

# **EXPANSION OF BHATADI OC CHANDRAPUR AREA, WCL**

**EC FOR ENHANCEMENT OF CAPACITY FROM 0.975 MTPA TO 1.365 MTPA  
WITHIN EXISTING LAND AREA OF 847.37 HA UNDER PROVISIONS OF  
7(ii) OF EIA NOTIFICATION 2006**



**JUNE 2018  
WESTERN COALFIELDS LIMITED  
NAGPUR**

**Sub:-** EC for Expansion of Bhatadi OC for enhancement of capacity from 0.975 MTPA to 1.465 MTPA within existing EC sanctioned area of 847.37 ha under provisions of 7(ii) of EIA Notification, 2006.

**Ref:** 28<sup>th</sup> EAC meeting held on 17-04-2018 and subsequent approved minutes of the meeting.

### **1. Introduction:**

- i. Based on the Scheme approved by WCL Board vide letter dated 26-02-2014, application for EC for Expansion of Bhatadi OC for enhancement of capacity from 0.975 MTPA to 1.465 MTPA in existing area of 847.37 ha under clause 7(ii) of EIA Notification, 2006 was submitted through online portal of MoEF & CC vide dated 06-02-2018.
- ii. The EAC considered the proposal in its 28<sup>th</sup> EAC meeting held on 17-04-2018.

### **2. EAC Meeting:**

After detailed deliberation in the EAC meeting, the minutes of the meeting recorded the following:

#### Quote

**28.2.4** The EAC, after deliberations noted 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.

In view of the above, the proposal was not taken forward.

#### Unquote

### **3. Submission:**

In this regard, following are submitted for kind consideration

- i. The existing EC for Expansion Bhatadi Expansion OC was accorded for 0.975 MTPA in an area of 847.37 ha under EIA Notification 2006 vide letter no.J-11015/151/2014-IA-II(M) dated 19-03-2015.
- ii. The present application was made for enhancement of 50% in production capacity within EC sanctioned land area i.e 0.975 MTPA to 1.465 MTPA in an area of 847.37 ha as per the approved Mining plan/Scheme.
- iii. The Public Hearing for the entire area of 847.57 ha with 0.65 MTPA production capacity was held on 20-07-2004 **as per EIA Notification 1994**, subsequently EC for 0.65 MTPA was accorded based on the Public Hearing.
- iv. In view of the observation of EAC, it is submitted that :-
  - a) PH was conducted as per EIA Notification 1994 and amendments thereafter.
  - b) The minutes of the meeting & present compliance is given below:

**Present status of Issues raised during Public Hearing in respect of Bhatadi OC Mine, Chandrapur**

S.N	Issues Raised	Compliance
1.	<p><b>Shri. Subhash Gourkar, member of Panchayat Samiti Chandrapur</b></p> <p>The arrangement provided for environmental protection is inadequate. Tree plantation is necessary between adjoining villages. Sprinkling of water on road to control Fugitive dust emission is not sufficient, additional tanker shall be provided to strengthen the system. He also suggested to Sprinkler water at coal handling plant, covering of coal transportation trucks. He also demanded for tarring of Tirwanja via. Kawathi to Chota Nagpur road as coal carrying trucks plying on this road. Also repairing of Bhatadi to Padmapur &amp; Erai dam road. Also complaints about damage of drinking water pipe lines due to transportation of W.C.L's coal carrying trucks. He also pointed out Ground water table goes down and development of cracks in houses due to blasting in mine.</p>	<p>The arrangements provided for environmental protection are as follows:</p> <p><u>Air Pollution Control:</u></p> <ol style="list-style-type: none"> <li>1) 30 Nos. of Mist Spray provided in CHP.</li> <li>2) 13 No. of Sprinklers provided along Coal Transport Road.</li> <li>3) 3 Nos. of High Efficiency Rainguns around CHP Area.</li> <li>4) 4 Mobile tankers have been provided.</li> </ol> <p><u>Water Pollution Control:</u></p> <ol style="list-style-type: none"> <li>1) 2 Nos. of Sedimentation tanks are provided.</li> <li>2) ETP of 75 KLPD capacity has already been provided for recycling of water after washing of HEMM</li> <li>3) Construction of DETP of 50 CMD Capacity.</li> </ol> <p>Regarding tree plantation till date 182350 numbers of trees have been planted covering an area of 56.37 hectares.</p> <p>Regarding sprinkling of water on road to control fugitive dust emissions, BOCP has deployed 4 no. of mobile tankers for water spraying purpose of following capacity:</p> <ol style="list-style-type: none"> <li>1) 3 Nos. of 28 KLD operate continuously in mine area.</li> <li>2) 1 Nos. of 8 KLD sprinkling water from Tirwanja checkpost to Tirwanja village.</li> </ol> <p>Besides this 13 no. fixed type water sprinklers are also provided from CHP to Weighbridge Area</p> <p>The following arrangement of dust suppression is provided at CHP:</p> <p>Rainguns: 3 nos. (high efficiency)</p> <p>Mist spraying: 30 Nos.</p> <p>CHP has also been provided with GI Sheet cladding to</p>

