

**EXECUTIVE SUMMARY**  
**ENVIRONMENTAL IMPACT ASSESSMENT**  
**&**  
**ENVIRONMENTAL MANAGEMENT PLAN**  
*FOR*  
**PUBLIC HEARING AS PER EIA NOTIFICATION, 2006**  
**GAURI PAUNI EXPANSION OCP**  
**(Ballarpur Area, WCL)**

**For**

Enhancement in production capacity from 3.40 (2.50 + 0.90) MTPA to  
3.50 MTPA and increase in project area from 931.53(676.53 + 255.00)  
Ha to 1618.00 Ha

***(PREPARED AS PER TOR J-11015/242/2008-IA.II (M) dated  
20.01.2021)***



**December - 2021**

**Prepared by**

**CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED**

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**CMPDI/EIA /PH/01/WCL/ 2021-22/DEC/120/00**

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## 1.0 INTRODUCTION

Gauri Pauni Expansion OC is a proposed mine with production capacity 3.50 MTPA located in Pauni Village, Rajura Tehsil of Chandrapur district. Chandrapur city is located at a distance of about 25 Km for the project.

Gauri Pauni Expansion OC is amalgamation of two existing mines namely Gauri I & II Expansion (A) OC and Expansion of Pauni OC with extraction of dipside (south-side) reserves.

Gauri I & II Expansion (A) OC (Production capacity – 2.50 MTPA) will exhaust its reserves in 2021-22 and Expansion of Pauni OC (Production capacity 0.90 – MTPA) has already exhausted its reserves. Thus, through Amalgamation and dipside expansion, it is proposed to maintain existing production levels of Ballarpur area of Western Coalfields Limited. This will enable saving for the national exchequer and ensure energy security for the nation.

A project report of Gauri Pauni Expansion OC was prepared and approved by WCL board for production capacity of 3.50 MTPA within 1618.00 ha in its 324<sup>th</sup> meeting held on 04.08.2020. Total capital investment is ₹ 337.3771 Crore (including WDV of ₹ 48.0436 Crore).

Based on the above approved Project Report, application for ToR was submitted to MoEF&CC and ToR was secured vide J-11015/242/2008-IA.II (M) dated 20.01.2021 for a production capacity of 3.50 MTPA within land area 1618.00 ha (1613.00 ha Mining Lease Area + 5.00 ha outside mining lease for Pauni Village Rehabilitation).

As per the approved project report, a geological fault exists in the dipside with 80m down-throw. In the approved project report, it was proposed to extract dipside reserves beyond geological fault through existing Quarry – I of neighbouring Pauni – II Expansion OC. Thus 321.58 ha land presently covered under Pauni – II Expansion OC will be transferred to Gauri Pauni Expansion OC. This transfer of land will be required after five year when reserves of Quarry – I of Pauni – II Expansion OC will exhaust.

Considering the above, a revised mining plan has been prepared which bifurcated mining sequence in two phases i.e. Phase – I which is limited to 1296.42 ha area (total area 1618.00 ha – Quarry – I of Pauni – II Expansion OC 321.58 ha) and Phase – II which will include transferred area of Quarry – I of Pauni – II Expansion OC thus making total project area

1618.00 ha. This revised mining plan also included barrier reserves between existing Gauri I & II Expansion (A) OC and Expansion of Pauni OC.

This revised mining plan has been noted by Expert Appraisal Committee (Coal Mining) in 19<sup>th</sup> EAC held on 23.09.2021. EAC has directed to submit the proposal accordingly.

Draft EIA report, Executive summary in English and Local language (in this case Marathi) has been prepared to conduct public hearing as per EIA Notification, 2006.

### **1.1 LOCATION**

The area falls in the Rajura tehsil of Chandrapur district of Maharashtra state. The Chandrapur district township is located at the distance of about 25 kms from the block.

