



**वेस्टर्न कोलफिल्ड्स लिमिटेड Western Coalfields Limited**

(मिनीरत्न कंपनी) (A Miniratna Company)

(कोल इंडिया लि. की अनुषंगी कंपनी) (A Subsidiary of Coal India Limited)

CIN-U10100MH1975GOI018626



**क्षेत्रीय महाप्रबंधक कार्यालय, चंद्रपुर क्षेत्र / Office of Area General Manager, Chandrapur Area**

पता: वेकोलि, चंद्रपुर क्षेत्र, पो. बाबुपेठ जि. चंद्रपुर, / Address: WCL, Chandrapur Area, Po- Babupeth,  
महाराष्ट्र, पिन: 442403 Dist: Chandrapur, MS, Pin-442403

Email: anoenv.cha@coalindia.in

FAX:- 07172-255287

**संदर्भ संख्या: वेकोलि/चक्षे/क्षेत्र/पर्यावरण/2023-24/ 142**

**दिनांक: 03.11.2023**

प्रति,

अतिरिक्त प्रधान मुख्य वन संरक्षक,  
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय,  
क्षेत्रीय कार्यालय (WCZ),  
भूतल, पूर्वी विंग, नया सचिवालय भवन,  
सिविल लाइन्स, नागपुर- 440001

विषय: Six Monthly Report against Compliance of Conditions of Environmental Clearance letter for **Bhatadi Opencast Mine** of Chandrapur Area, WCL (As on 01.10.2023)

संदर्भ: EC letter No. J-11015/151/2014-IA-II(M) dtd: 13.03.2020

महोदय,

Please find enclosed herewith, Six Monthly Report against Compliance of Conditions of Environmental Clearance letter for **Bhatadi Opencast Mine** of Chandrapur Area, WCL (As on 01.10.2023)

This for your kind information & necessary action please.

भव दि य

*Prashant Ashwin Kumar Thakur*  
03/11/23

(प्रशांत अश्विनकुमार ठाकर)

क्षेत्रीय केंद्रस्थ अधिकारी (पर्यावरण)

वेकोलि, चंद्रपुर क्षेत्र

संलग्न: यथोपरी

प्रतिलिपी:

1. प्रादेशिक अधिकारी, महाराष्ट्र प्रदूषण नियंत्रण बोर्ड, उद्योग भवन, प्रथम तल, रेलवे स्टेशन रोड चंद्रपुर 442401
2. क्षेत्रीय महाप्रबंधक, वेकोलि, चंद्रपुर क्षेत्र
3. महाप्रबंधक (पर्यावरण), वेकोलि-मुख्यालय, नागपुर
4. ऑफिस कॉपी

# **E.M.P. COMPLIANCE REPORT**

**AS ON 01.10.2023**

## **BHATADI OPENCAST EXPANSION PROJECT**



**WESTERN COALFIELDS LIMITED**  
**CHANDRAPUR AREA**



**WESTERN COALFIELDS LIMITED**  
**OFFICE OF THE SUB AREA MANAGER**  
**PADMAPUR SUB AREA**  
**CHANDRAPUR AREA**

Ref. No. WCL/CHA/PSA/BOCM/CIVIL/ 27

Date :- 31/10/2023

For preparation of six monthly report AS on 01.10.2023 data collected from following department of  
Bhatadi OC Mine of Padmapur sub Area

  
Survey Officer  
Bhatadi OCM

  
Manager (Civil)  
Bhatadi OCM

  
Mine Manager  
Bhatadi OCM

  
Sub Area Manager  
Padmapur Sub Area

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2	Data Sheet
3	Afforestation Details
4	Coal & OB Production Details

<b>Sr. No.</b>	<b>Description</b>	<b>ANNEXURE's</b>
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2	Copy of CTO	<b>B</b>
3	Copy of Environment Monitoring Reports	<b>C</b>
4	Photographs	<b>D</b>
5	Copy of CGWA NOC & 1st Renewal Application	<b>E</b>
6	CSR Activities & Photographs	<b>F</b>
7	Ground Water Monitoring Level Reports	<b>G</b>
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## **PRESENT STATUS OF PROJECT WORK**

### **PART - I**

Name of the Project	<b>BHATADI OPENCAST EXPANSION MINE</b>
Location	At-P.O.Bhatadi , Tehsil- Chandrapur, District-Chandrapur, Maharashtra State.
Address for correspondence	Sub Area Manager, Bhatadi Opencast Sub Area, PO : Bhatadi, Distt.: Chandrapur (M.S.) PIN-442404.
MOEF's Clearance No. & Date	J-11015/151/2014-IA-II(M) dtd: 13.03.2020
Period of Status Report	01.04.2023 to 30.09.2023
Date of Submission of Last Report	01.06.2023
Date of Commencement of Project work	1995

### **STATUS OF LAND ACQUISITION**

TYPE OF LAND	REQUIRED AS PER EMP (In Hectares)	ACTUAL AREA ACQUIRED AS ON 31.03.2023 (In Hectares)
FOREST LAND	0.20	0.00
OTHER GOVT. LAND	52.25	52.25
AGRICULTURAL LAND	785.69	785.69
(20.00 ha. Land provisioned for rehabilitation of Bhatadi village is yet to be acquired)		
<b>TOTAL</b>	858.14	837.94

287.57 Ha. land is acquired under CBA Act 1957 in the yr. 1990

82.15 Ha. Land is acquired under LA Act in the yr. 2007

467.01 Ha. Land is acquired under CBA Act 1957 in the yr. 2001

1.214 Ha. Land is acquired through direct purchase (As On 31.03.2019)

### **PRESENT STATUS OF LAND USE PATTERN (All Figures in HECTARES )**

SL	PARTICULARS	As Per EMP in (Ha)
1	Quarry area	161.32
2	External OB Dumps	142.10
3	Infrastructure	10.90
4	Roads	8.45
5	Township	16.70
6	Embankment	13.00
7	Temporary Top soil dump	40.20
8	Miscellaneous	465.27
	Total	857.94

### **STATUS OF LEGAL COMPLIANCE**

A	Consent under Water (Prevention & Control of Pollution) Act	Consent to operate for the coal production capacity of 1.465 MTPA vide Format 1.0/CAC/UAN No. 00000165617/CR/-2311001779 dt. 22.11.2023 for a period upto 31.03.2024.
B	Consent Fees under Water (Prevention & Control of Pollution) Act	Water Cess has been discontinued from July 2017. However, ground water/mine water abstraction charges are being regularly paid to CGWA and also obtained valid NOC.

C	Environment (Protection Act)	The project has been accorded Environmental Clearance by MOEF for expansion 0.975 to 1.465 Million Te./Yr. vide no. J-11015/151/2014-IA-II(M) 13 March 2020. (Copy enclosed)
D	Forest (Conservation) Act	Application for Stage-I clearance of 0.20 Ha forest land is under process.

## II –PART

	AIR POLLUTION CONTROL	STATUS OF ENVIRONMENT
A.	No. of Ambient Air Monitoring Stations	04 Nos.(Fortnightly) & 2 nos. of stations for fugitive emissions
B.	* Details of Locations	Location code
1	Bhatadi Village	CBOA-1
2	Colony	CBOA -2
3	Security Check Post	CBOA -3
4	Kitadi Village	CBOA -4
C.	** Ambient Air Quality Status for the Parameters prescribed by State Pollution Control Board.	Environment Monitoring results for the month of April -2023 to September-2023 is enclosed. This can be seen from the results that all the values are within permissible limits.
	A1: CBOA-1	
	A2: CBOA -2	
	A3: CBOA -3	
	A4: CBOA -4	
D	Fugitive dust monitoring Status	2 stations
	1.CHP	Environmental Monitoring reports for the month April - 2023 to September-2023 enclosed.
	2.Weigh Bridge	

\*Location of the Sampling Stations have been delineated on the Working Mine Plan Enclosed.

\*\* Detailed Report of Sampling & Analysis of Ambient Air Quality as per the Statute of Standard & Approved Laboratory: CMPDIL's Report for the month of April -2023 to September-2023.

	WATER POLLUTION CONTROL	STATUS
A.	No. of Stations & Frequency of Monitoring	02 (Fortnightly)
B.	*Description of Locations	
	Mine Water Discharge	WI - CBOW-1
	Workshop ETP Water Discharge	W2 - CBOW-2
C.	** Average Concentrations of Major Pollutants prescribed by State Pollution control Board	Environment Monitoring results for the month of April -2023 to September-2023 enclosed. From the analysis report it can be seen that all parameters are well within the permissible limit.

Environmental Monitoring Reports for the month April -2023 to September-2023 are enclosed.

A	Quantity of Effluent discharged to local water course from each course( in m3/day)	4545 m3/day.
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\* Location of the Sampling Stations have been delineated on the Working Mine Plan Enclosed

- \* Detailed Report of Sampling & Analysis of Effluent Quality as per the Statute of Standard & Approved.

Laboratory: CMPDIL's Report for the month of April -2023 to September-2023 is enclosed.

	<b>NOISE POLLUTION CONTROL</b>	
A	No. of Noise Monitoring Stations	02 No.
B	* Description of Locations & dB (A) Value	CBON-1 Near CHP, CBON-2 Colony
C	**Average Concentrations of Major Pollutants prescribed by State Pollution control Board	From the analysis report it can be seen that all parameters are well within the permissible limit

\* Location Points have been delineated on the Working Mine Plan: ENCLOSED.

\* Detailed Report of Noise Monitoring as per the Statute to be enclosed: Report for the month of April -2023 to September-2023 is enclosed.

### **PART – III**

#### **STATUS OF IMPLEMENTATION OF PROVISIONS OF EMP AS ON 01.10.2023**

SL	PARTICULARS	As per EMP	Current Year 01.04.2023 to 30.09.2023	Progressive
1	Area Excavated (Hectares)	161.52	0.618	175.80
2	Top soil Removed (MM <sup>3</sup> )	---	Nil	2.61
3	Overburden Removed (MM <sup>3</sup> )	110.786	4.665	92.041
4	Overburden Back-filled (MM <sup>3</sup> )	46.463	Nil	4.50
5	Overburden Dumped (MM <sup>3</sup> )	64.323	0.665	83.421
6	Area to be recovered for physical reclamation (Hectares)	212.02	NIL	---
7	Area Reclaimed Biologically (Hectares)	---	NIL	--
8	Annual Production : (Coal in M. Te., OBR in MM <sup>3</sup> )	1.465 (Coal) MTe	Coal: 0.341 Million Te. OB: 0.665 mm <sup>3</sup>	Coal: 16.207 MT

Note E C obtained for expansion 0.975 to 1.465 MTPA Vide ref No J-11015/151/2014-IA-II (M) dtd: 13<sup>th</sup> March 2020.