S.N	Issues Raised	Compliance
		<p>contain fugitive dust emissions.</p> <p>All trucks carrying coal are properly covered with tarpaulin so as to minimize spillage of Coal.</p> <p>The Coal Transportation road from Tirwanja Checkpost upto Padoli Junction 9.10 km has been tarred / Black topped.</p> <p>Repairing of Bhatadi to Padmapur &amp; Erai Dam Road has also been tarred/ blacktopped.</p> <p>Regarding provision of Drinking water, WCL has carried out various activities including Borewell installation, Scheme for Supplying of water through pipeline is also under process and Proposal of installation of RO plant is also under consideration.</p> <p>CMPDIL is carrying out Groundwater table monitoring on regular basis for 4 seasons in a year within the core zone (Mine area) &amp; Buffer zone (10 km area from mine boundary) and it is observed that there is no much depletion of ground water table.</p> <p>To minimize the effect of ground water depletion following water harvesting schemes have been implemented.</p> <p>1) Ground water recharge structure near Tiwanja village 2) Strengthening Maal Gujari Talaav at Tirwanja.</p> <p>Regarding cracks in houses due to blasting in mines all precautions under Coal mines Regulations are taken and blasting safety zone of 500 mtr is also maintained.</p>
2.	<p><b>Sau Upre, Sarpanch, Bhatadi</b> expressed that W.C.L is not taking care to sprinkle water properly on the road near village. Overburden is adjacent to village and causing entry of storm water in village, no Garland drain is provided yet to collect and discharge of surface rainwater from OB dams WCL shall bear entire expenditure of maintenance of water treatment facility and W.C.L should carry out tarring of road and community development works in village.</p>	<p>WCL has provided water tankers for sprinkling water on road near Bhatadi village. Water tanker of capacity 8KLPD is plying on regular basis for sprinkling water on village road.</p> <p>Garland Drain of 4 km. length and 2.5 m x 2.5 m dimension has been provided along OB dump adjacent to village so as to prevent storm water/rain water/OB dump runoff from entering into the village and the same is being cleaned periodically.</p>