Project is bounded by Latitudes: N 19°47'44" to 19°50'03" Longitudes: E 79°14'42" to 79°18'12". It falls in Survey of India Toposheet No. 56M/1 & 56 M/5 (IAC) E- 44B-1 & E-44B-5 (OSM).

### **1.2 COMMUNICATION**

The approach to the area at present is via Sasti Colliery or Rajura, Mathra, Gauri, Pauni and Sasti villages by a fair weathered road which is passing from north of the project. Delhi-Chennai Grand Chord Railway line passes through Ballarpur township which is located in the NE of the project at a distance of about 10 kms. The Ballarpur, in turn, is connected to Nagpur (160km) by State Highway no. 85 via. Chandrapur and Warora. Ballarshah Railway station is located at a distance of about 8 km from the project.

### **1.3 TOPOGRAPHY & DRAINAGE**

The major area of the project is covered by agriculture land with black cotton soil and exhibits a gently undulating topography with general slope from West to East. The altitude of the area ranges between 171.32 m and 203.72 m as per boreholes data.

The main drainage of the area is controlled by the Wardha river, which is flowing Southerly and is located about 8 kms east from the area. About 5 nalas are passing nearby the project area and their flow direction is from South-West to North-East. The sequence of nala from the western end is Lendi Laoni nala, Sakhari nala, Pauni nala, Chincholi nala & Gauri nala. Out of all these nalas, Pauni Nala & Chincholi Nala are passing through the coal bearing of the project. Gauri Nala forms the final drainage of these nalas which ultimately joins Wardha river. HFL of Gauri nala as recorded on 15-08-1986 is 186.50 m. The H.F.L. of the Wardha River as recorded by Sasti Colliery in year 1959 is 178.5m.

## 1.4 CLIMATE & RAINFALL

The area can be characterized as sub-tropical with the day temperatures in summer season rising to 48°C and the mercury falling to 10°C in winters. The annual rainfall in the area generally varies from 500 mm to 1400 mm, June to September being the wettest months. The wind direction varies from north easterly in November to westerly in June. Wardha River is the main source of drainage.

## 2.0 PROJECT DESCRIPTION

### 2.1 GEO – MINING PARAMETERS

The broad mine parameters of the proposed Gauri-Pauni Expansion OC mine are as follows:

Sl. No.	Particulars	Qty.
1.	Area of the Quarry	
a)	On floor (ha)	576.09
b)	On surface (ha)	773.00
2.	Depth (m) [upto floor of Bottom section]	
a)	Initial	110
b)	Final	230
3.	Gradient of Seam	1 in 7.40 to 1 in 10.50
4.	Average Strike length (m)	
a)	On surface	3300
b)	On floor	2925
5.	Average Width (m) [dip rise]	
a)	On surface	1100
b)	On floor	1000
6.	Total Mineable Reserves (Mt)	55.34
7.	Total Volume of Overburden (Mm <sup>3</sup> )	522.45
8.	Average stripping ratio (m <sup>3</sup> /t)	9.44
9.	No. of Workable Sections	2
10.	Annual Target Capacity (Mt)	3.50
11.	Life of Mine (incl. land acquisition period)	19
12.	Weighted average GCV of Coal	
a	For Dipside part (kCal/kg) (Undiluted)	4610 / (G9)
b	For Barrier Coal	G-10

## 2.2 METHOD OF MINING

This proposal is for expansion of existing opencast coal mines in the dip side to sustain the coal production. It is proposed to adopt Surface Miner with Front End loader and Dumper system has been proposed in approved mining plan for extraction of composite coal seam and Shovel Dumper System of mining for removal of overburden in both the quarries. As the seam gradient is relatively flat, Top OB, coal and partings will be worked by Inclined slicing method along seam floor.

## 3.0 DESCRIPTION OF ENVIRONMENT

This project envisages the expansion of existing mine in the dip side. The mining activities in the study area has been carried out since more than two decades. In order to understand the present environment status, the baseline data was generated for ambient air quality, water quality, noise level, soil, flora fauna and socio-economic including occupational health. The baseline data was generated in post-monsoon season (October to December), 2020 for air quality, water quality, noise level and soil quality. The baseline data for flora & fauna and socio-economic status was generated in March-April, 2021.