#### **AFFORESTATION \* (Nos.);**

SL	LOCATION	Current Year	Progressive
1	External OB Dumps	14500	62500
2	Embankments	-----	-----
3	Safety Zone	-----	-----
4	Back filled areas	-----	-----
5	Other areas	-----	134675
6	Along the periphery of mine	-----	59500
	TOTAL	14500	256675
Area under plantation (Progressive)		85.27 Hectares	
No. of plants per Hectare			

Species planted	Acasia, Shivan, Mango, Jamun, Teak, Bamboo, Gulmohar, Kranji, Shisoo, Behada, Neem, etc.
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### **REHABILITATION & RESETTLEMENT**

- 1) Land acquired under CBA act. 1957 in the year 1990 is 287.57 Ha. which includes 278.96 Ha. tenancy land and 8.61 Ha. Govt. Land Employment provided against this land is 113 no. as per norm.
- 2) Land acquired under LA act. 1897 in the year 2007 is 82.15 Ha. which includes 78.49 Ha. Tenancy land and 3.66 Ha. Govt Land employment provider against this land till date is 30 nos.
- 3) Land acquired under sec. 9(1) CBA act. 1957 at. 13.9.2011 is 467.21 Ha. which included 0.30 Ha diverted plot area, 426.73 Ha. Tenancy land, 39.98 Ha. Govt. land and 0.20Ha. Forest land. Administrative approval to 409 cases employment/monetary compensation has been approved by competent authority. Till date 299 cases of employment and 07 No. cases of M.C. is given and remaining cases of initiated employment/Monetary compensation is in process.
- 4) Regarding rehabilitation of Bhatadi village TLR survey has been conducted on dated 2 Sep. 2013 but this survey has been stopped by village 2 Sep. 2013

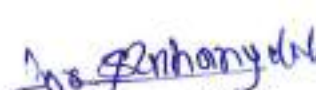
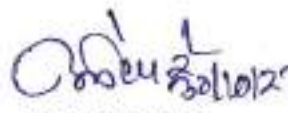


**EXPEDITURE: CAPITAL****EXPENDITURE ON POLLUTION CONTROL MEASURES AT BHATADI OCP as on 01.10.2023**

I	AIR POLLUTION CONTROL		
A)	<b>BLACK TOPPING OF ROADS/RCC PAVEMENT AT WEIGH BRIDGE</b>		
SL	Head	Project	Amount in Rs. Lakhs
1	Black Topping of Coal Transport Road from Tirwanja to Padoli	BOCP	160.00
2	Black Topping of road from Check post to CHP	BOCP	2.10
3	Black Topping of surface road near SAM Office	BOCP	2.60
4	RCC Pavement near Weigh Bridge	BOCP	1.80
5	Repair of Cement road near weigh bridge	BOCP	3.08
6	Const. of concrete road from coal stock to CHP	BOCP	5.00
7	Const. of balance concrete road from CHP to Weigh Bridge	BOCP	8.00
8	Strengthening & widening to exiting road including balance concreting of road from CHA check post upto new weigh bridge as part of dust suppression measures at Bhatadi OCM of Chandrapur Area.	BOCP	12.31
9	Construction of Concrete haul road at BOCM under PSA.	BOCP	9.88
10	Construction of Concrete Platform for stacking oil drum at store at BOCM of PSA.	BOCP	12.82
11	Mechanical Road sweeping M/C	BOCP	5.77
	<b>TOTAL</b>		223.36
B)	<b>MIST SPRAY SYSTEM/ FIXED SPRINKLERS INSTALLED /MOBILE TANKERS AS ON 01.10.2023</b>		
SL	Head	Project	Amount in Rs. Lakhs
1	Mist Sprinklers in CHP & Coal stock yard	BOCP	3.92
2	Fixed sprinklers at Weigh Bridge area	BOCP	1.02
3	Conversion of Dumper to Sprinkler	BOCP	1.00
4	Pipeline & sprinklers at workshop & Coal stock	BOCP	28.20
5	Making dust suppression arrangement with realignment of G.I pipeline work with providing rain guns sprinklers at CHP coal stock and weighbridge area.	BOCP	13.62
	<b>TOTAL</b>		47.76
C)	<b>G.I.SHEET CLADDING OF COAL HANDLING PLANT AS ON 01.10.2023</b>		
SL	Head	Project	Amount in Rs. Lakhs
1	Side cladding of CHP	BOCP	10.56
2	Shed & side cladding to feeder breaker of CHP	BOCP	1.64
	<b>Total</b>		12.20
	<b>GRAND TOTAL ( A+ B+ C)</b>	BOCP	<b>283.32</b>

	<b>WATER POLLUTION CONTROL</b>		
<b>SL</b>	<b>Head</b>	<b>Project</b>	<b>Amount in Rs. Lakhs</b>
1	Sedimentation pond for mine discharge	BOCP	2.89
2	Development of workshop ETP	BOCP	5.78
3	Additional Sludge bed at W/S ETP	BOCP	0.30
4	Up gradation of mine water sedimentation plant	BOCP	2.43
5	Providing & Fixing oil skimmer at ETP of BOCM	BOCP	4.75
6	Making temp. shed for oil grease, barrel at BOCM	BOCP	7.18
7	Making Settling tank and Pressure Filter	BOCP	15.08
8	Provision of DETP for colony	BOCP	4.29
	<b>TOTAL</b>		20.32
	<b>TOTAL CAPITAL EXPENDITURE (I + II)</b>		<b>303.64</b>

#### **EXPENDITURE: REVENUE (In Rupees)**

<b>ACCOUNT HEAD</b>	<b>01.04.2023 to 30.09.2023</b>	<b>PROGRESSIVE</b>
Afforestation	Nil	Rs. 111.21 Lakhs
Air Pollution Control(O & M of 2 Mobile Tankers)	Nil	Rs. 157.49 Lakhs approx
Water Pollution Control (O & M of ETP, Sedimentation pond)	Nil	Rs. 58.98 Lakhs approx
Monitoring	Rs. 17.00 Lakhs approx	Rs. 81.23 Lakhs approx
Legal Expenses	Nil	Rs. 86.45 Lakhs
Environmental Audit + Water Cess	Nil	Rs. 4.59 Lakhs
Others (JVs by MPCB) & Misc.	Nil	Rs. 9.49 Lakhs
<b>T O T A L</b>		<b>Rs. 509.44 Lakhs</b>

Manager (Civil) Bhatadi OCM      Mine Manager Bhatadi OCM      Sub-Area Manager Padmapur Sub Area      Area Nodal Officer (Env) WCL-Chandrapur Area

## PART-IV

**Project:-** BHATADI OPENCAST EXPANSION PROJECT

**Environmental Clearance:-** No.J-11015/151/2014-IA-II(M) dt.13<sup>th</sup> March, 2020

**Six Monthly Compliance Report:-** 01.04.2023 to 30.09.2023

### **COMPLIANCE REPORT AGAINST ENVIRONMENTAL CLEARANCE**

S.N.	EC CONDITIONS	COMPLIANCE STATUS
(i)	Distance from the mine and OB Dumps shall be 150 m away from river.	The nearest boundary of mine lease is 330 m away from the river.
(ii)	All additional mitigation measures proposed shall be implemented in 1 year of issue of this letter.	Mechanical Road Sweeping Machine has already been procured and deployed as and when required. Pipe conveyor system has been commissioned and is operational. One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions.
(iii)	Project proponent to plant 1,00,000 nos. of native trees with broad leaves along the periphery of the mine to prevent the effect of air pollution in 3 years of the issue of this letter. After completion of tree plantation number of trees shall be duly endorsed from District Forest Officer.	Till date total 256675 nos. plantation has carried out in Bhatadi OC mine. Complying to this condition for 1,00,000 nos. plantation, the plantation work has been carried out as follows:- 1) 2020-21 – 22,000 nos. 2) 2021-22 – 37,500 nos. 3) 2023-24 – 14,500 nos. Due to space restrictions and final height of the dumps are not achieved the balance 26,000 nos. plantation is likely to be achieved in the upcoming monsoon.
(iv)	Validity of EC is life of the mine or 30 years whichever is earlier as per EIA Notification, 2006.	Noted
(v)	The project proponent shall obtain Consent to Establish from the State Pollution Control Boards for the proposed peak capacity of 1.465 MTPA prior to commencement of the increased production.	Consent approved vide Format 1.0/CAC/UAN No. 00000165617/CR/-2311001779 dt. 22.11.2023 for a period upto 31.03.2024.
(vi)	Transportation of coal from Coal Handling Plant shall be through covered trucks.	Transportation of Coal from CHP is currently being carried out with tarpaulin covered trucks. Pipe conveyor has been commissioned & operational. Most of the coal is being transported through pipe conveyor and road transportation of coal shall be gradually reduced.
(vii)	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	Mist spray arrangement already provided at Crusher and in belt conveyor. 30 no. of mist spray nozzles provided under such arrangement. (Annexure-D)
(viii)	Mitigating measures shall be undertaken to control dust and other fugitive	2 No. of 12 KL & 8 KL water tankers are provided for Coal transportation roads.

	emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.	3 No. of 28KL water tankers are provided for sprinkling water on Haul Road. 30 no. ranguns are provided along Coal Stock Yard. 13 no of sprinklers are provided along Coal transport road. 3 no high efficiency ranguns provided in CHP area. 30 nos of mist spray nozzles provided in CHP and Conveyor at Bhatadi OCM. Avenue Plantation has been done along the Coal Transportation Road. Additionally a One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions.												
(ix)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	20% of the workforce is subjected to PME every year for monitoring of occupational health hazard. data are as follows; <table><tr><th>Year</th><th>PME</th></tr><tr><td>2019-20</td><td>287</td></tr><tr><td>2020-21</td><td>254</td></tr><tr><td>2021-22</td><td>179</td></tr><tr><td>2022-23</td><td>254</td></tr><tr><td>2023-24 (up to Sept'23)</td><td>140</td></tr></table>	Year	PME	2019-20	287	2020-21	254	2021-22	179	2022-23	254	2023-24 (up to Sept'23)	140
Year	PME													
2019-20	287													
2020-21	254													
2021-22	179													
2022-23	254													
2023-24 (up to Sept'23)	140													
(x)	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Persons of nearby villages are given training under CSR for livelihood and skill development. During 2015-18, 520 nos. of persons were given training at CIPET at an approximate cost of Rs. 1.20 Crores.												
(xi)	Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	Till date total 256675 nos. plantation has carried out in Bhatadi OC mine. Proposal of planting One Lakh trees in mine with an approximate 40.00 ha. area has already been initiated. 74,000 nos. plants have been planted along periphery of mine and OB dumps from 2020-2023 to mitigate dust pollution.												
(xii)	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.	Mine water is utilized for domestic and dust suppression purposes after treatment. Availability of mine discharge is sufficient amount to cater the need.  No water from any surface water source is used.												
(xiii)	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 1.465 MTPA.	NOC has been approved vide NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022. Applied for Renewal dtd: 10.03.2022 and the proposal were deferred stating that IAR with modeling report to be submitted. Final renewal applied along with requisite reports and the application has approved and the formal NOC letter is yet to be received. (Annexure-E)												
(xiv)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	20% of the workforce is subjected to PME every year for monitoring of occupational health hazard. data are as follows; <table><tr><th>Year</th><th>PME</th></tr><tr><td>2019-20</td><td>287</td></tr><tr><td>2020-21</td><td>254</td></tr></table>	Year	PME	2019-20	287	2020-21	254						
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		2021-22	179
		2022-23	254
		2023-24 (up to Sept'23)	140
(xv)	A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRE/NEERI/IIT or any other expert agency identified by the Ministry.	Work has been awarded to CSIR-NEERI vide letter वेकोलि/ मुख्यालय/ पर्यावरण/ 16-J/44 दिनांक: 24.11.2020 Copy of the previous report is attached for kind perusal.	
(xvi)	Active OB Dump should not be kept barren/ open and should be covered by temporary grass to avoid air born of particles.	Noted Bhatadi OC presently has two External OB dumps D1 and D2. D2 Dump has become inactive and has been stabilized through thick Plantation. D1 Dump is active dump which has achieved the height of 64 m out of total 90 m. OB dump get compacted due to continuous movement of heavy HEMM such as Dumpers and dozers and thus avoid air born particles. However possibility of grassing shall be explored in near future.	
(xvii)	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 <sup>st</sup> May, 2018.	Noted Activities are carried out under CSR as per Companies Act, 2013. Activities carried out under CSR during last 5 years are enclosed as Annexure-F	
(xviii)	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	Controlled Blasting is carried out using shock tubes as per DGMS guidelines to control ground vibrations and arrest fly rocks.	
(xix)	The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 <sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2 <sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union Of India and Ors.	Noted No illegal Mining is carried out at the Bhatadi Opencast.	
(xx)	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground Water table. The intersecting	NOC has been approved vide NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022. Applied for Renewal dtd: 10.03.2022 and the proposal were deferred stating that IAR with modeling report to be submitted. Final	

	ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	renewal applied along with requisite reports and the application has approved and the formal NOC letter is yet to be received.  Monitoring report on levels and quality of ground water are submitted along with 6 monthly EC Compliance on regular basis. Copy enclosed as Annexure-G
(xxi)	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also , Occupational health check-ups for workers having some ailments like BP, Diabetes, Habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	50 bedded area hospital with specialist doctors and 6 nos. of dispensaries have been provided. 20% of the workforce is subjected to PME every year for monitoring of occupational health hazard.
(xxii)	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29 <sup>th</sup> October, 2014 titled “Impact of mining activities on Habitation-Issues related to the mining projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area”.	Noted
(xxiii)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Noted  Illumination at the mine site is provided as per statute (DGMS). The levels are also monitored. No undue light or sound is thrown on the nearby villages. Ambient noise level is monitored fortnightly and results are enclosed as Annexure-C

(xxiv)	The Project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.	A detailed 2 year study is being undertaken for conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India. Recommendations of this study shall be implemented on receipt of the same.
(xxv)	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgment dated 8 <sup>th</sup> January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the Ministry.	Noted To be complied with after ceasing of mining operations
(xxvi)	CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 and the SPCB shall follow the mechanism/ protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24 <sup>th</sup> October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.	CTO for the production capacity 1.465 MTPA has been granted vide no. Format 1.0/CAC/UAN No. 00000165617/CR/-2311001779 dt. 22.11.2023 for a period upto 31.03.2024.
(xxvii)	The green belt of at least 5-10 m width shall be developed in more that 40% of the total project area, mainly along the periphery of mine boundary, in downward wind direction, and along road sides etc. Selection of plant species	Till date total 256675 nos. plantation has carried out in Bhatadi OC mine. Proposal of planting One Lakh trees in mine with an approximate 40.00 ha. area has already been initiated. 74,000 nos. plants have been planted along periphery of mine and OB dumps from 2020-2023 to mitigate dust pollution.

	shall be as per the CPCB guidelines in consultation with the State Forest Department.	
(xxviii)	In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.	Outside mine area plantation has already been developed by WCL Chandrapur Area in degraded forest land with FDCM for 150 ha. Similarly Chandrapur area has contributed 5 crores for development of an APJ Abdul Kalam Ecopark.
(xxix)	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Complied. Work has been awarded to CSIR-NEERI vide letter वेकोलि/ मुख्यालय/ पर्यावरण/ 16-J /44 दिनांक: 24.11.2020
(xxx)	The percentage the CER may be atleast 2 times the amount given in the OM dated 1 <sup>st</sup> May, 2018 recommended by the EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Noted Present expansion is without any increase in capital investment so CER does not applicable.
(xxxii)	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	Mist. spray system & Side Cladding provided at CHP for control of fugitive emissions. Mobile tankers are deployed on coal transportation road and haul road. Sprinklers and rainguns are provided for coal stock yard. Additionally a One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions. Transportation of coal through Pipe Conveyor System is followed to eliminate emissions during transportation.
(xxxiii)	Transportation of materials by rail/ conveyor belt, wherever feasible.	Pipe conveyor has already been commissioned & operational at the mine and would account for the majority of coal transport from the mine.
(xxxiii)	A detailed water harvesting plan may be submitted by the project proponent.	Rain Water Harvesting Structure at Bhatadi OCP has already been installed at an approximate cost of Rs. 2.63 lakhs during 2020-21. Photograph enclosed as (Annexure-D)
(xxxiv)	In case domestic waste water generation is more than 10 KLD, the industry may install STP.	STP of 50 KLD provided.
(xxxv)	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Noted Work has been awarded to CSIR-NEERI vide letter वेकोलि/ मुख्यालय/ पर्यावरण/ 16-J / दिनांक: 24.11.2020
(xxxvi)	PP shall comply all the conditions of earlier EC dated 19 <sup>th</sup> March, 2015 in 3 years from the issue of this letter and submit a copy of compliance to Ministry's Regional Office.	Noted All the conditions of earlier EC dtd: 19th March 2015 are already complied or in compliance and has been certified by Regional Office of MoEF&CC during its inspection on 22.01.2018 (Annexure-H)
(xxxvii)	All the recommendation of comprehensive study being conducted by NEERI shall be implemented by	Noted and will be complied once the report received.

	project proponent within certain timeline and necessary timeline shall be submitted to Ministry's Regional Office.	
<b>4.1</b>	<b>The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:</b>	
<b>(a)</b>	<b>Statutory compliance</b>	
(i)	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986 in case of the diversion of forest land for non-forest purpose involved in the project.	Proposal for Stage-I FC for 0.20 Ha. forest land is currently pending with State Government. No mining shall be carried out without FC.
(ii)	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable
(iii)	The project proponent shall prepare a Site-Specific Conservation plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/ Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule- I species in the study area).	Noted A detailed 2 year study is being undertaken for conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India, Dehradun. Recommendations of this study shall be implemented on receipt of the same.
(iv)	The project proponent shall obtain Consent to Establish/Operate under the provision of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.	CTO for the production capacity 1.465 MTPA has been granted vide no. Format 1.0/CAC/UAN No. 00000165617/CR/-2311001779 dt. 22.11.2023 for a period upto 31.03.2024.
(v)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	NOC has been approved vide NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022. Applied for Renewal dtd: 10.03.2022 and the proposal were deferred stating that IAR with modeling report to be submitted. Final renewal applied along with requisite reports and the application has been approved and the formal NOC letter awaited.
(vi)	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	Solid/hazardous waste generated in the Bhatadi OC is disposed via MPCB authorized agency to CHWTSDF.
<b>(b)</b>	<b>Air quality monitoring and preservation</b>	

(i)	<p>Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.</p>	<p>Ambient air quality monitoring is done fortnightly for pollutants namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> by Central Mine Planning &amp; Design Institute Limited (CMPDIL) in the core zone as well as in the buffer zone. Reports are regularly submitted to MPCB &amp; MoEF&amp;CC (Annexure-C)</p> <p>One CAAQMS has been commissioned in adjoining mine of Durgapur OCP on 11.10.2020 and data is submitted to MPCB on regular basis.</p> <p>Additionally a One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions. Monitoring of Heavy Metals is also carried out every six monthly and reports are submitted to RO, MoEF&amp;CC vide Email (Annexure-J)</p>
(ii)	<p>The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr, and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.</p>	<p>Monitoring is done by CMPDIL as per GSR 742 (E) dated 25<sup>th</sup> September, 2000 and reports are submitted to Ministry/Regional Office and to the CPCB/MPCB. Monitoring of Heavy Metals is also carried out every six monthly and reports are submitted to RO, MoEF&amp;CC vide Email. Last such report on Heavy metals submitted is enclosed as Annexure-J</p>
(iii)	<p>Transportation of coal, to the extent permitted by road shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.</p>	<p>Currently major transportation of coal is being done through pipe conveyor system and by road transportation of coal is done through tarpaulin covered trucks</p> <p>Mist. spray system &amp; Side Cladding provided at CHP for control of fugitive emissions.</p> <p>Mobile tankers are deployed for coal transportation road and haul road. Sprinklers and rainguns are provided for coal stock yard.</p> <p>It is proposed to use MgCl<sub>2</sub> as an additive to water for dust suppression.</p> <p>Additionally a One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions.</p>
(iv)	<p>The Transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case it is proposed to</p>	<p>Coal transportation is now predominantly through pipe conveyor. Road transport if any shall be through tarpaulin covered trucks only.</p> <p>Coal transport roads are regularly wetted by spraying water through mobile tankers.</p>

	construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	
(v)	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.	Vehicles complying with RTO rules which include owing PUC certificate are only engaged in coal transportation.  Sample copy of Work Order indicating compliance of various Laws including imposed by RTO and few valid PUC of vehicles engaged for reference (Annexure-K)
(vi)	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyor shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Mist. spray system & Side Cladding provided at crusher for dust suppression. Sprinklers and rain-guns are provided around coal stock yard & crusher. Drills are fitted with dust extractor. Additionally a One Mist fogger cannon is provided at coal stock yard to suppress fugitive emissions.
(vii)	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	Mist. spray system & Side Cladding provided at CHP for control of fugitive emissions. Mobile fogger has been proposed for Bhatadi CHP area for conservation of water. It is proposed to use MgCl <sub>2</sub> as an additive to water for dust suppression.
(c)	<b>Water quality monitoring and preservation</b>	
(i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25 <sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.	Monitoring is done by CMPDIL as per GSR 742 (E) dated 25 <sup>th</sup> September, 2000 and reports are submitted to Ministry/Regional Office and to the CPCB/SPCB vide Email. (Annexure-C)
(ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.11 (M) dated 27 <sup>th</sup> May, 2009 issued by Ministry of Environment, Forest & Climate Change shall also be referred in this regard for its compliance.	The Monitoring data is uploaded regularly on company website www.westerncoal.in and at Sub Area Manager Office.
(iii)	Regular Monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out	Ground water monitoring is being done four times every year (May to January) and report is submitted to MoEFCC & CGWA vide email in 6 monthly EC Compliance.  Monitoring Report enclosed as Annexure-G

	four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	02 nos. Piezometers have been installed in the mine for monitoring of ground water levels.
(iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	Monitoring of water quality upstream and downstream of water bodies is carried out once in six months and reports are submitted to RO, MoEF &CC vide email. Copy enclosed as Annexure-L
(v)	Ground water, excluding mine water shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	No ground water is used for mining. Rain Water Harvesting at SAM Office, Bhatadi OCP has been constructed at an approximate cost of Rs. 2.63 lakhs.
(vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dump shall be avoided by providing adequate channels for flow of silt into the drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.	For existing Bhatadi OCP garland drain/catch drain of size 2.5 mtrs x 2.5 mtrs is constructed around periphery of mine for total length of 4.00 km so as to arrest silt & sediment flow from the OB dumps & mine. Water pumped out from the mine is discharged onto the surface & made to pass thorough a sedimentation pond. The clear water from the sedimentation tank is used for activities like dust suppression on haul roads & in & around CHP. Green belt development as expansion project shall commence the catch drain shall be extended suitably. At Bhatadi OCP one retaining wall exists inside mine of length 80 mtr. below view point. Catch drains are provided to collect runoff and siltation from OB Dumps as expansion project commences additional toe wall shall be constructed as and when required.
(vii)	Adequate ground water recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	Rain Water Harvesting at SAM Office, Bhatadi OCP has been constructed at an approximate cost of Rs. 2.63 lakhs. Artificial ground water recharge is being done through one no. of rain harvesting pond (size 110 x 60 m). There is no shortage of water in the nearby villages. Their ponds remain full round year.

(viii)	Industrial waste water generated from CHP, workshop and other waste water , shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environmental (Protection) Act, 1986 and the Rules made there under, and as amended from time to time, Adequate ETP/STP needs to be provided.	6 nos. of Sedimentation tanks have been provided in series & ETP of capacity 75 KLD is provided and fitted with oil & grease trap. Treated water is reused for washing of HEMM.  STP of Capacity 50KLD provided for Colony.
(ix)	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. Watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Pumped out water is used for dust suppression, gardening and drinking purpose after suitable treatment. Drains are regularly de-silted before the onset of monsoon.
(x)	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any Other authority as prescribed by the law.	Noted.  As embankment of suitable dimension (20m on top x 3m height above HFL) has been constructed along river boundary with hard material & river front side has been stabilized with plantation.
(xi)	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation/ water resource department in the state government.	Noted  Already a similar study in nearby coalfield in WCL has been carried out. As directed, similar study will be completed in next 6 months
(d)	<b>Noise and Vibration monitoring and prevention</b>	
(i)	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations,	Workers engaged in drilling and blasting operations, operation of HEMM are provided with personal protective equipments like earplug/ear muffs. Awareness program for the users is periodically conducted by the safety department of unit and the

	operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	progress of such progress in use of such accessories is being monitored
(ii)	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Controlled blasting is being done with the help of shock tube. Blasting hours are fixed and blasting is carried out with due precautions. Vibrations are recorded using Vibrometer and results are within limit.
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six monthly basis.	Noise Monitoring is done by CMPDIL on fortnightly basis at CHP and near colony Monitoring results are within permissible limits and reports are regularly submitted to regional office of MoEFCC vide email at <a href="mailto:ecompliance-mh@gov.in">ecompliance-mh@gov.in</a> and uploaded on Parivesh Portal.
<b>(e)</b>	<b>Mining Plan</b>	
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.	Already being done & will continue to be done
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).	Already being done & will continue to be done
(iii)	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.	No forest land is involved in the lease area of 847.37 Ha
(iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Already being done. A solar power plant of capacity 140 kWh/day has been installed at Bhatadi OC. In future also such endeavours will be perused.
<b>(f)</b>	<b>Land reclamation</b>	
(i)	Digital survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest & Climate Change (MOEFCC) from time to time shall be submitted to MOEFCC/regional Office (RO).	Mapping of the project is done once in 3 years and the same is uploaded on WCL website. Report is submitted to MoEFCC, RO office in every 6-month.  Land Reclamation report of Bhatadi OC for the year 2021 is enclosed as Annexure-M

(ii)	<p>The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agriculture/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.</p>	<p>Currently life of mine is 8 years and backfilling is in progress. Till 31.03.2023, 4.50 Mm3 of overburden has been backfilled in the quarry and the same is being continued. As a part of progressive mine closure plan till date 80.27 Ha of land has been covered with plantation (242175 No.s). From 2020-21 onwards 1.00 lakh nos. trees will be planted along mine boundary in a phased manner with in 3 years period to increase the green cover. 22000 plants have been planted in 2020-21 along mine boundary. Plantation of 37500 nos. have been planted in 2021-22 along periphery for green belt development.</p>
(iii)	<p>The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.</p>	<p style="text-align: center;">Noted</p> <p>Present status as on date: Excavated Area 162.096 Ha, backfilling done with 3.909 Mm3 for making Haul roads etc. external OB dumping (including top soil) = 71.363 Mm3 (174.788 Ha), Infrastructure = 14.45 Ha, green belt(Afforestation) = 56.47 Ha, Colony = 16.55 Ha. Post mining Land use pattern will be adhered as per EIA/EMP submitted to the MoEF&amp;CC.</p>
(iv)	<p>Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flues Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEFCC, CPCB and SPCB.</p>	<p>Regarding this, it is submitted that the subject mine is an operational mine &amp; dumping of fly ash in such mine involves severe environmental &amp; safety issues. CIL so far as directed for fly ash filling in abandoned mines only. Moreover, MOC &amp; MoEF &amp;CC has jointly agreed for a detailed scientific study on this issue. As such, till an informed decision is arrived, the condition may be kept on hold.</p>
(v)	<p>Further, it may be ensure that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps</p>	<p style="text-align: center;">Noted.</p>

	shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.					
(vi)	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Noted				
(g)	<b>Green Belt</b>					
(i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest & Wildlife Department.	A detailed 2 year study is being undertaken for conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India, Dehradun. Recommendations of this study shall be implemented on receipt of the same.				
(ii)	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/coal transportation roads.	Till date total 256675 nos. plantation has carried out in Bhatadi OC mine. Proposal of planting One Lakh trees in mine with an approximate 40.00 ha. area has already been initiated. 74,000 nos. plants have been planted along periphery of mine and OB dumps from 2020-2023 to mitigate dust pollution.				
(h)	<b>Pub Hearing and Human Health issues</b>					
(i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this Ministry and it's RO on 6 monthly basis.	Noted Illumination at the mine site is provided as per statute. Monitoring is done on monthly basis. Report shall be submitted to Ministry and it's RO along with 6 monthly EC Compliance. Copy of last 6 months enclosed for your reference as Annexure-N				
(ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the	Noted Periodical medical examination of 20% of the workforce is being done annually. Data is as follows <table><tr><th>Year</th><th>PME</th></tr><tr><td>2019-20</td><td>287</td></tr></table>	Year	PME	2019-20	287
Year	PME					
2019-20	287					

	provisions of Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	<table><tr><td>2020-21</td><td>254</td></tr><tr><td>2021-22</td><td>179</td></tr><tr><td>2022-23</td><td>254</td></tr><tr><td>2023-24 (upto Sept.2023)</td><td>140</td></tr></table>	2020-21	254	2021-22	179	2022-23	254	2023-24 (upto Sept.2023)	140
2020-21	254									
2021-22	179									
2022-23	254									
2023-24 (upto Sept.2023)	140									
(iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	<p>Noted</p> <p>Masks are provided as protective gear.</p> <p>Training and informative sessions are kept for the Personnel (including outsourced employees) working in core zone at Vocational Training Centre (VTC), Chandrapur</p>								
(iv)	Implementation of action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/ measures as per the Action Plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R & R policy of the Company/State government/Central Government as applicable.	<p>Noted</p>								
(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-1A.II(M) dated 29th October, 2014, titled 'impact of mining activities on habitations- issues related to the mining projects where in habitations and villages are the part of smileys areas or habitations and villages are surrounded by the mine lease area'.	<p>Noted</p>								
(i)	<b>Corporate Environment Responsibility</b>									
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	This is an existing mine with expansion without capital investment so CER is not applicable.								
(ii)	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to	Company has a well laid down Corporate Environment Policy which is already available on the WCL website. (Annexure-O)								

