### **PUBLIC HEARING DOCUMENT**

**AS PER EIA NOTIFICATION, 2006** 

## **EXPANSION OF BHATADI OC EXPN.**

(Chandrapur Area, WCL)

for

**Increase in Production Capacity from** 

0.975 MTPA to 1.465 MTPA

Within the existing EC area of 847.37 ha

(Prepared as per direction of 42<sup>nd</sup> EAC held on 24<sup>th</sup> January 2019)

(Further projected upto 2.0 MTPA with 1436.86 ha)



**MAY - 2019** 

# Prepared by CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

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CMPDI/EIA/PH/01/WCL/2019-20/MAY/92/00

## **Executive Summary**

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SUBMISSION CMPDI

#### SUBMISSION

Project report for Bhatadi OC Expansion for a capacity of 0.65 MTPA was prepared in June 1998 and subsequently approved by WCL board. Environmental clearance was granted for enhancement in production capacity 0.25 MTPA to 0.65 MTPA with increase in land from 287.57 to 847.57 ha.vide J-11015/31/2001.IA.II(M) dated 19/05/2005.

Considering increased land cost, project report for Bhatadi OC Expansion was updated in 2015 for production capacity of 0.975 MTPA within existing area. The Environment Clearance of Bhatadi OC Expn. for 0.975 MTPA rated capacity in a lease area of 847.37 ha, was obtained vide no – J- 11015/151/2014-IA II (M) dated 19<sup>th</sup> March, 2015 (Forest land of 0.20 Ha was excluded for grant of EC).

Due to increased demand of coal, a mining plan for Bhatadi OC Expansion was prepared for a peak capacity of 1.465 MTPA within the existing EC area and subsequently approved by WCL board in its 293<sup>rd</sup> meeting held on 31.10.2017 vide WCL/BD/SECTT/BM-293/2017/936 dated 10.11.2017.

Accordingly an application for grant of EC for enhanced capacity of 1.465 MTPA within existing EC area was made to MoEF&CC through online portal dated 06.02.2018. This present proposal of expansion of Bhatadi OC Expn. envisages increase in production capacity from 0.975 MTPA to peak 1.4650 MTPA within the existing EC area of 847.37 ha. The enhancement in production is being envisaged within the existing resources (No additional capital is involved as per approved mine plan dated 31.10.2017).

Project was discussed in 28<sup>th</sup> EAC held on 17/04/2018, 36<sup>th</sup> EAC held on 31/08/2018 and 42<sup>nd</sup> EAC held on 24/01/2019. It was observed by the EAC that

"The last public hearing for the project was conducted by the State Pollution Control Board on 20th July, 2004 i.e. much before the inception of the EIA Notification, 2006 presently in force. The Committee desired for compliance of the present provisions of the said Notification, and insisted for fresh public hearing for the proposed expansion from 0.975 MTPA to 1.465 MTPA, even if the project area remains same"

As per the EAC direction this document has been prepared for conducting PH for Expansion of Bhatadi OC Expn.

It is also to be noted here that an expansion proposal with capacity 2.0 MTPA within an area of 1436.86 ha (tentative) is under preparation. This will dovetail present proposal having production capacity of 1.465 MTPA within the existing area. Hence, the proposal of 1.465 MTPA is only an intrim arrangement. This public hearing

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document is prepared for consideration of the present proposal as well as future projection of expansion proposal upto 2.0 MTPA within enhanced area of 1436.86 ha. Therefore, kind suggetions and comments are also invited from the stakeholders for present proposal of 1.465 MTPA within 847.37 ha of land as well as projected scenario of enhancing the capacity upto 2.0 MTPA with increased in land from 847.37 ha to 1436.86 ha.

#### 1.0 INTRODUCTION

Project Report for Bhatadi Expansion OC was prepared by CMPDI in June, 1998 for a capacity of 0.65 MTPA with a capital investment of Rs. 94.806 crores. This Project Report was approved by WCL Board in its 149<sup>th</sup> meeting held on 11.07.1998. The project was offered to MSEB for coal supply agreement on cost plus price basis.

