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PROJECT / LOCATION:	DATE: 00-00-2024	DATE OF NEXT ASSESSMENT
Job No.		00-00-2025

TASK / ACTIVITY
Fire Hazards

No	Hazard	Hazard Category (P/E/A/R/LG)	Consequence	Risk Level			Risk Control Measures	Residual Risk			Remarks
				P R	S	E/H/M/L/ N		P R	S	E/H/M/L/ N	
1.	Fire due to Hot Works	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	- Competent operatives to be appointed for all hot work operations. - Hot work permit must be obtained prior to start any hot work operations in the site. - All precautions mentioned in the permit and any extra precautions required also to be taken to carry out hot work. - Supervisor must monitor the hot work operation continuously. - Fire watch as recommended in the PTW to be carried out after completing the hot work. (Time to be extended according to the Risk involved in the area.)	1	5	L	



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							• All hot work equipment must be disconnected prior to leave the area. • Dry powder extinguisher with bucket full of water should be kept nearby hot work area				
2.	Fire due to Electricity	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	• Competent supervisor and operatives to be appointed to carry out electrical installation, maintenance and repair on site. • All electrical installation and wiring should be complying with Local Authorities standard. • Do not use damage electrical equipment, cables and accessories. • Proper grounding of all electrical equipment and tools. • All electrical installations and equipment must be inspected prior to use and periodically. • All live electrical cables to be protected to avoid damages. • Dry powder & CO2 extinguishers with sign board should be kept nearby Electrical Generators, DB, and Offices etc.	1	5	L	



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3.	Fire due to Improper storage of Flammable and combustible Items.	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	• Designated storage area to be provided for flammable and combustible materials. • All hazardous (Flammable) items to be stored & handled as per MSDS. • Do not store flammable items at work place, to be return to store after work. • Proper training as per MSDS to be given to all those who are working with flammable items. • Ensure flammable storage areas are equipped with adequate fire protection systems. Dry powder & CO2 extinguishers with sign board should be kept nearby chemical / flammable/ material storage area	1	5	L	
4.	Fire due to Smoking	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	• Include non-smoking Policy in Induction training, Tool Box / Safety Awareness Talk. • Designated smoking areas only to be used for smoking. • Do not bring the smoking material inside the site / work area. • Dry powder extinguisher with sign board should be kept at the designated smoking area	1	5	L	

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5.	Fire due to Poor Housekeeping	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	• All combustible wastes to be removed on a daily basis. • Empty chemical containers to be disposed as per MSDS. • Dip trays to be provided to all stationary plants and equipment to contain fuel or oil spillages and the tray must be cleaned daily. Fire extinguishers to be kept within 30meter radius, with sign boards and methods of how to use extinguishers	1	5	L	
6.	Fire due to Lightning.	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	2	5	M	• Sufficient Lightning arrestors to be installed as per standard. • Standard electrical wiring system with proper earthing. • ELCB, RCD, MCB etc to be installed in the electrical circuits. • All electrical circuits to be deactivated while in thunder storm / lightning.	1	5	L	
7.	Fire due to Arson	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	2	5	M	• Educate all employees regarding the consequences of fire accidents. • Smoking stuffs, match boxes, lighters etc. are not to be permitted in site / work area. • Provide security at all vulnerable points.	1	5	L	

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							• Proper and close supervision and monitoring at all times.				
8.	Lack of Fire Detection, Fire warning and Fire Fighting Equipment.	People and assets	Suffocation, Burn, Serious Injury, Fatality, Property Damage.	3	5	H	• Sufficient Fire Fighting equipment (Extinguisher, hose reels, water buckets etc.) to be provided in all areas according to the risk. • Fire detection and extinguishing systems to be installed in the offices. • Fire sprinkler system to be activated in the Basement storage areas. • Do not misplace the Fire Fighting Equipment from Fire Points.	1	5	L	

5.2 Risk Assessment Guidelines

SEVERITY								Consequences:
LIKELIHOOD		Insignificant	Minor	Moderate	Serious	Major	Catastrophic	6 – Catastrophic – Multiple fatalities
	1	1	2	3	4	5	6	5 – Major - Single Fatality
	2	2	4	6	8	10	12	4 – Serious – Permanent disability
	3	3	6	9	12	15	18	3 – Moderate – Lost Time Injury
	4	4	8	12	16	20	24	2 – Minor – Medical Treatment
	5	5	10	15	20	25	30	1 – Insignificant – First Aid Case
	6	6	12	18	24	30	36	
	24 - 36	Extreme	Immediate action required, Activity should not to proceed in current form					
	15 - 20	High	Prompt action required, including interim actions. Activity should be modified to include remedial action and planning.					

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8 - 12	Medium	Schedule action including any interim countermeasures e.g. implement safe work procedures, signage, instructions	
4 - 6	Low	Activity can operate subject to management and or modification,	
1 - 3	Very Low/ Negligible	Risk almost certainly acceptable, no action required unless escalation of risk is possible	

Likely Frequency:

Likelihood (of adverse event occurring)			
	Description	Health & safety	Environmental
6	Almost certain or imminent	Occurs all the time	Continuous or will happen frequently
5	Highly likely	Common occurrence, Occurs multiple times in a year	Happens 5 – 10 times per year
4	Likely or could occur	Know to occur in the last 12 months	1 – 5 times per Year
3	Not likely, but possible	Has occurred in an industry worldwide	Once every 5 years
2	Unlikely	Has not occurred in over 10 years of the same activity	Not happened in over 10 years
1	Rare	Theoretically possible, but not expected to occur	theoretically possible, but not expected to occur

The **Residual Risk** has been calculated following the assumption of control measures implementation.

Prepared by: HSE Engineer		Reviewed by: HSE Manager		Approved by:	
Sign:	Date:	Sign:	Date:	Sign:	Date: