

Hazard Identification , risk assessment & control measures (HIRA)

Name of Department :- PROJECTS

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Sl. No	Activity	Hazards	Consequence (Risk Severity)	Overriding factor LC (Yes /No)	BASE RISK				Existing Control Measures	RESIDUAL RISK				Additional control measures
					Probability (P)	Severity (S)	Risk Level (P x S)	Risk Level A / UA		Probability (P)	Severity (S)	Risk Level (P x S)	Risk Level A / UA	
10	EXCAVATION WORK	1.Damage of under ground services 2. Electrocution	Major injuries	No	2	5	10	UA	1. Work Permit 2. Visual Inspection 3. Clearance from Electrical & utility dept.	1	5	5	A	IMS/PRJ/SOP/ will be adopted and followed
		Cave-in	Major injuries	No	2	5	10	UA	1. Sufficient working space & slope maintained 2. Visual Inspection	1	5	5	A	IMS/PRJ/SOP/ will be adopted and followed
		Fall of Vehicle / Person in exacted pit	Major injuries	No	2	5	10	UA	1. Hard Barication 2. Warning sign 3. Cautionary notice	1	5	5	A	IMS/PRJ/SOP/ will be adopted and followed
11	MANUAL CONCRETING	Exposure to mixer machine	Major injuries	No	2	5	10	UA	1. Fan guard provided	1	5	5	A	IMS/PRJ/SOP/ will be made & followed
		Failure of shuttering	Major injuries	No	3	5	15	UA	1. Checking of reliability of the shuttering before concreting.	2	4	8	A	IMS/PRJ/SOP/ will be made & followed
		Protruded Re-bars	Major injuries	No	2	5	10	UA	1. Re-bar cap will be provided on protruded bars	2	4	8	A	IMS/PRJ/SOP/ will be made & followed
		Fall of Person from the height	Major injuries	No	2	5	10	UA	1. Hand railing provided 2. Usage of PPE's like Safety Helmet, Full body Harness	2	4	8	A	IMS/PRJ/SOP/ will be made & followed
12	FORMWORK	Defective Hand tools.	Minor injuries	No	2	4	8	A	Visual Inspection	2	2	4	A	IMS/PRJ/SOP/ will be made & followed
		Protruded Nails resulting cut	Minor injuries	No	3	3	9	UA	1. All wooden planks after de-shuttering will be kept free from protruded nails. 2. Wooden planks with nails should be kept at a designated place with proper barrication.	2	3	6	A	IMS/PRJ/SOP/ will be made & followed
		Fall of Person	Fatal	Yes	3	5	15	UA	1. Usage of PPE's like helmet, Full body harness, Safety shoes 2. Usgae of fall arrestor & lifeline 3. Trained workmen with fitness certificate 4. Apporach ladder & working platform	2	4	8	A	IMS/PRJ/SOP/ will be made & followed

		Fall of Material	Major Injury	Yes	2	5	10	UA	1. Area barrication 2. Physical inspection of lifting tools & tackels 3. Proper illumination 4. Physical inspection of lifting equipments	2	4	8	A	IMS/PRJ/SOP/ will be made & followed
13	REINFORCEMENT	1. Hit by reinforcement rod while cutting	Major injuries	No	2	5	10	UA	1. Use of proper PPE's like Safety helmet, Safety shoes, Face Shield etc.	2	2	4	A	IMS/PRJ/SOP/ will be made & followed
		2. Fall of person while moving over reinforcement cage	Major injuries	No	2	5	10	UA	Wooden planks/GI sheets provided on the pathway over the reinforcement cage	2	2	4	A	IMS/PRJ/SOP/ will be made & followed
14	PAINTING	1. Exposure to paint fumes / suffocation & nousia 2. Eye injury 3. Fall of Person	Minor Injury	No	2	3	6	A	1. Usage of PPE's like painting mask, hand glooves, safety goggles 2. Usage of MSDS before painting	2	2	4	A	IMS/PRJ/SOP/ will be made & followed
1	WORK AT HEIGHT	Fall of Person	Fatal	Yes	3	5	15	UA	1. Usage of PPE's like helmet, Full body harness, Safety shoes 2. Usgae of fall arrestor & lifeline 3. Trained workmen with fitness certificate 4. Apporach ladder & working platform	1	5	5	A	IMS/PRJ/SOP/ will be made & followed
		Fall of Material	Major Injury	Yes	2	5	10	UA	1. Area barrication 2. Physical inspection of lifting tools & tackels 3. Proper illumination 4. Physical inspection of lifting equipments	1	5	5	A	IMS/PRJ/SOP/ will be made & followed