Project was granted EC from MoEF vide letter J-11015/31/2004.IA.II (M) dated 19-05-2005 for a production capacity of 0.65 MTPA within EC area of 847.57 ha.

The agreement for supply of coal has been signed between M/s. MAHAGENCO and M/s. WCL, on 18.4.2007.

As per the requirement of coal, the Project Report was updated to 0.975 MTPA in year Aug-2015 and approved in the WCL Board on 273<sup>rd</sup> meeting Vide Ref No. WCL/BD/SECTT/BM-273/2016/688 Dtd.13.02.2016 and the environment clearance obtained accordingly vide ref No.J-11015/15/2014-IA-II(M) Dtd.19.03.2015 for 0.975 MTPA.

The coal production achieved its target i.e. 0.975 Mty during 2018-19. Production level of Chandrapur Area is declining year by year, due to exhaust of coal reserves of Padmapur OC, Durgapur OC and Hindustan Lalpeth OC. In order to bridge the gap between the supply and demand of coal to restore the production level of the area, it is proposed to enhance the annual coal production of Bhatadi Expansion OC urgently as it has potential to increase production without adding any additional capital. Considering the potentiality of the project, a mining plan has been prepared and approved by WCL board in its 293<sup>rd</sup> meeting held on 31.10.2017 vide WCL/BD/SECTT/BM-293/2017/936 dated 10.11.2017. The land acquisition envisaged in approved PR of Bhatadi Expansion OC is almost completed.

Further to sustain production from this mine, a project report for 2.0 MTPA production capacity within area of 1436.86 ha is under prepration. This will dovetail present proposal having production capacity of 1.465 MTPA within the existing area.

Hence this PH document is prepared in compliance of the EAC directives as well as to invite valuable suggestions and comments from the various stakeholders for the future expansion proposal involving production capacity of 2.0 MTPA within area of 1436.86 ha.

#### 1.1 LOCATION

The present area under report falls in Survey of India Topo-sheet No. 55 P/4 and P/8. The area falls in the Chandrapur tehsil of Chandrapur district of Maharashtra State. The area is bounded by Latitude N 20°03'50" to 20°05'36" and Longitude E 79°15'21" to 79°16'40".

#### 1.2 COMMUNICATION

Bhatadi OC can be approached from Chandrapur town via Chandrapur-Tadoba road. Bhatadi OC can also be approached through Nagpur-Chandrapur road partly by metalled and partly by unmetalled road upto Tirwanja village. The distance by this road is about 10 km upto Tirwanja village. At present this is the all-weather approach to Bhatadi OC. The nearest rail head is Tadali about 8 to 9 km from the mine and Chandrapur Station about 14 km from the mine. Both the stations are on the main line of Central Railway.

#### 1.3 TOPOGRAPHY & DRAINAGE

Drainage of the area surrounding Bhatadi OC is dominated by Erai River and its tributaries. The general elevation of the area varies between 184m and 212m from mean sea level with slope towards South-East.

The HFL of Erai River, which flows from North to South at the Eastern end of the Bhatadi OC is 189m (1994). An Embankment against Erai River has been constructed.

#### 1.4 CLIMATE & RAINFALL

The climate of the area is tropical with maximum temperature of 48° C recorded during summer and minimum temperature of 8° C during winter. The average rainfall is 1350 mm.

#### 2.0 GEOMINING PARAMETERS

The geo-mining parameters of the Expansion of Bhatadi OC Expn.are tabulated below:

SI.	PARTICULARS	QUARRY-I	QUARRY-II	TOTAL
No				
1	Area of the Quarry			
a)	On floor (Ha.)	50.870	33.875	84.745
b)	On surface (Ha.)	88.92	72.60	161.52

<u>Table 1 – Geo-Mining Parameters</u>

SI.	PARTICULARS	QUARRY-I	QUARRY-II	TOTAL
No				
2	Depth (m)			
a)	Initial	33	53	
b)	Final	150	150	-
3	Average gradient of Seam	1 in 6	1 in 6	
4	Averge thickness of seam (m)	17	17	
5	Average Strike length (m)	800	700	
6	Width on surface (m) (Dip Rise)	700	850	
7	Width on floor (m) (Dip Rise)	500	600	-
8	GCV (k Cal/ kg) ( Overall)		4504 (G-10)	
9	Balance Mineable reserves (Mt) as	5.14	9.27	14.41
	on 1.4.2015			
10	Total OB including Access Trench	29.42	51.07	80.49
	(Mm <sup>3</sup> )			
11	Average S.R. m <sup>3</sup> /t.	5.72	5.51	5.59