### 3.1 MICROMETEOROLOGY

The micrometeorological data generated was generated in post-monsoon season, 2020. The summary is provided below:

Sl. No.	Parameter	Details
1.	Wind Direction	Predominantly East
2.	Wind Speed (m/s)	Minimum – 0.0 m/s Maximum – 9.0 m/s Average – 2.82 m/s
3.	Rainfall (mm)	Total 14 mm during the study period
4.	Temperature (°C)	Minimum – 11 (°C) Maximum – 33 (°C) Average – 25 (°C)
5.	Relative Humidity	Minimum – 20% Maximum – 100% Average – 76%

### 3.2 AMBIENT AIR QUALITY BASELINE DATA

In order to understand the existing ambient air quality status of the study area, the ambient air quality monitoring was carried out at 11 locations. The baseline data for various parameters as required in the ToR issued by MoEF&CC was generated from October, 2020 to December, 2020.

Summary of baseline data is provided below:

Sl. No.	Name of the Location	Direction & Distance from Core zone	Upwind/ Downwind	Industrial/ Residential	PM10		PM2.5		NOx		SO2	
					Baseline GLC.	Std.	Baseline GLC.	Std.	Baseline GLC.	Std.	Baseline GLC.	Std.
1.	Chincholi Khurd	NE 0.52 Km	downwind	Residential	81	100	34	60	30	80	<10	80
2.	Hirapur Village	WSW 3.2 Km	Cross wind	Residential	80	100	42	60	30	80	<10	80
3.	Karmana Village	SW 3.5 Km	Downwind	Residential	64	100	35	60	30	80	<10	80
4.	Gauri Village	SE 0.15 Km	Downwind	Residential	84	100	44	60	22	80	<10	80
5.	Manager Office(Gauri I &II)	Core Zone	Core Zone	Industrial	83	300	34	-	29	120	18	120
6.	Muthra Village	S 3.3 Km	Downwind	Residential	74	100	37	60	28	80	<10	80
7.	Babapur Village	NE 0.85 Km	upwind	Residential	66	100	35	60	30	80	<10	80
8.	Charli Village	N 2.4 Km	upwind	Residential	69	100	37	60	28	80	<10	80
9.	Chandanvahi Village	SSW 6.3 Km	Downwind	Residential	67	100	39	60	28	80	<10	80
10	Aheri Village	SSE 6.3 Km	Downwind	Residential	72	100	36	60	29	80	<10	80
11	Antargaon Village	SE 2.2 Km	Downwind	Residential	51	100	35	60	15	80	<10	80

In general, All the values are found to be well within the AAQM Standards prescribed by CPCB.

### 3.3 WATER QUALITY

Water Quality samples were collected and analysed during the baseline data generation. These samples were analysed as per IS:3025 and “Standard Method for the Examination of Water & Waste Water” published by American Public Health Association (APHA: 23<sup>rd</sup> Edition, 2012). Samples were collected at following locations.

Sl. No.	Name of Sampling Locations	Type
1.	Mine Discharge Gauri I & II OC (A) Mine	Mine Discharge
2.	Sakhari Nalla Up Stream	Surface Water
3.	Sakhari Nalla Downstream	Surface Water
4.	Gauri Nalla Up Stream	Surface Water
5.	Gauri Nalla Downstream	Surface Water
6.	Wardha River Up Stream	Surface Water
7.	Wardha River Downstream	Surface Water
8.	Pauni Village	Drinking / Ground Water
9.	Gauri Village	Drinking / Ground Water
10.	Sakhari Village	Drinking / Ground Water
11.	Chincholi Khurd	Drinking / Ground Water
12.	Gauri Colony Filter Plant	Drinking Water
13.	ETP Gauri I & II OC (A) Mine	ETP Treated water
14.	Sakhari Pond	Surface Water

The water quality was found to be as per prescribed standard except few aberrations. The hardness, TDS and alkalinity in the ground water was found to exceeding desirable limit however within the permissible limit in absence of alternate source as per IS10500: 2012.

