**Activities River water pump suction end at river Point**

Objective Modification of Structure, FRP & HDPE work at river point

Responsibility Engineer in charge and workmen at job

PPEs to be used Helmet, Shoes, hand gloves, life boy, rescue apparatus,

Aspect-Impact

Steel Scrap Resource Depletion

FRP material Spillage Land contamination

Hazards Identified

|  |  |
| --- | --- |
| **Energy Sources** | **Potential hazards** |
| Electrical | * Electric shock, * Cable damage, * Loose connection. |
| Mechanical | - Falling, tripping.  - Proper fixing of fall arrestor.  - Entanglement, Impact, Cut injury |
| Potential | * River at high tide * All steady structures |
| Human behavior | * Loose connection, * Non use of PPEs, * Alcoholism |
| Biological | * Mosquitoes * Birds |
| Bio mechanical | * Body posture of workmen |

SAFETY PRECAUTION

24 volt DC supply should be used for providing illumination

Cotton/Leather hand gloves, nose mask, white/black goggles should be used

Proper checking of Welding machine, gas cutting set, grinding, cut off, flexible grinding machine, etc.,

PRECHECKS

Take the work permit and safety officer clearance at work place.

Ensure rescue apparatus and rescue team available at site.

Before starting of cutting set and welding machine check the testing certificate.

Before starting of welding / gas cutting work check the any leakages, clean the working areas, make a proper arrangement or put some sheet for sitting.

***DO’S***

1. *Use PPE’s.*
2. *Follow SOP.*
3. *Activity to be carried out during day duty hours.*
4. *Before putting addition helper/operator on job attendant must ensure that Entrant (helper/operator) should familiar with the operation.*
5. *Check the grizzly platform condition (made of rods) for its looseness, to avoid falling of person.*

***DONT’S***

*1) Do not by pass SOP.*

1. *Use 24V DC supply illumination to avoid electrocution/electric shock.*
2. *Check the grizzly platform (made of rods) for its looseness, if found any deviation correct it if not, stop the work and don’t allow any person to go inside main flue duct.*
3. *After job completion ensure that all involved crew members are come out from HESP and close the man hole of it.*
4. *All material/scrap collected during executiondo not keep at job site after completion of work.*
5. *Normalize the system and release all equipment shutdowns and close the work permit.*
6. *Give the clearance to HOD, SS from your side that your assigned job is completed.*

***Role of Rescue Team***

***As the work is being carried out inside HESP, in an emergency victim can be taken out by use of rescue apparatus such as stretcher. However attendant should call ambulance which is fully equipped. However rescue team members should take a charge of the situation.***

***Rescue Team member.***

***Detail activity procedure.***

1. After obtain clearance from operation department start remove the all unwanted platform / damaged platform material located near work place.
2. Provide new platform as per requirement and additional strengthen from bottom civil foundation.
3. Structural Platform detail scheme, stability has to be ensure from internal design department.
4. After placing platform, lock the existing FRP pipe to structure by providing double clamping.
5. After locking of FRP suction point, all damaged portion frp joint to be repaired.
6. All generated scrap during execution to be removed from site and shift to designated scrap yard.