

Format No: ER 5/10– F2, JOB SAFETY ANALYSIS (JSA), IB THERMAL POWER STATION, OPGC							
Serial No.	Department	Equipment	Location	Job description: Repairing of Roads in ITPS Colony			
			ITPS Colony				
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/ 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 Shoes, Safety Helmet, Hand Gloves, Dust Mask, safety goggles, gum boots and safety shoes, welding full face mask, boiler suit.						
Tools required	Road Marking Machine, Thermoplastic Paint, Mixer Machine						
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	
		Elimination/ Substitution	Engineering	Administrative	PPE		
Excavation of Road sides	Contact with live underground cables, water pipeline, sewage pipelines			Take excavation permit from colony maintenace.			
Cleaning of granular vase surfa	Fall of dust into eyes and inhalation of dust matter.				Use of dust mask and safety goggles.		

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Carriage of materials from the hot mix plant to the work site	Accident of vehicle, fall of man from the vehicle, hit with other objects			The speed limit of the vehicle should be below 30 Km/hr. The vehicle should have a proper fitness license and the driver should have a valid driving license. No person should sit on the trolley of the vehicle. The vehicle should have a reverse horn.		
Applying tack coat and primer coat on the road surface.	Fall of liquid bitumen onto the hands and legs of the workmen				The workman should be with proper handgloves and gum boots and full sleeve shirts and full pants.	
Laying of Bituminous Macadam and SDBC on the road surface	Fall of materials onto the workers.				The workman should be with proper handgloves and gum boots and full sleeve shirts and full pants.	
Compaction of the BM & SDBC by road roller.	Hit by roller from behind.		The road roller should have a reverse horn.	A signalling marshal should be provided along with the road roller.		
Pouring of Thermoplastic Powder into the burner trolley	Spillage of powder, fall of dust particles into eyes nose.				Use of safety helmet, hand gloves, dust mask and safety goggles.	Yes
Blinding road surface with sand	Fall of sand particles onto the road surface.			No persons should sit on the tractor trolley.	Use of safety helmet, hand gloves, dust mask and safety goggles.	Yes

SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARDS	SAFE JOB STEPS / HAZARD CONTROL MEASURES				Fire Control Measures adequate to mitigate the risk											
		Elimination/ Substitution	Engineering	Administrative	PPE												
Lighting and cooking of thermoplastic paint.	Gas leakage		ISI quality supply pipe and burner to be ensured and water bucket or fire extinguisher to be ensured.		Use of safety helmet, hand gloves, dust mask and safety goggles.	Yes											
Laying of Thermoplastic Paint	Fall of paint onto legs and body of workers				Use of safety shoes & use precaution while working.	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															