

Serial No.	Department	Equipment	Location	Job description		
			Inside Plant	Development of ash storage yard and rake loading platform		
JSA performed by: Akhila Satapathy						
HAZARD TEXT/TYPE						
PHYSICAL HARZARDS	PHYSICAL HARZARDS	PHYSICAL HARZARDS	ELECTRICAL HAZARDS	CHEMICAL/GAS HARZARDS	EXCAVATION	OTHERS
Noise	Fall from Height	Fore3ce (push/pull)	shock / Electrocution	Flammable/ Explosive	Collapse/sliding	Fire
Radiation	Fall (slip/Trip)	Caught in/on or between	Static electricity	Fumes Inhalation	Underground live cable	Heavy wind / Rain
Confined space	Fall down/below	Struck by/against	Arc/flash blast	Ingestion/Absorption	Ergonomics	Dust exposure
Exposure to pressurized steam/Air	Fall of objects from height	Extreme weather (hot & cold)	BIOLOGICAL HAZARDS	Body/Eye contact	Poor posture	Oil spill
Contact with Hot surface	contacts with moving parts	poor illumination		Spillage	Repetitive motion	Human factor
PPEs to be used	Safety Helmet, shoes, safety Glass, Hand gloves, Dust mask, Full body harness & Scaffolding materials.					
Tools required	Mixture machine, gamble, trowel, phowrah, welding machine, hammer, bucket, belcha etc.					
Emergency safety measures for	Rescue facilities (Height, Confined space, Medical, First aid, Fire extinguishing etc.)					
Applicable Emergency Safety Measures	Emergency Tel Nos -fire- 777,222257, Ambulance- 248/277, Hospital-666(Mr./233/244/222222)					
Overall risk category-	Medium					
SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARD		SAFE JOB STEPS AND CONTROL MEASURES			
1) Excavation of earth manually/mechanically	1) Contact with live cable / equipment existing there.		1) Obtain excavation permit before start the job. Make sure that no live cable is there near the excavation premises.			
	2) Fall down below		2) Barricade the excavated area.			
	3) Body/hand/leg injury/Struck by against.		3) Work carefully & maintain distance from the excavated area.			
	4) Injury due to swing of excavator		4) Deploy supervisor at excavation site, no worker should be allowed to enter in the swing area of the excavator			
2) Post Excavation	1) Unattended Trenches		1)Barricade the trenches.			
			2) Use warning signs & lights.			

SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARD	SAFE JOB STEPS AND CONTROL MEASURES
	2) Trench left opened for extended period	1) Close the trench, backfill and compact the area.
3) Cutting, bending and fixing of steel and shuttering works.	1) Cutting of hand/body parts.	1) Work to be executed carefully 2) Use hand gloves along with other PPEs.
	2) Body/hand/leg injury/Struck by against.	
	3) Electric shock.	3) Use certified cable/board and machine.
	4) Fire/burn hazard @ Hot work	4) Take hot work permit.
4) Cutting, bending and Positioning of TMT Reinforcement	1)Accidental contact with grinder wheel can cause bad cuts	1) Works should ensure the grinders guard is in place and fully operational before use.
	2)Mill scale, sharp ends of tie wire can injure eyes	2)Should use safety glass
	3)Tripping & Falling	3)Cut pieces and debris should be removed from the work place on daily basis.
5) PCC, RCC, concrete grading of roof, Ash brick work, plastering.	1) Fall (Slip/Trip)	1) Clean the site properly
	2) Body/hand/leg/other body part injury	2) Deploy trained workmen & Use hand gloves along with helmet, shoe, glass, earplug & dust mask.
	3) Eye injury	3) Use safety glass always.
	4) Irritation on hand/leg.	4) Use rubber hand gloves & gum boot during concreting.
	5) Fall from height.	5) Use full body harness during working at height.
6) Erection & dismantling of scaffolding.	1) Fall from height.	1) Deploy trained workers for erection & dismantling of the scaffolding.
		1a) Use full body harness & anchored the lanyards properly.
	2) Collapse of scaffolding.	2) The scaffolding materials along with the location shall be inspected by the competent person before starting of scaffolding.
		2a) Deploy trained scaffolders for erection & dismantling of the scaffolding.
		2b) After erection the scaffolding shall be certified by the competent person than only it may be used.
	3) Fall of objects from height.	3) The scaffolding area shall be barricaded. Use safety helmet along with other PPEs.

Pre Job Briefing (PJB) is Acknowledgement : I undertake that the JSA is communicated to me effectively

SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARD	SAFE JOB STEPS AND CONTROL MEASURES	
Name	Signature	Name	Signature