	have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have a defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholders/stakeholders	
(iii)	Separate environmental cell both at the project and company headquarter level with qualified personnel shall be set up under the control of senior executive who will directly to the head of the organisation.	At corporate level the Environmental issues are dealt by Director(Tech) P&P and GM(Env.). At area level it is headed by General Manager (Opr) & Area Nodal Officer. At project level, by Sub Area Manager through Nodal officer of the project.
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority. The year wise funds earmarked for the environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Yearwise progress of implementation of action plan shall be reported to the ministry/Regional office along with the six monthly compliance report.	Noted Annual Fund is allocated to Environment Department under Capital and Revenue Budget which is used solely for implementation of Environmental Activities under EMP.
(v)	Self environmental audit shall be conducted annually. Every 3 years third party environmental audit shall be carried out.	Third party audit every year is being carried out.
<b>(j)</b>	<b>Miscellaneous</b>	
(i)	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it in at least two local newspapers of the district or state, of which one shall be in vernacular language within 7 days and in addition this shall also be displayed in the project proponent's website permanently	Published in 1. Chandrapur Mahasagar (Marathi) dtd: 17.03.2020 2. Mahavidarbha (Marathi) dtd: 17.03.2020  However same has been uploaded on the WCL website (Annexure-P)
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the heads of the local bodies Panchayats and Municipal Bodies in addition to the relevant offices of the government who in turn has to	Copy of EC has been submitted to Local bodies, Panchayats and Municipal Bodies in addition to all relevant offices of the government vide letter WCL/CHA/AGM/ENV/1229 dtd: 15.03.2020 (Annexure-Q)

	display the same for 30 days from the date of receipt.	
(iii)	The project proponent shall upload the status of compliance of the stipulated environment Clearance conditions, including results of the monitored data on their website and update the same on half yearly basis.	Noted Compliance of EC Conditions along with monitored data is being submitted to MoEFCC Regional office vide email and the same is being uploaded on Parivesh Portal.
(iv)	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2 and NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at convenient location for disclosure to the public and put on the website of the company	Monitoring is done by Central Mine Planning and Design Institute (CMPDI) for the SPM, PM10, SO2 and NOx and reports are submitted to MoEFCC Regional office, Nagpur vide email and are uploaded on WCL website for general public along with putting on Board.
(v)	The project proponent shall submit six monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Six monthly reports are submitted to MoEFCC office vide email and is uploaded on Parivesh Portal.
(vi)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-IA.II(M) dated 29th October, 2014, titled 'impact of mining activities on habitations- issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Noted.
(vii)	The project proponent shall submit environmental statement for each financial year in Form-V to the concerned state pollution control board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Environment Statement is submitted online annually as per EPA, 1986 and the same is uploaded on the WCL website. Environment Statement for 2022-23 was submitted online on MPCB portal vide UAN No. MPCB-ENVIRONMENT_STATEMENT-0000060809 dtd: 29.09.2023 (Annexure-R)
(viii)	The project authorities shall inform to the Regional office of the MoEFCC regarding commencement of mining operations.	Informed the Regional office of the MoEFCC regarding commencement of mining operations vide email. (Annexure-S)
(ix)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Conditions stipulated by State Pollution Control Board, here MPCB via its Consent to Establish/Operate are adhered.
(x)	The project proponent shall abide by all	Noted

	the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	
(xi)	No further expansion or modification in the plant shall be carried out without prior approval of the ministry of Environment, Forests and Climate Change.	Noted
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under provisions of Environment (Protection) Act, 1986	Noted
(xiii)	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
(xiv)	The ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions	Noted
(xv)	The Regional office of this ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Noted Full cooperation will be extended to the officer(s) of MoEFCC Regional office, Nagpur regarding monitoring of compliance of conditions stipulated in the EC.
(xvi)	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules and any other orders passed by the Honorable Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter	Noted
5	The project proponent shall abide by all the commitments and recommendations made in EIA/EMP report and also that during the presentation to EAC. All the	Noted

	commitments made on the issues raised during public hearing shall also be implemented in the letter and spirit.	
6	The proponent shall obtain all necessary clearances/ approvals that may be required before the start of the project. The ministry or any other competent authority may stipulate any further condition for Environmental protection.	Noted
7	Any appeal against this environmental clearance Shall lie with the National Green Tribunal, if preferred, with in a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.	Noted
8	The Coal company/project proponent shall be liable to pay the compensation against illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August 2017 of Hon'ble Supreme Court in WP(Civil) No. 114/2014 in the matter of 'Common Cause Vs Union of India & others'.	Noted However, production of the mine is done within EC limits. No illegal mining activities are carried out at the Bhatadi Opencast mine.
9	The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through there respective Department of Mining and Geology, in strict compliance of judgement of Hon'ble Supreme Court.	Noted Mining is done in compliance of all the laws as applicable. No compensation has been imposed by the State Government.
10	This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgement of Hon'ble Supreme Court, as applicable, and other statutory requirements.	Noted
11	This issues in suppression of the earlier EC granted vide letter dated 19 <sup>th</sup> March, 2015.	Noted

  
Manager (Civil)  
Bhatadi OCM

  
Mine Manager  
Bhatadi OCM

  
Sub Area Manager  
Padmapur Sub Area

  
Area Nodal Officer (Env)  
WCL-Chandrapur Area

**Monitoring the Implementation of Environmental Safeguards**

**Ministry of Environment & Forests-Regional Office ( W),Bhopal.**

**Monitoring Report**

**D A T A   S H E E T**

1. Project type :River- valley/Mining/ Industry/Thermal/Nuclear/Other(Specify) : MINING
2. Name of the Project : BHATADI EXPANSION  
OPENCAST PROJECT
3. Clearance letter(S)/OM No.& Date : J-11015/151/2014-IA.II(M).dt.13.03.2020
4. Location
  - a) District : CHANDRAPUR
  - b) State : MAHARASHTRA
  - c) Latitude/Longitude : Lat.20 ° - 2' - 45'' to 20 -5''-45''(N)  
Long. 79 -13'-10'' to 79-16' -55'' (E)
5. Address for Correspondence
  - a) Address of concerned project : Chief General Manager  
Project Chief Engr. (with pin code) Western Coalfields Limited  
& Tel./telex/Fax Chandrapur Area- P.O. Babupeth  
442404- (Maharashtra)  
07172-255522...25,256715,256124  
Fax-07172-255287
  - b) Address of Executive Project Engineer/ : Sub Area Manager  
Manager (with pin code) Padmapur Sub Area- W.C.L  
Village-Bhatadi,Tehsil-Bhadravati  
Dist-Chandrapur (Maharashtra)  
Ph. 07172-231009/ 231008
6. Salient Features
  - a) Of the project : Enclosed as A
  - b) Of the Environmental :  
Management Plans
7. Break up of the project area : 847.57 Ha.(Final) ;(847.57-.20=847.37 ha E. C .)
8. Break up of the project affected population : 720 nos as per NGO survey  
with enumeration of those losing houses/  
dwelling units only, agricultural land only,  
both dwelling units & Agricultural land &  
Landless labourers/artisan
- a) SC-ST/ADIWASI : 863(Tribals)
- b) Others : 637

(Please indicate whether these figures are based : As per 2001 Census/ Latest Available record on any scientific and systematic survey carried out or only provision figures, if as survey is carried out give details and years of Survey)

9. Financial details :

- a) Project cost as originally planned and subsequent revised estimates and year of price reference : Rs. 94.8060 Crores (Incremental for expansion Rs.105.53 crores only)
- b) Allocation made for environmental project management plans with item wise and year wise break-up : Rs. 6.84 Crores for expansion
- c)Benefit cost ratio/Internal Rate of Return and the year of assessment : 100 % Capacity 85 % Capacity  
IRR 6.83% 4.47%  
(June-1998)
- d)Whether © includes the cost of environmental management as shown in the above : Yes
- e)Actual expenditure incurred on Project so far : Rs.264.71 Crores (as on 30.09.2022) the (For existing Bhatadi OCP)
- f)Actual expenditure incurred on the environmental management plans : Capital-Rs. 303.64 Lakhs  
: Revenue –Rs. 509.44 Lakhs  
(as on 30.09.2022) on existing BOCP

10.Forest land requirement

- a) The status of approval for diversion of forest land for non-forestry : NOT APPLICABLE
- b) The status of clearing felling : NOT APPLICABLE
- c) The status of compensatory afforestation ,if any : NOT APPLICABLE
- d)Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far : NOT APPLICABLE

11. The status of clear felling in non-forest areas (such as reservoir, approach roads), if any with quantitative information : NOT APPLICABLE

12. Status of construction

a) Date of commencement (Actual and/or planned) : MAY 1995 (Original BOCP)

b) Date of completion (Actual and/or planned) : Not Planned at present

13. Reasons for the delay if the project is yet to start. : Delay in land acquisition

14. Dates of site visits

a) The dates on which the project was monitored by the Regional Office on previous occasions, if any. : -----

b) Date of site visit for this monitoring report : -----

15. Details of correspondence with project authorities for obtaining action plans information on status of compliance to safeguards other than the routine letters for logistic support for site visits) : Sub Area Manager  
Padmapur Sub Area- W.C.L  
Village-Bhatadi, Tehsil-Bhadravati  
Dist-Chandrapur (Maharashtra)  
Ph. 07172-231009/ 231008

(The first monitoring report may contain the details of all the letters issued so far, but the later reports may cover only the letters issued subsequently)

  
Manager (Civil)  
Bhatadi OCM

  
Mine Manager  
Bhatadi OCM

  
Sub Area Manager  
Padmapur Sub Area

  
Area Nodal Officer (Env)  
WCL-Chandrapur Area

## **SALIENT FEATURES OF THE PROJECT**

Name of project	: Bhatadi Opencast Expansion Project 1.465 Million Te./Year.( Grant EC for expansion 0.975 to 1.465 MTPA has been obtained vide letter No.J-11015/151/2014-IA-II(M) dt.13 <sup>th</sup> March, 2020
Capacity of project:	
Capital Investment	: Rs.303.64 Crores
Life of project	: 24 years from 2012-13 (as per MCP approved date 28.01.2013) 50 years from 2012-13 (as per revised MCP approved date 10.11.2017)
Land Required	: 858.14 Ha.( As per EMP)
Quarry/Excavation Area.	: 161.52 Ha. (as per EMP)152.79 As on 31.03.2022
No. of Seams/Seam thickness	: 1/17.0 Mt. avg
Depth of Working (Maximum)	: 139.00mt
Total Coal Production	: 0.341 MTe upto 30.09.2023
Total Over Burden removal	: 0.665 MM3 upto 30.09.2023
Stripping Ratio	: 1: 6.708 t/ cum
Environment Provision Including R & R (original)	: Rs.7.394 Crores

