

Format No: ER 5/10- F2, JOB SAFETY ANALYSIS (JSA), IB THERMAL POWER STATION, OPGC							
Serial No.	Department	Equipment	Location	Job description:			
	Civil	Clarifier Drive Wheel	Main Plant	AMC for Specialised Civil Maintenance work inside Main Plant Area at ITPS			
JSA performed by:	Signature	Reviewed & Approved by	Signature	Date of Issue	Date of revision		Revision No-
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/ Electrocution	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/Absorption	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	Repeative motion	Human factor	
PPEs to be used	Safety helmet, shoe, hand gloves, earplug, dustmask, goggles etc						
Tools required	Sledge hammer, belcha, bucket etc						
<b>Important Note-</b> 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		
Shifting of materials near to working area.	1) Fall (Slip/Trip)	na	Working site along with the path way shall be cleaned.	na	na	Yes	
	2) Fall from height	na	na	Don't lean, three point contact to be ensured.	na	Yes	
	3) Fall of objects from height	na	na	Barricade the ground area.	na	yes	
Core Cutting / Core Drilling using Core Cutting Machine	1) Fall (Slip/Trip)	na	Clean the working site properly. Don't go to the edge near by.	Isolation protable pump 4&5 mouldie pump	Use safety helmet, shoe, hand gloves, earplug, dust mask and goggles.	Yes	
	2) Exposure to cement dust.	na	na	na	Use safety goggles and dustmask.	Yes	
	3) Noise	na	na	na	Use earplug.	Yes	
	4) Hand/body injury	na	Work carefully with proper posture.	Deploy trained workmen	Hand gloves must be used.	Yes	
	5) Electric Shock	na	Use certified cable, machine and board.			Yes	
Shuttering works	1) Body/Hand injury	na	Work carefully	Deploy trained workmen	Use safety helmet, shoe, hand gloves.	Yes	
	2) Cutting of hand					Yes	
	3) Contact with fire sparks	na	na	na	Face shield must be used if use cutter or any equipment	Yes	
	4) Exposure to cement dust	na	na	na	Use safety goggles and nose mask.	Yes	
	5) Irritation on hand/legs	na	na	na	Use rubber hand gloves and gum boot.	Yes	
	2) Fall from height	na	na	na	Use full body harness and anchor the lanyard to a rigid structure.	Yes	

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 at height	3) Fall of objects from height	na	na	Barricade the ground area.	Use hand gloves having proper grip and ground area workmen shall wear safety helmet properly.	Yes
Injection Grouting/ Pouring of chemical / grouts	1) Fall (Slip/Trip)	na	Clean the working site properly.	na	Use safety helmet, shoe, hand gloves, earplug, dust mask and googles.	Yes
	2) Exposure to Chemical/cement dust.	na	na	na	Use rubber hand gloves,safety googles and dustmask.	Yes
	3) Noise	na	na	na	Use earplug.	Yes
	4) Hand injury during shuttering works.	na	Work carefully.	na	Hand gloves must be used.	Yes
	5) Contact with chemical dust	na	na	na	3) Use safety googles and dust mask.	Yes
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-	Medium					
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				