

JOB SAFETY ANALYSIS (JSA), IB THERMAL POWER STATION, OPGC (2X660MW)							
Serial No.	Department	Equipment	Location	Job description:Special repair of Bituminous Road from Telenpalli Gate to Khadam Junction			
	Civil		Switch yard	Civil work			
JSA performed by:	Signature	Review & 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/ Electrocutation	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 Shoe, Safety goggle, Hand glove, Safety belt,Rubber hand gloves gum boots etc.						
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	SAFE JOB STEPS / HAZARD CONTROL MEASURES				Area control Measures adequate to	
		Elimination/ Substitution	Engineering	Administrative	PPE		
Work start-up & obtaining PTW	1. Body infection 2. Death	1. Area survey 2.Housekeeping		1.Training (PJB/OJT) 2.carbolic Acid spray	All PPE's mandatory	Yes	

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Area Layout & Marking	1) Inhelction of dust 2) Snake bite/insect bite.	1-Bushes shall be cleaned before start of job. 2-Apply carbolic acid/Bliching power if required.		1-Training (PJB/OJT) 2-PTW shall be taken before start of job.	Safety Shoes, Hand Gloves, Helmet ,Goggles, Dust mask, Hearing protection, safet belt & fluorescent jacket must be worn	Yes
Power Cable Rerouting	1. Electrical shock	Power supply shall be isolate before start of job.		1-PTW shall be taken before start of job. 2-Training (PJB/OJT) 3-Isolation permites(LOTO) shall be taken before start of job.	All Mandatory PPE's with Rubber hand gloves.	Yes
Vehicale movement	1-Vehicle can hit 2-vehicle can fall in the excavated pit 3-Vehicle can run over during reversing			1-Compitent operator shall be deployed. 2.Training to be provided through PJB/OJT. 3-Spotter to be deployed. 4- Proper illumination should be provided 5- Vehicle shall be checked prior to start the work on daily basis through checklist & maintain the record.		Yes
Work at adverse weather	Poor illumination	1-No work shall be carried in adverse weather.		1-PJB shall be conducted. 2-Dedicated supervision shall be deployed. 3-Permit shall be canceled in adverse weather.		Yes
Snake bite	1. Body infection 2. Death	1. Area survey 2.Housekeeping		1.Training (PJB/OJT) 2.carbolic Acid spray	All PPE's mandatory	Yes

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Scarifying Work	1.Dust emision	Nose mask to be weared	Skiled workmen to be deployed.	PTW system follows. Proper supervision.	Helmet, Safety Shoes, Cotton handgloves, goggels, Jacket, nose mask.	Yes
House keeping work	1. Tripping over loose objects. 2. Being hit by objects. 3. Slipping on bitumen or dirty surface. 4. Striking against projecting, poorly stacked items. 5. Cutting, puncturing or tearing the skin of parts of the body	Clear on obstructed walk way.	Segregate the materials in designated place. Unwanted materials to be removed on regular basis.	PJB brifing on daily basis	Basic PPE used.	Yes
Materials transport	Materials can fall on leg. Back Injury	1. Hazard should be explained during PJB. 2. Mandatory PPEs should be use during work at site. 3. Manual materials technique to be applied. 4. Sufficient man power to be engaged. 5. Close supervision to be ensure.			Safety Helmet Safety Shoe Safety Goggles Hi-Vi- Jacket Hand gloves	Yes

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Heating of Bitumen by wooden	1. Fire. 2. Burn 3. Health hazard 4. Contact with eye.	1. Area to be barricaded. 2. Bitumen burning area to be cover. 3. Ventilation to be provided. 4. Sufficient Nos of fire extinguisher to be kept at site. 5. All required PPEs to be use during heating. 6. Workmen should be cover their body. 7. Hazard to be explained during PJB.			Helmet Gum boots Cover All Leather Hand gloves Goggles, Body apron	Yes
Mixing of Bitumen with sand	1. Burn 2. Inhalation 3. Contact with eye	1. All body should be covered. 2. Chrome hand gloves to be use. 3. Goggles should be use. 4. Skilled man power to be engaged.			Helmet Gum boots Cover All Leather Hand gloves Goggles, Body apron	Yes
Emergency Control Measures: Keep ready DCP/Co2 Type Fire		Main Control Room- 7077743444, CHP Control Room- 8018084333, Fire- 07077225454/777, 222257,				
Overall Job Risk Category-	High					
JSA Review during PJB: Yes						
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 & understand the hazards & risks						
Name	Agency's name	Signature	Name	Agency's name	Signature	

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