**DETAILS OF PLANTATION AT BOCM**

<b>YEAR</b>	<b>LOCATION</b>	<b>TREES PLANTED</b>	<b>AREA IN Ha</b>
1997-98	Vacant land in colony	50000	8.61
1998-99	Vacant land in colony	50000	14.50
1999-2000	OB dump slope	28000	10.05
2000-01	Avenue plantation	7000	4.42
2002-03	Opp/ side of CHP	5000	2.83
2004-05	Behind C& D in colony	10000	3.02
2005-06	Vacant land	10000	4.00
2010-11	OB dump slope	10000	4.00
2011-12	Ob Dump slope	10000	4.00
2016-17	Behind filter plant	1850	0.74
2017-18	Behind colony	500	0.20
2018-19	Avenue plantation in new colony, Dispnsary	325	0.10
2019-20	-----	0	0.00
2020-21	Along the peripheri of mine	22000	8.80
2021-22	Along the peripheri of mine	37500	15.00
2023-24	Douth East OB Dump D1	14500	5.00
<b>TOTAL</b>		<b>256675</b>	<b>85.27</b>

**COAL AND OVERBURDEN PRODUCTION AT BHATADI**  
**OPENCAST MINE FOR LAST 5 YRS**  
(Since Last Environment Clearance dtd: 13.03.2020)

Year	Production (MTPA)	Overburden MTPA	
		Departmental	HOE
2015-16	0.712	2.664414	---
2016-17	0.875	2.578902	4.399808
2017-18	0.639	2.500	5.589
2018-19	0.975	2.498	4.60
2019-20	1.465	2.037	1.34
2020-21	1.231	2.037	2.173
2021-22	1.302	2.003	9.741
2022-23	1.465	1.720	4.715
2023-24 (upto 30.09.2023)	0.341	0.665	Nil



No. J-11015/151/2014-IA-II(M)  
**Government of India**  
**Ministry of Environment, Forest & Climate Change**  
 (Impact Assessment Division)

\*\*\*

Indira Paryavaran Bhavan,  
 Jor Bagh Road, New Delhi-110 003

Dated: 13<sup>th</sup> March, 2020

To,

The General Manager (Environment),  
 M/s Western Coalfields Ltd.,  
 Coal Estate, 9<sup>th</sup> Floor, Civil Lines,  
Nagpur - 1 (Maharashtra)  
Email: greenenvironment.wcl@nic.in; wclenv@yahoo.in

**Sub: Expansion of Bhatadi Opencast Coal Mine from 0.975 MTPA to 1.465 MTPA (Peak) of M/s Western Coalfields Limited in mine lease area of 847.37 ha, located in Village Bhatadi, District Chandrapur (Maharashtra) Environment Clearance(EC) - reg.**

Sir,

This has reference to your online proposal no. IA-MH/CMIN/72758/2018 dated 1<sup>st</sup> March, 2018 on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal is for Environmental Clearance for Expansion of Bhatadi Opencast Coal Mine from 0.975 MTPA to 1.465 MTPA (Peak) of M/s Western Coalfields Limited in mine lease area of 847.37 ha, located in Village Bhatadi, District Chandrapur (Maharashtra).

3. The proposal was considered by the EAC in its 52<sup>nd</sup> meeting held on 24<sup>th</sup> January, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (i) The project is located in Bhatadi village, in Wardha Valley Coalfields in Chandrapur district. The nearest rail head is Tadali which is about 8 to 9 km away from the mine and Chandrapur Station about 15 km away from the mine. Both the stations are on the main line of Central Railway.
- (ii) The project area falls in Survey of India Topo Sheet No.55 P/08 with geographical coordinates ranging from 20° 02' 27" - 20° 04' 25" N and longitudes 79° 15' 18" - 79° 17' 35" E

*Amul*

- (iii) Coal linkage of the Bhatadi OC mainly lies with Thermal Power Plants of MAHAGENCO. In addition to this coal from the mine will be provided to other miscellaneous consumers.
- (iv) No joint venture cartel has been formed to operate the mine. Bhatadi OC Expansion Mine Project has been proposed to be operated solely by the M/s WCL.
- (v) Project does not fall in the Critically Polluted Area (CPA), where the MoEFCC vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of Environment Clearance.
- (vi) Direct employment to about 474 personnel, it will provide further employments to land losers. Administrative approval for 409 of employment in WCL has been accorded and out of 409, 339 nos. has already been provided employment.
- (vii) The project is reported to be beneficial to bridge the gap between demand and supply of non-coking coal for the power houses and other bulk consumers of western region as well as southern part of the country.
- (viii) The last EC for Bhatadi OC coal mine from 0.65 to 0.975 MTPA in a total lease area of 847.37 ha with no forest land, was accorded vide letter dated 19<sup>th</sup> March, 2015.
- (ix) Erai River flow in the area of Bhatadi OC Expansion. The proposal for Erai river diversion has been submitted to CDO, Nasik and further action will be taken as per the design of CDO, Nashik & subsequent approval of the State Irrigation Department.
- (x) The existing Bhatadi Expansion OC mine has been divided into two quarries namely, quarry-I and quarry-II. Presently quarry-I is being worked whereas area of quarry-II is virgin. The geo-mining parameters of the project are as under: -

S.N	Particulars	Quarry-I	Quarry-II	Total
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
2	Depth (m)			
a)	Initial	33	53	
b)	Final	150	150	-
3	Average gradient of Seam	1 in 6	1 in 6	
4	Average 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 (G10)		
9	Balance Mineable reserves (Mt) as on 1/4/2017	3.54	9.27	12.81

2011

10	Total OB including Access Trench (Min <sup>3</sup> ) as on 1/4/2017	19.78	51.07	70.85
11	Average Stripping ratio in m <sup>3</sup> /t. as on 1/4/2017	5.59	5.51	5.53

(xi) Last 5 years production is as given below *(All figures in Million Tonnes per Annum)*

Year	Coal Production	EC capacity
2019-20 (Upto 31.10.2019)	0.970	0.975
2018-19	0.975	0.975
2017-18	0.639	0.975
2016-17	0.875	0.975
2015-16	0.71	0.975
2014-15	0.71	0.975

The land usage pattern of the project is as follows:

Pre-mining land use details

Sl. No.	Particulars	Tenancy Land	Govt. Land	Forest Land	Total
1	Land Already acquired by existing Bhatadi Expansion OC Mine (ha)	785.69	52.25	0.00	837.94
	Land for Bhatadi Village Rehabilitation to be Acquired (ha)	9.43	0.0	0.0	9.43
	<b>Total</b>	<b>795.12</b>	<b>52.25</b>	<b>0.0</b>	<b>847.37</b>

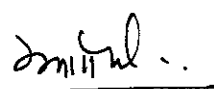
Post Mining land use details

S.N	Land use during mining	Land use (ha)				Total
		Plantation	Water Body	Public use	Undisturbed	
1	Backfilled Area	50.00	38.92	0.00	0.00	88.92
2	Excavated Area	0.00	72.40	0.00	0.00	72.40
3	Embankment Area	13.00	0.00	0.00	0.00	13.00
4	External OB dump	142.10	0.00	0.00	0.00	142.10
5	Colony, Infrastructure etc.	6.00	0.00	21.60	0.00	27.60
6	Miscellaneous (Blasting zone, river diversion, power line diversion & rationalization)	50.00	0.00	0.00	435.47	485.47
7	Road	3.00	0.00	5.45	0.00	8.45
<b>Total (A)</b>		<b>264.10</b>	<b>111.32</b>	<b>27.05</b>	<b>435.47</b>	<b>837.94</b>
Land for Bhatadi Village		0.0	0.0	9.43	0.0	9.43

*M. Abdul*

Rehabilitation to be Acquired (B)					
Grand total (A + B)	264.10	111.32	36.48	435.47	847.37

- (xii) Total geological reserve reported in the mine lease area is 45.714 MT with 23.566 MT mineable reserve, out of which 12.81 MT of reserve is extractable reserve with extraction intensity of 95 %.
- (xiii) Mining Plan including the Mine Closure Plan for further expansion of the mine for increasing the production capacity from 0.975 MTPA to 1.465 MTPA within the existing land area and without any capital investment has been approved by the 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.
- (xiv) The method of mining would continue to be opencast with Shovel-Dumper combination
- (xv) There is two external OB dump with Quantity of 69.708 Mm<sup>3</sup> in an area of 142.10 ha with height of 60 m and 1 internal dump with Quantity of 53.75 Mm<sup>3</sup> in an area of 88.92 ha. Out of this 88.92 ha, 50 ha would be biologically reclaimed and 38.92 ha would be partially backfilled and converted into water body.
- (xvi) The final mine void would be in 111.32 ha with depth of 150 m.
- (xvii) Total quarry area is 161.32ha. Out of total quarry area of 161.32ha, 88.92 ha would be backfilled and reclaimed. Out of which 50 ha area shall be reclaimed with plantation. A void of 111.32 ha with depth 150 m which is proposed to be converted into a water body.
- (xviii) The balance life of mine is 8 Years as on 01.04.2019
- (xix) Transportation: Coal transportation in pit by dumpers, surface to siding by dumpers and loading at siding by pay loaders. Pipe conveyor system for coal transportation is in advance stage of commissioning.
- (xx) The details of R&R activities, carried out for the existing project is as follows: -
- Land acquired under CBA Act, 1957 in the year 1990 is 287.57 ha which includes 278.96 ha tenancy land and 8.61 ha Govt land. Employment provided against this land is 113 no. as per norm.
  - Land acquired under LA act 1897 in the year 2007 is 82.15 ha which includes 78.49 ha Tenancy land and 3.66 ha Govt. land. Employment provided against this land till date is 30 nos.
  - Land acquired under section 9(1) CBA Act, 1957 at 13.9.2011 is 467.21 ha which included 0.30 ha diverted plot area, 426.73 ha. Tenancy land 39.98 ha, Govt. land and 0.20 ha forest land. Administrative approval to 409 cases employment/monetary



compensation has been approved by competent authority. Till date 284 cases of employment and 07 No. cases of M.C. is given and remaining cases of initiated employment/Monetary compensation is in process.

(xxi) Total capital cost of the project is Rs.304.5162 Crores as per PR and no additional capital is required for the present proposal. Cost of Production is Rs.1300.98 per tonne, CSR cost will be Rs. 2 per tonne, R&R Cost will be Rs.79.79 Crore and the capital Environmental Management cost will be Rs. 0.9709 crores.

(xxii) NOC for withdrawal of groundwater from CGWA has been applied vide letter No. WCL/ENV/HQ/20-J & 17-U/263 dated 13.06.2016. NOC for abstraction of ground water for Bhatadi OC have been recommended by CGWB on 11.10.2019. Formal issuance of NOC letter awaited.

(xxiii) Public Hearing conducted on 13.09.2019 at WCL Durgapur Auditorium, Durgapur, Ta. Dist. Chandrapur, Maharashtra State.

