

Serial No.	Department	Equipment	Location	Job description: Construction of Store room at Tilia ash pond.			
	F/M	Ash pond	Tilia Ash Pond				
JSA performed by: Satyabrat Malla	Signature	Reviewed & Approved by	Signature	Date of Issue 09.03.2024	Date of revision		Revision No- R-0
HAZARD TEXT/TYPE (For reference to identify the Hazard type)							
PHYSICAL HAZARDS	PHYSICAL HAZARDS	PHYSICAL HAZARDS	ELECTRICAL HAZARDS	CHEMICAL/ GAS HAZARDS	EXCAVATION	OTHERS	
Noise	Fall from height	Force (Push/Pull)	Shock/ Electrocuton	Flammable/ Explosive substances	Collapse/Sliding	Fire	
Radiation	Fall (Slip/Trip)	Caught in/on or between	Static electricity	Inhalation of toxic fumes	Underground live cable damage	Heavy Wind/Rain	
Confined space	Fall down/below	Struck by/against	Arcflash/ blast	Ingestion/Abso rption	ERGONOMICS	Dust exposure	
Exposure to pressurised Steam/Air	Fall of Objects from height	Extreme weather (Hot/Cold)	BIOLOGICAL HAZARDS	Body/Eye Contact	Poor Posture	Oil spill	
Contact with Hot surface	Contact with moving parts	Poor illumination	Snake/Insect bite/Virus infection	Spillage	Repeatative motion	Human factor	
PPEs to be used	Safety Shoes, Safety Helmet, Hand Gloves, Dust Mask, safety goggles, gum boots and safety jackets, safety belt.						
Tools required	Spades, belcha, gamela, pick axe etc.						
Important Note- While deciding hazard control measures, consider hierarchy of hazard control steps in order of preference.							
SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARDS	SAFE JOB STEPS / HAZARD CONTROL MEASURES				Are control Measures adequate to mitigate the risk (Yes/No)	
		Elimination/ Substitution	Engineering	Administrative	PPE		
Work start-up & obtaining PTW	1.Unauthorized work. 2. Invalid permit . 3. Lack of competency 4. Lack or poor communication .5.Haste or shortcut	Access should be free without obstacle.	Responsible person will conduct inspection, monitor the work activities and have to ensure safety standards and procedures are strictly adhered to	Obtain a valid work permit before starting the job. Adequate Supervision for the task to be done. Be attentive on the job.	Basic PPES used	Supervisor must ensure that all work activities are carried out by competent personnel. Before start of the activity, Conduct pre-job briefing and have close monitoring for supervision.	
Vehicles & Machinery Movement	1-Bodily injury to the road users/drivers/ helper. 2-Material/ equipment damage.	Road condition to be even/follow safe route.	Speed limit inside the plant should not be more than 20 KM/H.While reversing the trucks, Machinery banks man shall be available and away for prier guiding the vehicles.	Skilled & trained driver with Valid DL to be deployed.Vehicle shall be checked prior to start the work.Inspect the vehicle on daily basis through checklist & maintain the record. Vehicle should be in good working condition with back up alarms functioning.	Shoes, helmet, goggles, vest, face shield & hand glove , Nose mask.	Don't park the vehicle on passage of vehicle movement.Vehicle shall be checked prior to start the work.	
Excavation Work	1.Collaps of soil. Under ground 2.Utilityline damage. 3.Hit by banksman. 4.Electrical hazard.	Hard bancaion to be provided. Clear access .Ensure lighting arrangement	Equipment physical condition and valid documents to be ensured.Authorized oprator deployed. Excavation during banksman provided	Area clearance electrical and all utility line must be checked. PTW system follows. Slope maintain as per approved drawing.	Basic PPE used.		

Steel Reinforcement work	1.Fall of matrial.2. Hit by rod while bending & shifting. 3.Crush between materials.	Access egress clear should be free of material. Secure the rod properly while shifting and fixing	Protruding rebar shall be protected with mushroomcap. Proper checked cutting machine befour activity.	PTW system follows. Conduct PJB before starting the job. Proper supervision.	Basic PPE used.	Shoulder pad must be used during Rod shifting.
SHUTRING WORK.	1.Phisicaly hazard. 2.During shuttering fixing fall of shutring matrial. 3.Electrical shock.	Working area to be cleared from un wanted materials. Shutring matrial to be stacked proper .	Shutring cutting machine physicaly cheked. Skiled work man deployed. Cutting machine power cable proper insulaated. Connected 30ma elcb must.	asper drawing procuder follows. PTW system and daily PJB to be conducted befour activity.	Basic PPE used.	During shuttering fixing safe distance should be mainted. Wooden harmer or plastic grip hammer should be used.
Concrete Work	1.Phisical injury. 2.Slip & trip .3.concreate enter eye.4.Fall of concrete. 5.Topple vehicle	Working area access should be clear. Boomplacing area to be labelling.	Skiled masson deployed. Area cordenof. Boom and miller condition phisicaly ensured. Authorized oprator deployed. Banks man provided.	PTW system follows. Conduct PJB job specific must. Proper supervision.	Basic PPE used.	
JCB Operation		Take electrical isolation wherever overhead electrical lines are passing.		No operator is allowed to talk over the mobile phone while operatin the equipment. Reverse horn should be working in the JCB. Signal man and traffic marshals are to be deployed with red and green flags while the JCB operation is taking place. Cordon off the area where any electrical pole or underground water pipeline is passing.		
Proper and Competent Supervision				Site supervisor must be present at all the times and also ensure discipline and safety norms being followed at		
Emergency Safety Measures (Rescue / Fire Brigade etc):		Emergency Contacts-Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/337, Hospital-666				
Overall Job Risk Category- (High/Medium/Low) :	High					
JSA Review during PJB:						
Pre Job Briefing (PJB) is applicable to all persons involved with the task.						
Pre Job Briefing (PJB) Acknowledgement: I undertake that the JSA is communicated to me effectively						
Name	Agency's name	Signature				