

## JOB SAFETY ANALYSIS (JSA)

**FORMAT NO: ER 5/10- F2.**

Serial No.	Department	Equipment	Location	Job description		
	Civil, Main Plant		Main plant	"AMC for Horticulture Maintenance in Main plant at ITPS".(For 02 years)		
Analysis Done by (EIC/Authorised or Competent Person/Supervisor)	Signature	Reviewed & Approved by ( SIC)	Signature	Date of Issue	Date of revision	Revision No

### 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	EGRONOMICS	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 Goggles, Safety Shoes, Hand Gloves, Dustmask etc.
Tools required	Bucket, mug, gainti, belcha and other plantation related tool & plants etc.

SEQUENCE OF BASIC STEPS	IDENTIFIED SAFETY, HEALTH & ENVIROMENT	RECOMMENDED SAFE JOB STEPS AND CONTROL
Dressing of surface with wild grass & bush cleaning	Finger/eye injury, Insect & snake bite	Goggles and gloves are to be used. Stick beating to be done before entering to dense grass area.
Excavation of earth pits.	Hand, leg and body injury	Proper care should be taken to avoid injury. Use of safety shoe, goggles and hand gloves.
Application of manure and pesticides.	Inhalling probem, poisonous	Use of goggles, nose mask and hand gloves. Keep the pesticides labelled & follow MSDS. Disposing of manure & pesticide shall be done as per EHS guide line.
Plantation of sapling followed by watering	While planting sapling foreign particles may come in contact with eye, hand and other parts of body.	Proper care should be taken to avoid unsafe condition wearing proper PPEs.
Transportation of saplings including loading and unloading.	While transporting saplings, manure, fertilisers and other materials injury may occur.	Proper care should be taken to avoid unsafe condition wearing proper PPEs and checking of healthy condition of vehicle with insurance of driver, helper and vehicle itself.
Maintenance of flower bed and decorative plants by Grass cutting and trimming of hedges manually/mechanical means	Finger/eye injury, Insect & snake bite, Electric shock.Moving blade petrol engine explosion, cutting of hand/body part	Goggles and gloves are to be used. Stick beating to be done before entering to dense grass area. Special care to be taken, hand glove with all PPEs to be used. Guard the blade properly use double insulated cable with proper plug. Do not use flame near petrol engine/while fueling. Deploy trained workmen.
Work at height	Fall from height, Electrocutation by over head line.	Use full body harness for working at height and take permit before this nature of job. Over head line shall be take care off.

Overall Job Risk Category- (High/Medium/Low) :	Medium	Supervision/Monitoring frequency-	Once daily
Emergency Contacts- Main Control Room- 222, 233,244, Fire- 777, 222257, Ambulance- 248/277, Hospital-666			
Remark- In case, persons find difficult in controlling hazards and minimizing risks of all the activities involved with a task, Dept. Leader/ EIC / Safety Officer shall be consulted and finally the task shall be performed within acceptable risk level.			
Pre Job Briefing (PJB) is applicable to all persons involved with the task. PJB can either be done before execution of the job.			
Pre Job Briefing (PJB) Acknowledgement:			
Name	Agency's name	Signature	