(xxiv) Following issues has been raised during the Public Hearing held for Bhatadi OC Expansion Project for increase in Coal production capacity from 0.975 MTPA to 1.465 MTPA within existing EC area of 847.37 Ha. Detailed pointwise compliance report has been submitted to MPCB

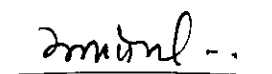
- a. Rehabilitation of Bhatadi and Payali Village.
- b. Balance land acquisition
- c. Coal Quality
- d. Land Compensation
- e. Provision of Employment in lieu of Land acquisition.
- f. Pollution Control Measures to be adopted.
- g. Plantation
- h. CSR works
- i. Installation of RO Plant for Drinking Water

(xxv) Total afforestation plan shall be implemented covering an area of 255.64 ha at the post-mining. Density of tree plantation is 2500 trees/ ha of plants.

(xxvi) There is no court cases/violation pending with the project proponent

(xxvii) The existing Bhatadi OC has opened Escrow Account against the existing provisions and till 2018-19, Rs.33.2519 Crores have been deposited in the said Escrow Account

(xxviii) Availability of ground water has been reported to be varying between 3.3 m – 13.28 m during pre-monsoon season and between 0.10 m to 13.15 m during post-monsoon season. Total water requirement for the project has been reported to be 222 KLD



(xxix) One composite seam with thickness ranging between 15.78 – 20.83 meters has been reported to be workable. Grade of coal is G-10, stripping ratio 1:5.53, while gradient is 1 in 6.

(xxx) Method of mining envisages opencast with shovel-dumper combination

(xxxi) Afforestation plan over a total area of 264.10 ha has been proposed to be implemented by the end of mining operations with density of 2500 plants per ha. It is further mentioned that implementation of the Progressive Mine Closure Plan is being taken up by the PP as per the approved Plan and there is no deviation from the approved Plan

(xxxii) The PP has reported no court cases, violation cases are pending.

(xxxiii) The Regional Office (WCZ), Nagpur conducted site inspection of the area to assess the status of compliance of conditions, stipulated in the environment clearance dated 19th March, 2015. The Regional Office, vide letter no. 3-16/2015/3202 dated 5th February, 2018 submitted inspection report along with its observations.

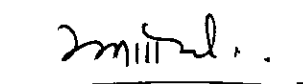
(xxxiv) As per approved Mining Plan, the lease area is 837.94 ha. However, additional area of 20.2 ha, including 0.20 ha of forest land, is also required outside the lease area for the settlement of Bhatadi village. However, the present proposal has been limited to the existing lease area of 837.94 ha as per existing EC

(xxxv) No forest land has been reported to be involved in the project. However, an area of 0.20 ha of forest land is involved in the project which, along with 20 ha of additional land, has been proposed to be acquired for the resettlement and rehabilitation of Bhatadi village.

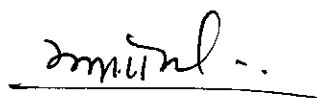
(xxxvi) The project involves 820 project affected families.

(xxxvii) Transportation of coal in mine pit head has been proposed by dumpers, surface to sidings by tippers at siding by Pay loader. The PP has also mentioned that construction of piped conveyor is in advance stage.

4. The Expert Appraisal Committee in its meeting held on 24<sup>th</sup> January, 2020 has recommended the proposal for grant of Environmental Clearance. Based on the recommendations of the EAC, the **Ministry of Environment, Forest and Climate Change hereby accords approval for grant of Environment Clearance(EC)** to the project for **expansion of Bhatadi Opencast Coal Mine from 0.975 MTPA to 1.465 MTPA (Peak) of M/s Western Coalfields Limited in mine lease area of 847.37 ha, located in Village Bhatadi, District Chandrapur (Maharashtra)**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto, subject to the compliance of the following terms and conditions and environmental safeguards mentioned below:

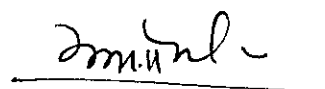


- (i) Distance from the mine and OB Dump shall be 150 m away from river.
- (ii) All additional mitigation measures proposed shall be implemented in 1 year of issue of this letter.
- (iii) Project proponent to plant 100,000 nos. of native trees with broad leaves along the periphery of the mine to prevent the effect of air pollution in 3 years of the issue of this letter. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer
- (iv) Validity of EC is life of the mine or 30 years whichever is earlier as per EIA Notification, 2006
- (v) The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 1.465 MTPA prior to commencement of the increased production.
- (vi) Transportation of coal from Coal Handling Plant shall be through covered trucks.
- (vii) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (viii) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (ix) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (x) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (xi) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (xii) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (xiii) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 1.465 MTPA.
- (xiv) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.



- (xv) A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- (xvi) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xvii) The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- (xviii) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xix) The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xx) Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xxi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

- (xxiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xxiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xxv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8<sup>th</sup> January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional office of the Ministry.
- (xxvi) CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24<sup>th</sup> October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (xxvii) The green belt of at least 5-10 m width shall be developed in more than 40% of the total project area, mainly along the periphery of mine boundary, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xxviii) In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xxix) Monitoring of compliance of EC conditions may be submitted with third party audit every year.



(xxx) The percentage the CER may be at least 2 times the amount given in the OM dated 1<sup>st</sup> May, 2018 recommended by the EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

(xxxii) Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.

(xxxiii) Transportation of materials by rail/ conveyor belt, wherever feasible.

(xxxiv) A detailed water harvesting plan may be submitted by the project proponent

(xxxv) In case, domestic waste water generation is more than 10 KLD, the industry may install STP.

(xxxvi) Monitoring of compliance of EC conditions may be submitted with third party audit every year

(xxxvii) PP shall comply all the conditions of earlier EC dated 19<sup>th</sup> March, 2015 in 3 years from the issue of this letter and submit a copy of compliance to Ministry's Regional Office

(xxxviii) All the recommendation of comprehensive study being conducted by NEERI shall be implemented by project proponent within certain timeline and necessary timeline shall be submitted to Ministry's Regional Office


**4.1** The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:

**(a) Statutory compliance**

(i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

(ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

(iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).



- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

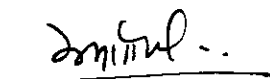
**(b) Air quality monitoring and preservation**

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.

- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

**(c) Water quality monitoring and preservation**

- (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.
- (ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-1A.11 (M) dated 27<sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- (iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- (iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- (v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- (vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the



drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

- (vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- (viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
- (ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development *etc.* The drains shall be regularly desilted particularly after monsoon and maintained properly.
- (x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- (xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

**(d) Noise and Vibration monitoring and prevention**

- (i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

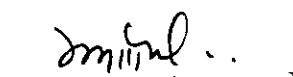
- (ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- (iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

**(e) Mining Plan**

- (i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- (ii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- (iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
- (iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

**(f) Land reclamation**

- (i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- (ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.
- (iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the “during mining”/“post mining” land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- (iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification



issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEFCC, CPCB and SPCB.

- (v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- (vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

**(g) Green Belt**

- (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

**(h) Public hearing and Human health issues**

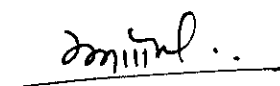
- (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.
- (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from

workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

**(i) Corporate Environment Responsibility**

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-1A.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.



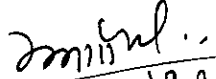
**(j) Miscellaneous**

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
  - (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
  - (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - (xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - (xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
  6. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  7. Any appeal against this Environment Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
  8. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of

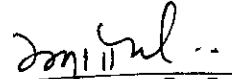
time, in terms of the orders dated 2<sup>nd</sup> August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.

9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.
10. This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.
11. This issues in supersession of the earlier EC granted vide letter dated 19<sup>th</sup> May March, 2015.

  
(Manoj Kumar Gangeya)  
Director

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Principal Secretary, Department of Environment, Government of Maharashtra, 15<sup>th</sup> Floor, New Admn. Bldg, Madam Cama Road, Mantralaya, Mumbai - 32 (Maharashtra)
3. The Additional PCCF (Central), Ministry of Environment Forest and Climate Change, Regional Office (Western Central Zone), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-1 (Maharashtra)
4. CMD, WCL, Nagpur
5. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
6. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
7. The Member Secretary, Maharashtra State Pollution Control Board, Kalapataru Point, 3<sup>rd</sup> & 4<sup>th</sup> Floors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 2
8. The District Collector, Chandrapur, Government of Maharashtra
9. Monitoring File   10. Guard File   11. Record File   12. Notice Board

  
(Manoj Kumar Gangeya)  
Director

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: [cac-cell@mpcb.gov.in](mailto:cac-cell@mpcb.gov.in)



Kalpataru Point, 2nd and  
4th floor, Opp. Cine Planet  
Cinema, Near Sion Circle,  
Sion (E), Mumbai-400022

RED/L.S.I (R35)  
No:- Format1.0/CAC/UAN No.MPCB-  
CONSENT-0000165617/CR/2311001779

Date: 22/11/2023

To,  
M/s. Bhatadi Opencast Mine,  
Western Coalfields Limited,  
P. O. Bhatadi, Tal & Dist-Chandrapur.



**Sub: Renewal of consent with increase in CI under RED category.**

**Ref:** 1. Earlier Consent granted by Board vide Format1.0/CAC/UAN-109729/  
CR/2211001876 dated 24.11.2022 valid up to 31.03.2023.  
2. Minutes of Consent Appraisal Committee Meeting held on 03.07.2023.