### 3.4 HYDROGEOLOGICAL QUALITY

Ground water quality and ground water levels data are collected periodically. The average water levels fluctuations measured from the area in and around for Gauri Pauni Expansion OC are given below.



Pre monsoon	Core Zone (within 3 km radius Area)	6.50 mg/l to 8.50 mg/l
	Buffer zone (Area between 3 km and 10 km)	1.40 mg/l to 14.25 mg/l
Post-monsoon	Core Zone	3.30 mg/l to 6.00 mg/l
	Buffer zone	1.66 mg/l to 16.70 mg/l

### 3.5 NOISE LEVELS

Baseline data of Mean Leq noise levels at day time and night time was generated at six locations (two in core zone and four in buffer zone) for project. All noise levels values are found to be within the prescribed limits.

### 3.6 LAND USE

Project involves total 1618.00 ha area out of which 321.58 ha, land will be transferred from neighbouring Pauni – II Expansion OC (already mined out area) in Phase – II i.e., after 5 years. Balance 1296.42 ha land involves 380.31 ha additional land. Out of this 380.31 ha 5.00 ha land is to be acquired outside for rehabilitation of the Pauni Village.

Summary of the land requirement is given in below table.

Table 1 Total Land Requirement in Phase – I

Sl. No.	Particulars	Existing Land (ha)	Additional land (ha)	Total Land (ha)
1)	Tenancy land	916.11	365.31	1281.42
2)	Government land	0.00	10.00	10.00
3)	Forest land	0.00	0.00	0.00
	SUB TOTAL	916.11	375.31	1291.42
4)	Land for Rehabilitation of Pauni villages	NIL	5.00	5.00
	TOTAL	916.11	380.31	1296.42

### 3.7 SOCIO ECONOMIC

Project involves rehabilitation of Pauni Village. ₹ 47.5156 crores have been provisioned as Rehabilitation and resettlement cost. R&R of the Pauni Village will be done as per the R&R Policy of Coal India Limited and any other statutory obligations in vogue.

Baseline data for socio-economic study has been generated during April 2021. Positive impacts on socio-economic environment are expected due to creation of direct and indirect

employment opportunities and development of infrastructure such as roads, schools, hospitals etc.

## **4.0 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

To have a close watch on the environmental condition and implementation of various measures suggested, a multi- disciplinary approach is essential.

### **4.1 AIR QUALITY**

Prediction of fugitive dust level in the surrounding is carried out (for 24 hours average) with the help of computerized AERMod Model, based on Gaussian Plume formulation. The resultant values are within limits as per CPCB rules.

#### Air Pollution Control Measures

In order to mitigate the adverse impacts on ambient air, the following main control measures have been proposed and will be implemented during the actual operation of the mine.

- a) Water sprinkling on road, stockpiles by mobile tankers.
- b) Black topping of road.
- c) Covering of trucks carrying coal & avoiding overloading of trucks.
- d) Development of adequate green belt all along the coal transportation road on both sides will be done.
- e) Blasting will be done between shifts or during the rest interval when the minimum number of persons are present around the blast area. In order to quickly disperse the dust generated in blasting operations, blasting will be avoided when there is wind. Blasting will be avoided in the mornings and during cloudy situations.
- f) Optimize travel distances through appropriate site layout and design.
- g) Vehicular emission of particulates, SO<sub>2</sub>, NO<sub>x</sub>, hydrocarbons can be minimized by proper training and maintenance of vehicles and other oil - operated equipment.
- h) Regular monitoring of ambient air quality as per CPCB rules for Coal Mines.