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3.	<b>Shri Doke, N.G.O's Ballarpur</b> , stated that groundwater level is depleting in the nearby mine area	<p>CMPDIL is carrying out Groundwater table monitoring on regular basis for 4 seasons in a year within the core zone (Mine area) &amp; Buffer zone (10 km area from mine boundary) and it is observed that there is no much depletion of ground water table.</p> <p>Ground water recharge structure near Tiwanja village and Strengthening Maal Gujari Talaav at Tirwanja.</p> <p>Roof top water harvesting structures have been built at various locations by WCL Chandrapur area such as RSA sub area, AGM office for recharging the ground water.</p>																																							
4.	<b>Shri Bhaskar Tajane, Tirwanja</b> said that W.C.L should adopt village Tirwanja for development.	Development Activities carried out in Tirwanja village have already been covered in CSR																																							
5.	<b>Shri K A mohitkar Tirwanja</b> said W.C.L should construct School building outside village	New School Building at Tirwanja was constructed in 2013.																																							
6.	<p><b>Panel recommendations</b></p> <p>(i) W.C.L shall carry out massive tree plantation especially between villages and mines, OB Dumps and Avenue plantation outside their area which will be helpful in maintaining ecological balance</p> <p>(ii) W.C.L shall provide adequate fix water sprinklers at Coal Handling Plant, Coal transportation road, Weigh Bridge, Haul roads etc to control negative dust emission.</p> <p>(iii) W.C.L shall ensure that all the trucks carrying coal shall be covered with tarpaulins properly to avoid spillage of coal on the roads and overloading of coal shall strictly be avoided.</p> <p>(iv) Adequate water sprinkling shall be carried out on roads passing through villages to avoid fugitive dust emission due to movements of trucks.</p> <p>(v) W.C.L shall take massive groundwater table recharging works and effective utilisation of</p>	<p><u>Details of Plantation carried out till date:</u></p> <table border="1"> <thead> <tr> <th>Year</th><th>No of Plants</th><th>Area</th></tr> </thead> <tbody> <tr> <td>1997-98</td><td>50000 nos</td><td>8.61Ha</td></tr> <tr> <td>1998-99</td><td>50000 nos</td><td>14.50 Ha</td></tr> <tr> <td>1999-2000</td><td>28000 nos</td><td>10.05 Ha</td></tr> <tr> <td>2000-01</td><td>7000 nos</td><td>4.42 Ha</td></tr> <tr> <td>2002-03</td><td>5000 nos</td><td>2.83 Ha</td></tr> <tr> <td>2004-05</td><td>10000 nos</td><td>3.02 Ha</td></tr> <tr> <td>2005-06</td><td>10000 nos.</td><td>4.0 Ha</td></tr> <tr> <td>2010-11</td><td>10000 nos</td><td>4.0 Ha</td></tr> <tr> <td>2011-12</td><td>10000 nos</td><td>4.0 Ha</td></tr> <tr> <td>2016-17</td><td>1850 nos.</td><td>0.74 Ha</td></tr> <tr> <td>2017-18</td><td>500 nos</td><td>0.20 Ha</td></tr> <tr> <td><b>Total</b></td><td><b>= 182350 Nos</b></td><td><b>56.36Ha</b></td></tr> </tbody> </table> <p><u>Dust Suppression at BOCP</u></p> <p>1) 30 Nos. of Mist Spray provided in CHP.</p> <p>2) 13 No. of Sprinklers provided along Coal Transport Road.</p>	Year	No of Plants	Area	1997-98	50000 nos	8.61Ha	1998-99	50000 nos	14.50 Ha	1999-2000	28000 nos	10.05 Ha	2000-01	7000 nos	4.42 Ha	2002-03	5000 nos	2.83 Ha	2004-05	10000 nos	3.02 Ha	2005-06	10000 nos.	4.0 Ha	2010-11	10000 nos	4.0 Ha	2011-12	10000 nos	4.0 Ha	2016-17	1850 nos.	0.74 Ha	2017-18	500 nos	0.20 Ha	<b>Total</b>	<b>= 182350 Nos</b>	<b>56.36Ha</b>
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	<p>mine water discharge such as irrigation at nearby villages.</p> <p>W.C.L shall also ensure that if there is a scarcity of water due to depletion of groundwater level due to mining activities they shall supply water to the affected villages.</p> <p>(vi) W.C.L shall maintain Over Burden dumps to avoid nuisance to villages and carry out massive tree plantation on the Over Burden.</p> <p>(vii) W.C.L shall carry out blasting in daytime only, using advanced technology to avoid ill effects due to blasting to nearby residents. also W.C.L shall maintain the record of blasting using vibrometer.</p> <p>(viii) W.C.L shall install continuous air monitoring station in the vicinity of the mine and adjoining villages and submit the results who the district Administration and local bodies on weekly basis.</p> <p>(ix) W.C.L shall initiate mass community development programs in the vicinity of the affected villages in consultation with the district administration, M.P.C Board &amp; Local Body and yearly proposal for approval of the District Administration.</p>	<p>3) 3 Nos. of High Efficiency Rain guns around CHP Area.</p> <p>4) 4 Mobile tankers have been provided.</p> <p>Overloading avoided and 100% tarpaulin covering of Trucks carrying coal is ensured.</p> <p><u>Mobile tankers</u></p> <p>1) 3 Nos. of 28 KLD continuously in mine area.</p> <p>2) 1 Nos. of 8 KLD sprinkling water from Tirwanja checkpoint to Tirwanja village</p> <p>Mine water discharge of BOCP is being used by villagers for agriculture purpose. No scarcity of water being reported.</p> <p>WCL has also provided garland drain of 4km length and 2.5 m X 2.5 m dimensions along D1 dump and plantation of 12.41 Ha. on OB dumps.</p> <p>Blasting is strictly restricted to daytime</p> <p>Fortnightly monitoring is carried out on regular basis by CMPDIL for Air and Water Quality. Reports are regularly submitted to state bodies such as MPCB and available online for Other bodies and individual on WCL website.</p>

v. From the above it may be seen that the issues raised during the public hearing have all been addressed and as such there is no pending works.

Further, the O.M dated 15/09/2017 clearly stipulates that Public Hearing already conducted for the total mine lease area involved and no more area is required for proposed expansion.

The subject proposal for 40% enhancement in capacity fulfils the above conditions as detailed out in earlier paragraphs.

vi. Based on the above, the EC is solicited for atleast 40% capacity enhancement with the same parameters i.e. from 0.975 MTPA to 1.365 MTPA with exemption of public hearing as per the O.M. dated 15-09-2017.

vii. It is further submitted that EC compliance from Regional Office, MoEF & CC has been secured vide no. 3-16/2015 dated 05-02-2018 which was also deliberated in the 28th EAC meeting held on 17-04-2018.

#### 4. Air Quality:

- i. Regarding observation of EAC for adequate mitigating measures to address the air quality concern, it is submitted that appropriate pollution control measures are already in place which are being operated & maintained to keep the air pollution level within the permissible limits. The details of pollution control measures are detailed out in subsequent paragraphs.

