

Format No: ER 5/10– F2, JOB SAFETY ANALYSIS (JSA), IB THERMAL POWER STATION, OPGC							
Serial No.	Department	Equipment	Location	Job description:			
	Ash Pond	Ash Pond	Ash Pond	Name of work: Annual Maintenance Contract (AMC) for Miscellaneous works at Ash Pond- A, B & C of ITPS for Two Years			
JSA performed by:	Anil Panda	Reviewed & Approved by	Gouri prasad Mishra	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	Repeatative motion	Human factor	
PPEs to be used	Safety Helmet, Safety Shoes, Safety goggle, Dust mask, Hand gloves, Ear Plug, Full body harness etc.						
Tools required	Spade, crow bar, hose pipe 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	
1.Sprinkling of water over dry ash.	1.Ash blowing.	N.A	1. Ash disposal series will be operated with extension of HDPE pipes for keeping the surface wet to avoid blowing 2. Diesel pump will be operated for water sprinkling	1.The worker must use dust mask,Safety glass during dry weather to protect them shelves from ash blowing.	Wear safety helmet, shoes, safety goggle, dust mask	yes
1.Cleaning of wild grass from slope of bund, AD pipe line. 2.cleaning of toe/periphery drain of ash pond 'B'	1.Sliping from the slope. 2.Injury dueto slip of sickle.	N.A	1. For working in slope rope support to be used, by placing the rope firmly at the top of embankment.	1. A supervisor must be engaged to monitor the work properly. 2.The workers should move carefully while going down/up the slope of bank. 3.The workers must use dust mark, safety grass during dry weather to protect them shelves from ash blowing.	Wear safety helmet, shoes, safety goggle, dust mask	Yes
Cleaning of Control room, Pump house, Battery room and Site office	1.Falling from height while Cleaning. 2.Dust ingress in Nose & Eye during cleaning of surface. 3.Falling of cleaning materials on ground while Cleaning and create environmental hazard.	N.A	1.Scaffolding to be made properly as per requirement.	1.Painting materials will be shifted to the painter in small container/bucket carefully. 2.The ground will be cleaned immediately.	Wear safety helmet, shoes, safety goggle, dust mask	Yes
Cleaning of floating grass from PST / Ash pond	1. Drowning in water 2. Slip in the slope of embankment	N.A	1. For safe working in slope rope support to be used 2. Life-buoy and life jacket to be used for working inside ash water with long rope.	1. Supervisor to be present at site during work execution 2. More than four workers to be deployed with proper PPE and support workers tio be deployed at the bund for emergency	Life jacket, Rope, Life buoy	Yes

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		Elimination/ Substitution	Engineering	Administrative	PPE								
Emergency Safety Measures (Rescue/Fire Brigade etc): Contact MCR or inform to emergency contact no.		Emergency Contacts-Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/337, Hospital-666											
Overall Job Risk Category-		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											