Type and Method of Mining Operations: Opencast Mining with shovel dumper combination is the present method of mining. The same will continue during the present as well as during the projected scenario. In the projected scenario, it estimated that with increase in land area, there would be addion of reserves upto 45 MT. With the maximum projected capacity of 2.0 MTPA, the life is most likely to increase by another 20-25 years with sustained supply to CSTPS.

During the projected enhanced capacity implementation, it is envisaged that minimum land degradation is there with maximum reclamation.

#### 3.0 DESCRIPTION OF ENVIRONMENT AND ANTICIPATED IMPACT

Bhatadi OC expansion is an existing mine and regular environmental monitoring is being carried out. Same data as been presented to EAC and utilized to assess environmental scenario as well as Air Quality Impact Prediction.

#### 3.1 AIR QUALITY

Regular environmental monitoring is carried out at four locations. Summary of reports of last two years is given below:

Average values for PM<sub>10</sub> at core zone i.e. manager office and security post are 109.52  $\mu$ g/m³ and 149.83  $\mu$ g/m³ against standard of 300  $\mu$ g/m³. Average values for PM<sub>10</sub> at buffer zone i.e. Bhatadi Village and Kitadi Village are 72.71  $\mu$ g/m³ and 65.03  $\mu$ g/m³ against standard of 100  $\mu$ g/m³. Average values for PM<sub>2.5</sub> at core zone i.e. manager office and security post are 42.03  $\mu$ g/m³ and 46.08  $\mu$ g/m³ against standard of 60  $\mu$ g/m³. Average values for PM<sub>2.5</sub> at buffer zone i.e. Bhatadi Village and Kitadi Village are 35.79  $\mu$ g/m³ and 65.03  $\mu$ g/m³ against standard of 100  $\mu$ g/m³. Average values for NOx at Manager Office, Security post, Bhatadi Village and Kitadi Village are 10.33  $\mu$ g/m³, 9.45  $\mu$ g/m³ and 10.16  $\mu$ g/m³ against standard of 80  $\mu$ g/m³. Average values for SO<sub>2</sub> at Manager Office, Security post, Bhatadi Village and Kitadi Village are 18.62  $\mu$ g/m³, 18.18  $\mu$ g/m³, 15.97  $\mu$ g/m³ and 17.12  $\mu$ g/m³ against standard of 80  $\mu$ g/m³

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

#### **3.2 WATER QUALITY**

To assess the water quality, mine water discharge and workshop ETP are monitored regularly. pH ranges from 6.26 to 8.37 and 6.42 to 8.22 for mine water discharge and ETP respectively. COD ranges from 28 to 44 and 24 to 44 for mine water discharge and ETP respectively. The water quality all the parameters are found to be well within the prescribed norms of, IS: 10500 – 1991 (permissible) and IS: 2296 - 1982.

#### 3.3 HYDROGEOLOGICAL QUALITY

The average water levels fluctuations measured from the area in and around are given below.

Pre monsoon period	Core Zone	3.30 m to 09.65 m
	Buffer zone	3.35 m to 13.28 m
Post monsoon	Core Zone	2.15 m to 06.32m
	Buffer zone	0.10 m to 13.15 m

Table 2 - Ground water levels

#### 3.4 NOISE LEVELS

Regular environmental monitoring is being carried out for mean L<sub>eq</sub> noise levels at day time and night time was generated at CHP and Colony locations. Average value for

day and night was found to be 62.2 and 60.7 at CHP and 43.7 and 41.9 at Colony. All noise levels values are found to be within the prescribed limits.

