

Format No: _____ **JOB SAFETY ANALYSIS (JSA), IB THERMAL POWER STATION, OPGC**

Serial No.	Department	Equipment	Location	Job description		
	Civil(Cleaning& Housekeeping Team)		ESP	Cleaning Ash in ESP Area		
JSA performed by:	Signature	Reviewed by (TL)-	Signature	Date of Issue	Date of revision	Revision No : 01
		Reviewed by (Shift In charge) –	Signature			

HAZARD TEXT/TYPE

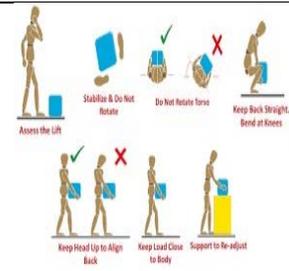
PHYSICAL HAZARDS	PHYSICAL HAZARDS	PHYSICAL HAZARDS	ELECTRICAL HAZARDS	CHEMICAL/ GAS HAZARDS	EXCAVATION	OTHERS
Noise	Fall from height	Force (Push/Pull)	Shock/ Electrocutation	Flammable/ Explosive	Collapse/Sliding	Fire
Radiation	Fall (Slip/Trip)	Caught in/on or between	Static electricity	Fumes Inhalation	Underground live cable damage	Heavy Wind/Rain
Confined space	Fall down/below	Struck by/against	Arc/flash 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	Human factor
Contact with Hot surface	Contact with moving parts	Poor illumination	Snake/Insect bite/Virus infection	Spillage	Repetitive motion	Any other

Tools required

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	HAZARD CONTROL MEASURES				Are control Measures adequate to mitigate the risk (Yes/No)
		ELIMINATION/ SUBSTITUTION	ENGINEERING	ADMINISTRATIVE	PPEs	

Obtain Permit or area clearance for housekeeping activities	Unauthorized work cause injury/damage			<p>1. Get PTW before starting the job or entry the job details in the communication log (available in the AHP Control room), housekeeping JSA should be approved by AP of AHP and JSA should be communicated to the crafts before starting any activities.</p> <p>2. Permit should be close only after thoroughly inspecting the work area.</p>	Safety helmet, Safety shoes, Nose Mask, Ear Plug, Safety goggles, Hand gloves etc.	<p style="text-align: center;">YES</p> <p>Note: - If cleaning or housekeeping carried out on Commissioning or running equipment, valid PTW shall be obtained from AHP PTW Office.</p>
Cleaning Of Ash	<p>1. Trips and falls</p> <p>2. Contact with Sharp Objects.</p> <p>3. Fall in to the unprotected cable trench.</p> <p>4. Exposure to service air (Only when service air used for cleaning)</p> <p>5. Struck against by Bobcats and JCB.</p>	<p>1. All waste generated shall be contained and disposed of in designated waste skips.</p> <p>2. All opening should be properly protected.</p> <p>3. Competent Flagman should be deployed while moving Of Equipment.</p>	<p>1. All materials shall be removed from the site to a safe storage location immediately after the work.</p> <p>3. Competent operator should be deployed while operating equipments.</p>	<p>1. Proper supervision must be provided for housekeeping.</p> <p>2. Floor opening caution signage to be displayed on the proper places.</p> <p>3. PJB & proper Permit must be followed before starting the work.</p> <p>4. Before using service air, take permission from AHP Operation team. Hose should be away from body part.</p>	Safety helmet, Safety shoes, Nose Mask, Ear Plug, Safety goggles, Hand gloves etc.	<p style="text-align: center;">YES</p>
Manual Material Handling	Un-comfortable lifting and handling.	<p>1. Safe lifting load of person to be respected (Adult Male=50Kgs. And Adult Female=30Kgs.</p>	<p>1. The task to be clearly defined and planned.</p> <p>2. Environmental conditions such as slippery surface, water</p>	<p>1. Job rotation system need to implement.</p> <p>2. Training on Safe Manual handling procedures need to be imparted by demonstration.</p>	Safety helmet, Safety shoes, Nose Mask, Ear Plug, Safety goggles, Hand gloves etc.	<p style="text-align: center;">YES</p>



-As per Odisha Factories Rules-1950-Section-34-Rule-57).
2. Characteristics of the Load need to consider.
3. Competency and Capacity of Individuals to be considered.

logging need to be considered.
3. Mechanisation of the process need to be practiced.

Improper ergonomic practices

Falling objects while cleaning & inspection.

Shifting of material (from the racks) from height using ladder.

1. Mechanisation of the process need to be practiced.
2. Job rotation system need to implement.
3. No person to stand or touch any commissioning equipment.

1. The working environment needs to be ergonomically designed and defined.
2. 5S System need to practice.
3. Training to be imparted at regular intervals.

1. Floors to be check before erecting ladder.
2. Ensure toppling of ladder.
3. Training on Safe Manual handling procedures need to be imparted by demonstration.
4. Supervisor must present at site during work.

Emergency Safety Measures:

Emergency Contacts-Main Control Room- 222, 233,244, AHP Control Room-7077728552, Fire- 777, 222257, Ambulance- 248/277, Hospital-660

Overall Job Risk Category- (High/Medium/Low) :

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