In this regard, the results of vigilance sampling carried out by MPCB and third party monitoring shows that the levels of ambient air pollutants at the mine activity area (i.e. core zone) are within the permissible limits.

##### Joint Vigilance Monitoring (MPCB)

All values ug/m3

Parameter	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>x</sub>
No of samples in Core Zone (8 hrs sampling)	01	01	01
No of values & % of times exceeded in Core Zone	Nil	Nil	Nil
<b>Standards 24 hrs (Coal Industry )</b>	<b>300</b>	<b>120</b>	<b>120</b>

##### Third Party Monitoring

All values ug/m3

Parameter	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>x</sub>
No of samples in Core Zone (24 hrs sampling)	01	01	01
No of values & % of times exceeded in Core Zone	Nil	Nil	Nil
<b>Standards 24 hrs (Coal Industry )</b>	<b>300</b>	<b>120</b>	<b>120</b>


#### ii. Details of existing pollution control measures at Bhatadi OC is placed below:

- 16 nos. of fixed sprinklers installed along coal transportation road
- 30 Nos. of Mist sprinklers installed at CHP
- 03 nos. of High efficiency Rain Guns installed at CHP Area.
- 3 Nos of mobile tankers with 28KL capacity & 1 No of mobile tankers with 18KL capacity are deployed for dust suppression at haul road, near coal stock yard etc.
- 1,82,350 Nos. of saplings planted till date
- 1 No. of Mechanical Sweeping machine commissioned at Chandrapur Area
- CHP side cladding with GI sheets
- Blacktopping / Concreting of approx. 10.80 kms
- Tarpaulin covering of Coal Transportation Trucks

**Proposed Additional Measures:**

To eliminate air pollution due to coal transportation by road, the main consumer i.e. M/s. MSPGCL has planned to take coal from the Bhatadi OC through Pipe Conveyor of approx. 6.25 km length to their thermal power plant CSTPS, Chandrapur. The work is in advance stage of installation.

In this regard, it is mentioned that recently, the competent approval from Ministry of Coal for installation of Pipe Conveyor system by MSPGCL through WCL acquired land for transportation of Coal from Bhatadi Expansion OC to Padmapur Wagon lading system of CSTPS, Chandrapur has been received vide letter no.43022/8/2018-LA & IR. A copy of the same is attached herewith for ready reference.

File No.LAIR-43022/8/2018-LAIR	
/8983/2018(1)	
No. 43022/8/2018-LA&IR Government of India Ministry of Coal New Delhi, the 14th June, 2018.	
To,	
Chairman-cum-Managing Director, Western Coalfields Limited, Coal Estate, Civil Lines, Nagpur - 440001, Maharashtra..	
Subject: Proposal for permission for installation of Pipe conveyor system by Maharashtra State Power General Co. Ltd. (MSPGCL) through WCL acquired land for transportation of coal from Bhatadi expansion OC to Padmapur Wagon loading Station of CSTPS Chandrapur.	
Sir,	
I am directed to refer to WCL's letter ref. no. WCL/MP(L&R)/SKG/61 dated 5/7.3.2018 on the above subject and to convey the approval of the competent authority of this Ministry to WCL for installation of pipe conveyor by MSPGCL through WCL acquired land on the lease basis for a period of 25 years.	
Yours faithfully  (Ram Shiromani Saroj) Under Secretary to the Govt. of India.	
Copy to: - Chairman, Coal India Limited, Newtown, Rajarhat, Kolkata(West Bengal)-700156.	



iii. Further, it is submitted that, the regular environmental monitoring will be continued during expansion and additional measures as needed will be augmented for pollution control.

iv. **Future Scenario:** As indicated above, installation of pipe conveyor for coal transportation from Bhatadi OC to CSTPS will eliminate the air pollution due to coal transportation by vehicles.

## 5. Conclusion:

- i. Based on the above, the EC is solicited for atleast 40% capacity enhancement with the same parameters i.e. from 0.975 MTPA to 1.365 MTPA with exemption of public hearing **(PH was conducted on 20-07-2004 as per EIA Notification, 1994)** as per the O.M. dated 15-09-2017.
- ii. It is further submitted that EC compliance from Regional Office, MoEF & CC has been secured vide no. 3-16/2015 dated 05-02-2018 which was also deliberated in the 28<sup>th</sup> EAC meeting held on 17-04-2018

## 6. Submission:

In view of the above, we most earnestly solicit your good office to reconsider our application for grant of Environmental Clearance for 40% enhancement in production capacity for Expansion of Bhatadi OC (from 0.975 MTPA to 1.365 MTPA) within existing land area of 847.37 ha. with exemption of fresh Public Hearing.

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