Format	No: ER 5/10-	F2, JOI	B SAFETY AN	ALYSIS (JSA), I	B THERMAL POWER ST	ATION, OPGC			
Serial No.	Department	Equipment	Location	Job description:					
	Civil	Road section	СНР	"REPAIR OF ROADS AT ITPS COLONY"					
JSA performed by:	Signature	Reviewed & Approved by	Signature	Date of Issue	Date of revision			Revision No-	
		HAZ	ARD TEXT/TYP		e to identify the Hazard t	:ype)			
PHYSICAL HAZARDS	HYSICAL HAZARDS HAZARDS		ELECTRICAL HAZARDS	CHEMICAL/ GAS HAZARDS	CHEMICAL/ 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/Abso rption	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	, shoe, hand gloves, earplug, dustmask, googles, leather haand gloves, appron, face shield etc							
Tools required	Jhadu, Belcha	, Phowrah, Gambla	a etc.						
Important Note- While d	eciding hazard	control measures,	consider hiera	archy of hazard	control steps in order of p	oreference.			
SEQUENCE OF BASIC STEPS		SAFETY, HEALTH & ENVIROMENT HAZARDS		SAFE JOB STEPS / HAZARD CONTROL MEASURES					
				Elimination/ Substitution	Engineering	Administrative	PPE	Are control Measures adequate to mitigate the risk (Yes/No)	
1) Transportation of materials		1) Failure of vehicle due to overloading/unsafe driving/mechanical failure.		na	Check the fitness of the vehicle periodically. Over loading is strictly prohibited.	Ensure proper license of driver. Speed limit should me 10 km/hr during transporting in loading condition.	na	Yes	
		2) Struck by/against		na	Work carefully.	Keep distance from the working area.	na	Yes	
		1) Cutting of hand/Hand injury		na	Use correct and tested tools.	na	Hand gloves must be used.	Yes	

spreading them after transporting to the road followed by Hot work and	2) During mixing/fueling/transporting/lo ading hot mix may come and contact with any body parts.	na	Work very cautiosly during working with hot bitumen. Try to wear full clothes.	Don't stand near by hot mixing area. Keep distance. Experienced workmen to be deployed for the	Use safety helmet, shoe/gum boot, leather hand gloves, googles and dust mask.	Yes		
Irolling.								
	3) Traffic hazard	na	na	Barricade the working road area.	na	Yes		
	4) Contact with dust & bitumen fume.	na	na	na	Use safety googles and nose mask properly.	Yes		
	5) Foreign material may come and stricke to body.	na	na	Barricade the working road area.	na	Yes		
Emergency Safety Measures (Rescue/	Emergency Contacts-Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/337, Hospital-666							
Overal Job Risk Category- (High/Medium/Low) :	High	1						
	Emergency Contacts-Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/33							
Emergency Safety Measures (Rescue/	5) Foreign material may come and stricke to body.	Emergency Co		working road area.	na			
Emorganou Cafatu Maaguras (Basqua /	and stricke to body.			working road area.				
Emergency Safety Measures (Rescue/								
and stricke to body. Emergency Safety Measures (Rescue/Fire Brigade etc):		na working road area. na Yes Emergency Contacts-Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/33						
		na	na			Yes		
			na	na	and nose mask	Yes		
	-		na	Barricade the working road area.		Yes		
	3) Traffic hazard	na	na		na	Yes		
rolling.	3) Traffic hazard	na	na		na	Yes		
the road followed by Hot work and	ading hot mix may come and	na	Work very cautiosly during working with hot bitumen. Try to wear full clothes.	Experienced workmen to be deployed for the	leather hand gloves, googles and dust	Yes		
	_			hot mixing area.	Use safety helmet,			
	1) Fire / Burn hazard	na	before start the hot work.	extinguisher and water bucket shall be kept at site.	na	Yes		
			Take hot work permit	Deploy a fire watcher. Fire				
	4) Struck by against	na	Work carefully.	na	na	Yes		
	3) Contact with dust particles.	na	na	na	Use nose mask and safety googles.	Yes		
2) Dressing of pot holes	2) Traffic hazard/Road accident	na	na	Use traffic one to control traffic hazard.	na	Yes		