#### Plantation to Check Air Pollution

Plantation will be under taken in the mine area as mitigative measure against air pollution, noise pollution and to increase the aesthetic value. The plantation will be developed at suitable places like overburden dump, along the road sides, unused land etc. to arrest dust generated due to various mining operations viz. quarrying, coal and OB transportation, OB

dumping, CHP operation. Technical & Biological reclamation of External dump including backfilling dump will be carried out. Cumulative total 920.00 ha land will be planted at the end of Phase – II which includes existing plantation.

As on 01.04.2021, 520875 nos of plantation done in 137.53 Ha in Gauri I & II Expansion OC. In Expansion of Pauni OC 18250 nos of plantation done in an area of 7.30 Ha. Entire OB dump of 66 Ha has been covered by native plants (own growth).

## **4.2 WATER QUALITY**

### **4.2.1 Anticipated Impact**

Mining and its associated activities not only use a lot of water but also likely to affect the hydrological regime of the area. The major impact of deep and large mines is of natural groundwater table. Lowering of water table may result in reduced groundwater availability. Extraction of different minerals is known to lead to water pollution due to heavy metal, acid discharges and increased suspended solids. However, effect of coal mining due to nearby mines of Ballarpur area on water is mainly observed as increase in suspended solids.

### **4.2.2 Pollution Control Measures**

Salient control measures to be taken to reduce water pollution are as follows:

#### **i) Industrial Effluent**

The waste-water from workshop and CHP, which normally remain laden with oil and grease, suspended and dissolved solids etc. will be treated in the Effluent Treatment Plant (ETP). Clear water coming out from the treatment plant will be taken into the closed water circuit and recycled for its reuse. All parameter of ETP waste discharge will be monitored regularly as per Env. (Protection) Amendment Rule, 2000.

#### **ii) Mine Water**

Most of the suspended particles will be settled in the sump located in the quarry and the supernatant water is pumped out to the sedimentation tank present on surface. This water is to be passed through sedimentation pond on surface, before being discharged in to natural drain or agricultural field.

#### **iii) Surface Run-off**

Adequate numbers of vegetation will be grown on the top surface and slopes of the dumps in order to arrest the erosion of soil and it will also reduce surface run-off, which helps averting siltation of natural water courses.

### **4.3 HYDRO - GEOLOGY**

#### **4.3.1 Impact on Hydro-Geological Regime**

In the opencast mines, the different aquifers overlying the working coal seam would be contributing groundwater to the mine by gravity drainage since they are exposed/removed at the mine. The anticipated groundwater inflow to the mine is to the tune of 3268.00 m<sup>3</sup>/day (approx.). As such due to this pumping/gravity drainage, cone of depression would be formed. The shape and extent of the cone would depend on mainly hydraulic conductivity and specific yield of aquifers, mine depth & area etc.

Generally steep drawdown cone would be formed in poor potential aquifers, thereby the influence area will be limited to small distance and reverse is established in respect of aquifers with high hydraulic conductivity

The radius of mine influence area estimated is 360 m based on the above-mentioned aquifer. The stage of ground water development in the buffer zone (10 km from the periphery of the core zone) comes to about 20.40%.

#### **4.3.2 Conservation Measures for Ground Water**

1. The mine discharge will be utilized to meet the mine's domestic, dust suppression, firefighting and other industrial water needs.
2. The artificial recharge by water conservation structures in the outside mine influence areas will check water level lowering. The impact on ground water level is being minimized by artificial recharge by spreading of pumped out water, creation and filling of ponds with mine water and construction of rainwater harvesting structure.
3. After the cessation of mining, with copious rainfall and abundant groundwater recharge, the water levels will recoup and attain normalcy. Thus, the impact of mining on groundwater system may be considered as a temporary phenomenon. The old mine workings also behave as water pools and improves the resource availability in the area.
4. The discharged mine water would be available for the local people to utilize in irrigation and domestic use. Thereby the mine water will be a resource for many of the local villagers.
5. Monitoring of water quality of mine water discharge, local river/hala and domestic water (dug well/hand pumps) will be done under routine monitoring. On analyzing the field data if any area receiving the maximum impact, suitable controls measures will be adopted by the project authorities.