#### 3.5 SOCIO ECONOMIC

Bhatadi village, falling within the core zone is required to be rehabilitated and resettled for enhanced capacity of 1.465 MTPA. Expansion proposal of Bhatadi OC of 2.0 MTPA capacity has envisagesd rehabilitation of Payli Village in addition of Bhatadi village. A total provision for 20.0 ha land has been made in project report. 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 Fugitive Dispersion Model (FDM90121 by USEPA), 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, presently following air quality control measures are in place. .

- a) 13 nos. of fixed Water sprinkler on coal transportation road
- b) 30 no. of mist spray installed at CHP
- c) Side cladding is provided to cover CHP
- d) 3 Nos. of high power rain guns installed at CHP
- e) 10.38 Km of Black topped road.

In view of eliminating transportation of coal through road, pipe conveyor system of length 6.25 km is being constructed in Bhatadi OC which will transport coal from the mine to Padmapur MGR.From Padmapur MGR to CSTPS coal will be transported through rail .This will eliminate present 17 Km road transport of Coal to the power plant.

Futher following control measure are taken up and will be continued and augmented as per the requirement.

- a) Black topping of road.
- b) Covering of trucks carrying coal & avoiding overloading of trucks.
- c) Development of adequate green belt all along the coal transportation road on both sides will be done.
- d) 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.
- e) Wet suppression of unpaved areas can achieve dust emission reductions of about 70 percent or more, and this can sometimes be increased by up to 95% through the use of chemical stabilisation.
- f) Optimize travel distances through appropriate site layout and design.
- g) Vehicular emission of particulates, SO<sub>2</sub>, NOx, hydrocarbons can be minimized by proper training and maintenance of vehicles and other diesel operated equipment.
- h) Regular monitoring of ambient air quality as per CPCB rules for Coal Mines.

#### Plantation to Check Air Pollution

Plantation work has been under taken in Bhatadi OC. Total 182350 nos. of plantation covering 56.37 ha. Species planted includes Mango, Guava, Jamun and Neem. Total 264.10 ha land has been proposed to be planted at post mining stage as mitigative measure against air pollution, noise pollution and to increase the aesthetic value.

#### **4.2 WATER QUALITY**

#### Anticipated Impact

The anticipated impact of coal mines is of lowering of ground water table and water contamination by effluents. To control such adverse impact on natural water coarse following control measures have been taken at Bhatadi OC

#### i)Industrial Effluent

The waste-water from workshop, which normally remain laden with oil and grease, suspended and dissolved solids etc. is treated in ETP having capacity of 75 KLD. Clear water coming out from the treatment plant is taken into the closed water circuit and

recycled for its reuse. All parameter of ETP waste discharge are monitored regularly as per Env. (Protection) Amendment Rule, 2000 and are found in statutory limites. Same will be continued.

#### ii) Mine Water

Most of the suspended particles are 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. 2 Nos of Settling tanks of dimension 25.0 m x 9.0 m x 2.5 m , 25.0 m x 12.0 m x 2.5 m has been constructed. Two more sedimentation tanks with dimension of 9m X 6m X 3m will be constructed one near filter plant and second near

CHP and the measures will be augmented if need arises.

#### 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. Garland drain /catch drain of size 2.5 mtrs X2.5 mtrs is constructed around periphery of mine for a total length of 4.00 km to control surface run-off of loose material.

#### iv) Domestic Water Treatment

A 50 KLD capacity STP plant has been constructed to cater need of the Bhatadi colony.

#### 4.3 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 radius of mine influence area estimated for the Expansion of Bhatadi OC Expansion is 810 m based on ultimate depth of 150 m. The stage of ground water development in the buffer zone (10 km from the periphery of the core zone) comes to about 30.36% which is safe.

#### **Conservation Measures:**

- 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. Monitoring of water quality of mine water discharge, local river/nala 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 LEVELS**

In order to assess the existing ambient noise level in the surrounding of the project site, regular environmental monitoring is being carried out. Average noise level values for CHP are found to be 62 dB(A) and 60 dB(A) for day and night time respectively. Average noise level values for Colony are found to be 43.6 dB (A) and 42 dB (A) for day and night time respectively. All values are within permissible limits.

