (Reduced Likelihood)** | **REDUCED RISK (ALARP)** |
| Welding | Sparks and heat | Fire outbreak causing injury, death, or property damage | 5 | 4 | 20 | Use of fire blankets, firewatchers, maintaining a fire extinguisher nearby, and clear safety zones | 3 | 2 | 6 |
| Grinding | Generation of sparks | Ignition of flammable materials | 4 | 4 | 16 | Enclose work area, keep flammables away, and provide fire extinguishers nearby | 3 | 2 | 6 |
| Cutting metals | Hot slag and sparks | Burns, ignition of nearby combustible materials | 4 | 3 | 12 | Perform work in designated areas with fire-resistant flooring and barriers | 2 | 2 | 4 |
| Use of gas-powered equipment | Leakage or explosion of gas cylinders | Fire, explosion causing injuries or fatalities | 5 | 3 | 15 | Regular inspection of cylinders, proper storage, and use of flame arrestors | 3 | 2 | 6 |
| Temporary electrical installations | Faulty wiring or equipment | Electrical fire | 4 | 3 | 12 | Regular inspections, use of certified electricians, and adherence to standards | 2 | 2 | 4 |
| Storage of flammable materials | Improper storage | Increased fire risk and rapid spread | 5 | 4 | 20 | Store materials in designated fire-safe areas with proper signage | 3 | 2 | 6 |
| Smoking in construction areas | Unauthorized smoking | Fire due to ignition of flammable substances | 4 | 3 | 12 | Enforce no-smoking policies and designate smoking zones away from flammables | 2 | 2 | 4 |
| Painting with flammable materials | Use of flammable paints and solvents | Ignition causing fire | 4 | 4 | 16 | Provide proper ventilation, use non-sparking tools, and control ignition sources | 3 | 2 | 6 |
| Hot bitumen application | Heated material and fumes | Burns and fire from accidental spill or overheating | 4 | 3 | 12 | Train workers, use temperature controls, and maintain spill containment systems | 3 | 2 | 6 |

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| **Criteria: Consequence ( C )**  **Negligible**- Immediate return to work  **Minor** - First aid and return to work.  **Moderate**- Medical treatment/ lost time  **Major**- Multiple injuries and RIDDOR reportable  **Fatal/Catastrophic-** Death, loss of  installation | **Criteria: Likelihood ( L )**  **Improbable**- So unlikely that it would not happen.  **Unlikely**- Remote chance of event  **Possible**- Inattention may cause an event to happen.  **Probable**- Highly likely without control.  **Certain**- Will happen without Intervention/control. | **Risk Calculator**  Risk level **R= CxL**  1-3 Acceptable  4-6 Moderate  8-12 Substantial  15-25 Intolerable | **Conclusions:**  Working on construction sites is a hazardous activity if the controls proposed are followed this environment can be successfully managed.  Overall risk: Very High - High - Medium **-** Low  Are risks reduced to ALARP (as low as reasonably practicable): **Yes .** |

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| Likelihood→  Consequence↓ | Improbable  1 | Unlikely  2 | Possible  3 | Probable  4 | Certain  5 |
| Negligible 1 | 1 | 2 | 3 | 4 | 5 |
| Minor 2 | 2 | 4 | 6 | 8 | 10 |
| Moderate 3 | 3 | 6 | 9 | 12 | 15 |
| Major 4 | 4 | 8 | 12 | 16 | 20 |
| Fatal/catastrophic 5 | 5 | 10 | 15 | 20 | 25 |

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| 1-3 | 4-6 | 8-12 | 15-25 |
| Low | Medium | High | Very High |