#### 4.4 NOISE QUALITY

In order to assess the existing ambient noise level in the surrounding of proposed project site, the baseline data generated for Gauri Pauni Expansion OC in Post-Monsoon season i.e., from October 2020 to December 2020 is documented in chapter III of the EIA & EMP report and noise level values have been found to be within permissible limits.

##### Noise Pollution Control Measures

Monitoring of the noise control will be carried out on regular basis as per the Environment (Protection) Amendment Rule 2000. While planning for an effective noise attenuation measure, the concept of source, path and receiver has been considered.

#### 4.5 IMPACT ON LAND AND LAND RECLAMATION

Additional land of 380.31 ha will be required by the project. Out of this additional land, 5.00 ha will be used for village rehabilitation. 375.31 ha will be used for mining purpose i.e. extraction of coal and OB Dumping etc. Land use during the mining will be as follows:

Table 2 Land Use

Sl. No.	Land Use category	1 <sup>st</sup> year (1.4.2022)	5 <sup>th</sup> Year	11 <sup>th</sup> Year	16 <sup>th</sup> Year	End of Mine Life (19 <sup>th</sup> Year)	Post Mining
		Phase – I		Phase – II			
1	Backfilled Area upto GL	0.00	191.00	250.0	302.0	330.0	330.0
	(Reclaimed with plantation)	0.00	0.00	30.00	140.0	180.0	330.0
2	Excavated Area (Not reclaimed)/ void)	360.00	275.00	457.00	471.0	443.0	443.0
3	External OB dump	250.00	280.00	504.00	504.0	504.0	504.0
	(Reclaimed with plantation)	0.00	30.00	200.00	450.0	475.0	504.0
4	Green belt area	0.00	0.00	0.00	0.00	0.00	0.00
5	Undisturbed area	656.42	490.42	327.00	261.0	261.0	261.0
	(Brought under plantation)	0.00	20.00	60.00	65.00	65.00	75.00
6	Roads	10.00	25.00	25.00	25.00	25.00	25.00
	(Avenue plantation)	0.00	1.00	2.00	3.00	4.00	4.00
7	Land for Pauni village Rehab.	0.00	5.00	5.00	5.00	5.00	5.00
	(Brought under plantation)	0.00	1.00	1.00	1.00	1.00	1.00
8	Embankment	0.00	0.00	0.00	0.00	0.00	0.00
	(Avenue plantation)	0.00	0.00	0.00	0.00	0.00	0.00
9	Nalla Diversion	0.00	10.00	10.00	0.00	10.00	10.00

Sl. No.	Land Use category	1 <sup>st</sup> year (1.4.2022)	5 <sup>th</sup> Year	11 <sup>th</sup> Year	16 <sup>th</sup> Year	End of Mine Life (19 <sup>th</sup> Year)	Post Mining
		Phase – I		Phase – II			
	(Plantation around nala diversion)	0.00	0.00	0.00	0.00	0.00	0.00
10	Area around buildings and infrastructure	20.00	20.00	40.00	40.00	40.00	40.00
	(Plantation around Infrastructure)	0.00	1.00	2.00	3.00	5.00	6.00
	<b>Total (Ha)</b>	<b>1296.42</b>	<b>1296.42</b>	<b>1618.00</b>	<b>1618.00</b>	<b>1618.00</b>	<b>1618.00</b>
	<b>Plantation (Ha)</b>	0.00	53.00	295.00	662.00	730.00	920.00

This can be seen from the above table that 920 ha land out of 1618.00 ha will be biologically reclaimed. This would lead to a better eco-system in the vicinity of the project.

The land use in core zone is mainly agricultural land. So the major impact on land will be degradation of agriculture land in the mining area.