#### **Noise Pollution Control Measures**

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

#### 4.5 IMPACT ON LAND AND LAND RECLAMATION

Total area required for the present proposal is 847.37 Ha. Breakup of the land is as follows:

- Land in possession for mining: 837.94 ha
- Land to be acquired outside ML area for resettlement of Bhatadi Village: 9.43 ha
   Table 3 Land Details of Bhatadi OC (1.465 MTPA, 847.37 ha)

SI.	Particulars	Tenancy	Govt.	Forest	Total
No.		Land	Land	Land	(ha)
		(ha)	(ha)	(ha)	

1	Land Already acquired by existing	785.69	52.25	0.00	837.94
	Bhatadi Expansion OC Mine (Ha)				
2.	Land for Bhatadi Village	9.43	0.0	0.0	9.43
	Rehabilitation to be Acquired				
3.	Total EC Land	795.12	52.25	0.0	847.37
4.	Additional Land involved in	10.57	0.0	0.2	10.77
	approved Mine Plan				
5.	Total Land as per approved Mine	805.69	52.25	0.2	858.14
	Plan				

It is also to be noted here that an Expansion proposal is under preparation for Bhatadi OC which involves 1416.86 ha ML area and 20.0 ha land outside ML area for rehabilitation of Bhatadi and Payli Village, thus total project area to be 1436.86 ha. This area will include existing acquired land of 837.94 ha. Expansion proposal has been prepared keeping production capacity of 2.0 MTPA and include 0.20 ha forest land. Tentative land details for expansion proposal is as follows:-

<u>Table 4 – Land Details of Expansion Proposal (2.0 MTPA, 1436.86 ha)</u>

SI.	Particulars	Existing Land	Additional	Total Land
No.	Particulars	(ha)	land (ha)	(ha)
1)	Tenancy land	785.69	573.70	1359.39
2)	Government land	52.25	5.02	57.27
3)	Forest land	0.00	0.20	0.20
	ML area	837.94	578.92	1416.86
	Land outside ML Area	-	20.00	1436.86

The land use in core zone is mainly agricultural land. So the major impact on land will degradation of agriculture land in the mining area. Forest land of 0.20 ha is involved.

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.

The land use during the mining would be as follows: -

Table 5 - The Land Use during the Mining

SI No.	Particulars	Land Details
1	Quarry area	161.32
2	External OB Dump	142.10
3	Infrastructure	10.90
4	Colony	16.70
5	Embankment	13.00
6	Road	8.45
7.	Temporary top soil dump	40.20
8.	Miscellaneous (300m blasting zone, river	
	diversion, power line diversion &	445.27
	rationalization	
	Sub-Total	837.94

The land use at the end of the mine would be as follows:-

Table 6 - Land use at the end of the mine

S.	Land use during	Land use (ha)				
N	mining	Plantation	Water	Public	Undist	Total
•			Body	use	urbed	
1	Backfilled Area	50	0	0	38.92	88.92
2	Excavated Area /Void	0	72.40	0	0	72.40
3	Embankment Area	13	0	0	0	13
4	External OB dump	142.1	0	0	0	142.1
5	Colony, Infrastructure etc.	6	0	21.6	0	27.6
6	Miscellaneous (300m blasting zone, river diversion, power line diversion & rationalization	50	0	0	435.47	485.47

7 Road	3	0	5.45	0	8.45
Total	264.10	72.40	27.05	474.39	837.94

Table 7 - Stage-wise Land use and Reclamation Area (ha)

