2.11.1 Water accumulation in mine

Hurdul Nala flows from east to west, from the center of block, Catchment study for the nalla to be carried out. All required precaution against inundation would be taken care of.

A careful assessment shall be made against the danger from surface water before the onset of rainy season. Garland drains shall be provided to drain away the surface rainwater from the mine excavated area. Adequate capacity of pumping will be installed. All pumps in designated sumps will be mounted on floats to prevent drowning in case of unwarranted heavy rainfall. Inspection for any accumulation of water, obstruction in normal drainage and weakening of embankment shall be carried out regularly.

2.12 Social impact assessment (SIA)

Social Impact Assessment study has been conducted in the project area copy of SIA is attached as **Annexure XII**.

2.13 Resource requirement

2.13.1 Power Requirement

The power requirement shall be fulfilled from the nearby 132/33kV substation at Dongri village. 33kV line shall be taken up to the CHP area and further power distribution for CHP equipment, mine pit water pumping, and illumination shall be carried out as per requirement at 6.6 kV and 415 V through overhead line and cables as suitable.

2.13.2 Water Requirement

The demand of water for the project has been estimated as per industrial norms. The requirement of water for various purposes has been furnished below in **Table 2.13.**

Table 2.13: Water Requirement for Mining

Sl.no.	Industrial water	m^3 /day
1	Water requirement for sprinkling at mine haul roads	340
2	Service water requirement for CHP & dust suppression system	500
3	Water requirement for Base Workshop & other miscellaneous purposes	100
4	Water requirement for green belt development and biological reclamation	750

5	Evaporation loss	20
6	Potable Water (Drinking and sanitation water requirement in Mine)	50
Total		**1760**
Add 10 % design allowance		176
Net water demand		**1936**
Considering 18 hrs/day of operation		107.5555556

2.13.2.1 Source of water

It is envisaged that to meet the requirement of water for construction, drinking and sanitation as well as mine operation, at the initial stage of 2- 3 years, will be met from ground water. PP has obtained the NOC from Central Ground Water Authority (CGWA) vide NOC no. CGWA/NOC/MIN/ORIG/2022/15765 which is valid from 15.06.2022 to 14.06.2024 copy is attached as **Annexure VI**. Water sourced from bore well will be treated to make potable water.

After that mine quarry will collect sufficient water which will meet the industrial demand. However, the potable water demand at mine, mine facilities will be met through ground water by bore wells.

2.13.3 Manpower

Mine shall provide an opportunity of direct and indirect employment to 970 peoples.

2.13.4 Proposed Investment

Total cost of the proposed mining project is estimated as **Rs. 2800 Crore**.

2.13.5 Site Services

The project being green field, all necessary structures must be developed before and during commencement of mining operation. Facilities such as Coal Handling Plant (CHP), maintenance and electrical workshops, stores, Explosive Magazine, Power supply, Access roads to Mine site, Telecommunication, housing, offices, first aid centre/hospital, canteen, Vocational training centre and other necessary facilities will have to be developed. Workshop area will house facility for the servicing of light vehicles, HEMM, wash bays, warehouse etc.