The following activities have been proposed for reclamation of land.

1. Backfilling of the excavated area at the time of mine closure.
2. Levelling of the backfilled area and carpeting with the topsoil.
3. Creation of garland drains in order to arrest the silt load, due to erosion, to enter into natural watercourses during surface run-off.
4. Grass, legumes and different types of plants etc. will be planted on such reclaimed land in order to make it, as far as possible, conducive to agricultural growth.
5. Technical and biological reclamation of external OB dump and rehandling at the end of mine life. The density of trees will be around 2500 plants/Ha.

#### 4.6 REHABILITATION & RESETTLEMENT

365.31 ha of additional private land will be required for the proposed expansion project within mine leasehold area. All the Project Affected Families will be suitably compensated as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and resettlement Act, 2013. The shifting and rehabilitation of Pauni village is envisaged in PR. Impacts on Socio-Economic status would be most likely observed as change in standard of living of the project affected people. Shift in means of livelihood is also expected to occur as impact of the proposed project.

#### **4.7 PROGRESSIVE MINE CLOSURE PLAN**

For the Mine Closure activities, a corpus fund is created by opening an escrow account with the coal controller organization in nationalised bank. For opencast mine, an amount @ Rs 9.00 lakhs per Ha of the project area is required to be deposited in this escrow account for final mine closure after adjustment for WPI on the date of computation. This mine closure corpus is divided by the life of mine to calculate yearly mine closure contribution. This amount is deposited in the escrow account every year after escalating @ 5% per annum.

Thus, the total Mine Closure Corpus of Gauri- Pauni Expansion OC (Phase I & II) is (Lakhs INR) = 4332.8 (Phase-I corpus) + 5508.02 (Phase-II corpus) + 2022.61 (Pauni OC) + 5851.54 (Gauri OC) = 17714.97 Lakhs (based on April, 2019 WPI @ Rs 9 lakh/ Ha and 5% escalation each year).

#### **5.0 ENVIRONMENTAL MONITORING PROGRAMME**

The Environmental Monitoring Programme will be carried out as per statutory requirements and detailed in the chapter – IV of the Draft EIA report.

##### Environment Management Cell

WCL, has an Environment Department headed by General Manager (Environment) at its HQ. The department provides necessary support that are required for environmental management of various mining projects under the jurisdiction of the company. At area level, Area General Manager co-ordinates the activities of various disciplines in the area to render all necessary assistance at the implementing level i.e., the Project level. Nodal Officer (Environment) of the area monitors all aspects of environment on behalf of the Area General Manager. He will also take suitable steps for generation of environmental data along with CMPDI team for its analysis and interpretations.

#### **6.0 ENVIRONMENTAL COST PROJECTION**

A capital provision of Rs **5.62 crores** has been made against environment protection. The capital for environment protection excludes provision for Compliance of issues raised during public hearing, (marked under CER head in Approved Project Report 2020) which works out to Rs 215.37 for Total Hiring Option. Rs. 6.00/t of coal has been provided to absorb environmental related cost in the project.

#### **7.0 PROVISION FOR CSR WORK**

The fund for the CSR will be allocated based on 2% of the average net profit of the Company for the three immediately preceding financial years or Rs 2.00 per Tonne of Coal Production of the previous year whichever is higher.

## **8.0 CONCLUSION**

The mining sequence has been planned in a way to maximise internal dumping so that least area is required for external OB dumping.

The project authorities need to follow the mitigation measures strictly as given in the EIA & EMP report. This will minimise the impact on environment.

The Gauri - Pauni Expansion OC may be granted environmental clearance so that the project can bridge the gap between demand and supply of coal in the country and help in achieving the target of 1 BT of domestic coal production by 2023-24.

Hence as directed by MoEF&CC, this Executive Summary of Draft EIA of Gauri Pauni Expansion OC has been prepared for submission to Maharashtra Pollution Control Board for conducting Public Hearing.