Land use category	Present (1st year)	5 <sup>th</sup> year	10 <sup>th</sup> year	End of Mine Life	Post Mining
Backfilled Area (Reclaimed with plantation)	0.00 (0.00)	30.00 (0.00)	70.92 (10.00)	88.92 (50.00)	88.92 (50.00)
Excavated Area (Not reclaimed)/void	59.80	89.80	68.88	72.40	72.40
Ext. OB dump (Reclaimed with plantation)	110.00 (25.00)	130.00 (30.00)	142.10 (70.00)	142.10 (142.10)	142.10 (142.10)
Temporary Top soil	40.20	40.20	40.20	0.00	0.00
dump	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Embankment	5.00 (0.00)	13.00 (4.00)	13.00 (10.00)	13.00 (13.00)	13.00 (13.00)
Undisturbed area (brought under plantation)	586.89 (32.37)	498.89 (35.00)	466.79 (50.00)	485.47 (50.00)	485.47 (50.00)
Roads (avenue plantation)	8.45 (2.00)	8.45 (2.00)	8.45 (3.00)	8.45 (3.00)	8.45 (3.00)
Area around colony, buildings and Infrastructures	27.60 (2.00)	27.60 (4.00)	27.60 (6.00)	27.60 (6.00)	27.60 (6.00)
Total with in ML Area(Reclaimed with plantation)	837.94 ) <b>61.57</b> (	837.94 ) <b>75.00</b> (	837.94 )149.00(	837.94 ) <b>264.10)</b>	837.94 (264.10)

<sup>\*</sup>Plantation (Ha) figures given in bracket. Plantation will be done @2500 plants/Ha

#### 4.5 REHABILITATION & RESETTLEMENT

Resettlement / rehabilitation of Bhatadi village is envisaged in present proposal as well as in the expansion proposal. Payli village has been envisaged to be rehabilitated in expansion proposal. 20 ha land has been provisioned for rehabilitation of Bhatadi and

Payli village. Site will be decided by area authority in consultation with administration. A Capital provision of ₹ 130.36 crores (approx.) have been made in Project Report for resettlement of Bhatadi and Payli Villages.

#### **4.6 PROGRESSIVE MINE CLOSURE PLAN**

The mine closure cost will cover the different mine closure activities for which a corpus fund has been created by opening an escrow account with the coal controller organization in nationalised bank. An amount @ Rs 6.00 lakhs per Ha of the project area is being deposited in this account for final mine closure. Total corpus amount for present proposal is ₹ 69.2328 crore. ₹ 33.25 Crore has been already available (deposited + interest accrued) in Escrow account for Bhatadi OC as on 31.03.2019.

#### 5.0 ENVIRONMENTAL MONITORING PROGRAMME

The Environmental Monitoring Programme is being carried out as per statutory requirements.

#### **Environment Management Cell**

WCL, has an Environment Deptt. headed by General Manager (Env.) 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.

#### 6.0 ENVIRONMENTAL COST PROJECTION

A capital provision of Rs **97.09** lakhs has been made against environment protection in the present proposal. Rs. 6.00/t of coal has been provided to absorb environmental related cost in the project. For Expansion proposal 1.95 Crore (approx.) has been kept as capital cost for environment management.

#### 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 immediate preceding financial years or Rs 2.00 per Tonne of Coal Production of the previous year whichever is higher.

#### 8.0 CONCLUSION

The existing bhatadi OC mine is directly linked to CSTPS. Any increase in production will only add to the supply to CSTPS. The addition supply of coal to CSTPS will help the state of Maharashtra not only by producing more power but simultaneously reducing the burden of bringing coal from distant coalfileds.

As such, it is initially proposed that the capacity will be enhanced in first phase from 0.975 MTPA to 1.465 MTPA and finally going upto a maximum of 2.00 MTPA. With the proposed expansion, there will be increase in the ambient air pollution load. To reduce the ambient air pollution load both MAHAGENCO and WCL have jointly come forward and taken up the implementation of pipe conveyor system for conveying coal from mine to CSTPS. The installation of pipe conveyor system is in advance stage of completion. So with the proposed expansion of Bhatadi OC in two phases i.e. first from 0.975 MTPA to 1.465 MTPA and thereafter secondly from 1.465 MTPA to 2.0 MTPA, there will be benefit to the state of Maharashtra by way of increased capacity of power generation from state – owned company and also reducing the burden on the state exchequer.

#### 9.0 SUBMISSION

This PH Document has been prepared for conducting public hearing/public consultation in compliance of 42<sup>th</sup> EAC directives for present proposal involving production capacity 1.465 MTPA within existing EC area of 847.37 ha. Comments/suggestions are also invited for the expansion proposal involving production capacity 2.0 MTPA with enhancement in area from existing 847.37 ha to 1436.86 ha.