Your application No.MPCB-CONSENT-0000165617 Dated 19.03.2023

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- The consent to renewal is granted for a period up to 31/03/2024**
- The capital investment of the project is Rs.309.4373 Crs. (As per C.A Certificate submitted by industry CI of Existing mine-Rs.306.5463 Cr+ Increase in CI-Rs.2.891 Cr = Total CI-Rs.309.4373 Cr.)**
- Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Coal	1.465	MTPA

- Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	13230	As per Schedule-I	Recycle to the maximum extent for Dust Suppression & Fire Fighting and remining on land for plantation/ Irrigation/Gardening

<b>Sr No</b>	<b>Description</b>	<b>Permitted</b>	<b>Standards to</b>	<b>Disposal</b>
2.	Domestic effluent	45	As per Schedule-I	Recycle to the maximum extent for Dust Suppression & Fire Fighting and remining on land for plantation/ Irrigation/Gardening

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

<b>Sr No.</b>	<b>Stack No.</b>	<b>Description of stack / source</b>	<b>Number of Stack</b>	<b>Standards to be achieved</b>
NA				

6. **Non-Hazardous Wastes:**

<b>Sr No</b>	<b>Type of Waste</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>
1	Over Burden	1000000	m3/month	Landfill	Backfilling and Reclamation of Land

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

<b>Sr No</b>	<b>Category No./ Type</b>	<b>Quantity</b>	<b>UoM</b>	<b>Treatment</b>	<b>Disposal</b>
1	5.1 Used or spent oil	40	KL/A	Recycle	Send to authorised recycler/reprocessor
2	5.2 Wastes or residues containing oil	18	Ton/Y	Incineration	CHWTSDF
3	35.3 Chemical sludge from waste water treatment	40	Ton/Y	Landfill	CHWTSDF

- The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities
- The applicant shall comply with the conditions of the Environmental Clearance granted by MoEFCC, Gol vide letter No.J-11015/151/2014-IA.II(M) dtd. 13.03.2020
- Industry shall provide Tyre wash system at entry and exit of mine within 3 months and submit the BG of Rs.5.0 Lakh towards compliance of same.
- PP shall provide Trolley mounted mist cannons fogger system at CHP/coal stock yard within 3 month.
- PP shall install CAAQMS at a suitable location in the mine within 3 months and submit the BG of Rs.5.0 Lakh towards compliance of same.
- PP shall submit the valid renewal NOC of CGWA within 3 months period.
- PP shall submit the BG as per BG regime of mines.
- Industry shall submit the undertaking on stamp paper regarding the compliances of above points within a month.

17. PP shall carry out plantation as per EC condition before ensuing monsoon.
18. PP shall carry out over burden dump management as per CPCB guidelines.
19. Industry shall submit the action plan for green belt development all along the major approach/coal transportation roads.
20. The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.

**Received Consent fee of -**

<b>Sr.No</b>	<b>Amount(Rs.)</b>	<b>Transaction/DR.No.</b>	<b>Date</b>	<b>Transaction Type</b>
1	618875.00	MPCB-DR-18142	25/03/2023	NEFT
2	586000.00	MPCB-DR-19339	31/05/2023	NEFT
3	15000.00	MPCB-DR-19529	06/06/2023	NEFT

**Copy to:**

1. Regional Officer, MPCB, Chandrapur and Sub-Regional Officer, MPCB, Chandrapur  
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Sion, Mumbai
3. CAC desk-For record and website updation purpose

### **SCHEDULE-I**

#### **Terms & conditions for compliance of Water Pollution Control:**

1. A] As per your application, you have provided ETP of designed capacity-75 KLD consisting of oil skimmer, pre-settling tank-dosing tank-final treated tank provided for treatment of workshop effluent and Provided Sedimentation tank of capacity-0.75 MLD followed by sand filter for treatment Mine Water discharge.
- B] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent:

<b>Sr.No</b>	<b>Parameters</b>	<b>Limiting concentration not to exceed in mg/l, except for pH</b>
(1)	pH	5.5 to 8.5
(2)	Oil & Grease	10
(3)	BOD (3 days 27°C )	30
(4)	Total Suspended solids	100
(5)	Total Dissolved solids	2100
(6)	COD	250

- C] The treated effluent shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise. In no case, effluent shall find its way to outside factory premises.
2. A] As per your application, you have provided Sewage Treatment Plant of designed capacity 50 CMD for the treatment of 45 CMD of sewage.
  - B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

<b>Sr.No</b>	<b>Parameters</b>	<b>Standards (mg/l)</b>	
1	BOD (3 days 27°C )	Not to exceed	30 mg/l
2	COD	Not to exceed	100 mg/l
3	Suspended Solids	Not to exceed	50 mg/l

- C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise. In no case, sewage shall find its way to outside factory premises.
3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
  4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

<b>Sr. No.</b>	<b>Purpose for water consumed</b>	<b>Water consumption quantity (CMD)</b>
1.	Industrial Cooling, spraying in mine pits or boiler feed	500.00
2.	Domestic purpose	65.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	100

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

#### **SCHEDULE-II**

##### **Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

<b>Stack No.</b>	<b>Source</b>	<b>APC System provided/proposed</b>	<b>Stack Height(in mtr)</b>	<b>Type of Fuel</b>	<b>Sulphur Content(in %)</b>	<b>Pollutant</b>	<b>Standard</b>
NA	NA		0.00	-	-	NA	-

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
5. Control Equipments
- Coal handling plant shall be provided with GI sheet enclosures & automatic water sprinkler and shall be operated continuously
  - Scientific spraying of water on all working area, dump area, stock piles with the help of appropriate dust suppression system.
  - Coal transportation shall be done by installing conveyors wherever possible & mechanically covered closed trucks shall be used for transportation. Overloading of dumpers shall be avoided to prevent spillages

- d. The applicant shall carry out tree plantation along road side, around dumps or compulsory afforestation as per proposal approved by Forest Department. The tree plantation programme shall be taken up well in advance of the actual mining activity, so that green belt of sufficient width & height is developed between mining area/road and surrounding environment.
- e. Black topped metal roads provided shall be well maintained to prevent dust formation.
- f. Slope of the over burden shall have slope not more than 28° to the horizontal. The overburden shall be covered by vegetation for stabilization
- g. Correct type & quantity of explosive shall be used to avoid excess dust formation & vibration in the surrounding area.

6. Standards for Ambient Air Pollutants:

The Suspended Particulate Matter (SPM), Respirable Particulate Matter (RPM), Sulphur dioxide (SO<sub>2</sub>) and Oxides of Nitrogen (NO<sub>x</sub>) concentration in downwind direction considering predominant wind direction, at a distance of 500 metres from the following dust generating sources shall not exceed the standards specified in the table given below:

Dust Generating Sources:

Loading or unloading, Haul Road, coal transportation road, Coal handling plant (CHP), Railway Sliding, Blasting, Drilling, Overburden dumps, or any other dust generating external sources like coke ovens (hard as well as soft), briquette industry, nearby road etc.

<b>Pollutant</b>	<b>Time weighted average</b>	<b>Concentration in Ambient Air</b>
Suspended Particulates Matter (SPM)	Annual Average	360 µg/m <sup>3</sup>
	24 hours	500 µg/m <sup>3</sup>
Respirable Particulate Matter (size less than 10 µm) (RPM)	Annual Average	180 µg/m <sup>3</sup>
	24 hours	250 µg/m <sup>3</sup>
Sulphur Dioxide (SO <sub>2</sub> )	Annual Average	80 µg/m <sup>3</sup>
	24 hours	120 µg/m <sup>3</sup>
Oxides of Nitrogen as NO <sub>x</sub>	Annual Average	80 µg/m <sup>3</sup>
	24 hours	120 µg/m <sup>3</sup>

- i. In case of any residential or commercial or industrial place falls within 500 metres of any dust generating sources, the National Ambient Air Quality Standards notified vide MOEFCC GOI notification dtd 16.11.2009 as ammended shall be made applicable.
- ii. The applicant shall provide minimum three ambient air quality monitoring stations within mining area which should be monitored for SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub>, HC, CO etc. The Annual Arithmetic Mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval shall conform to the National Ambient Air Quality Standards prescribed under Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986. The records of results of monitoring done shall be made available for inspection to the officers of the Board.

7. The applicant shall take adequate measures for control of noise levels from its own sources as follows:

<b>Sr. No</b>	<b>Location</b>	<b>Permissible Norms [in dB (A)]</b>	<b>Desired minimum thickness of green belt (m)</b>
1.	Along Road side	65 (Commercial Area)	20
2.	In colonies	55 (Residential Area)	20
3.	Near Opencast Mines	75 (Industrial Area)	10
4.	Near CHPs	75	30
5.	Near Shaft	75	20
6.	Near Mine exhaust fan	75	> 50

8. Other conditions:

- i Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess standards laid down, such information shall be forthwith reported to Board, concerned Police station, office of Directorate of Health services, Dept. of explosives, Inspectorate of Factories & Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.

### **SCHEDULE-III**

#### **Details of Bank Guarantees:**

<b>Sr. No.</b>	<b>Consent (C2E/ C2O /C2R)</b>	<b>Amt of BG Imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Compliance Period</b>	<b>Validity Date</b>
1	C2R	Rs. 2.0 Lakh	15 days	Regular monitoring of ground water level and quality should be carried out by establishing the network of existing wells and constructing new piezometers during mining operations	6 Monthly	31.07.2024
2	C2R	Rs.5.0 Lakh	15 days	Catch drain and situation ponds of appropriate size should be constructed to arrest silt and sediment flow from soil, OB and mineral dumps. Water so collected should be utilized for watering of the mining area, roads green belt developers etc.	Regular Activity	31.07.2024
3	C2R	Rs.5.0 Lakh	15 days	Coal transportation shall be done by covered/closed trucks. Overloading of shall be avoided to prevent spillages.	Regular Activity	31.07.2024
4	C2R	Rs.5.0 Lakh	15 days	Coal Handling Plant (CHP) & loading / unloading area will be provided with Dust Collector and Automatic Water Sprinkler.	4 Months	31.07.2024
5	C2R	Rs.5.0 Lakh	15 days	Convert existing water sprinkling arrangement into chemical fogging arrangement (M <sub>9</sub> Cl <sub>2</sub> )	2 Months	31.07.2024

<b>Sr. No</b>	<b>Consent (C2E/ C2O /C2R)</b>	<b>Amt of BG Imposed</b>	<b>Submission Period</b>	<b>Purpose of BG</b>	<b>Compliance Period</b>	<b>Validity Date</b>
6	C2R	Rs.5.0 Lakh	15 days	Deploying mechanized sweepers which are automated suction sweeper for cleaning the coal dust from road.	2 Months	31.07.2024
7	C2R	Rs.5.0 Lakh	15 days	To provide Tyre wash system at entry and exit of mine	3 Months	31.07.2024
8	C2R	Rs.5.0 Lakh	15 days	Adoption of Bioswales technology on the road sides. Bioswales is a land scape element of construction design, primarily a run off conveyance system by the sides of road, to remove dust ,silt and debris	3 Months	31.07.2024
9	C2R	Rs.5.0 Lakh	15 days	Towards installation of CAAQMS within 3 months	3Months	31.07.2024
10	C2R	Rs.5.0 Lakh	15 days	Over burden (OB) should be stacked at earmarked dumpsites only and should not be kept active for long period. Proper terracing of OB should be carried out so that the overall slope will come down to 28°. Over Burden shall be disposed by way of backfilling.	Regular Activity	31.07.2024
11	C2R	Rs.5.0 Lakh	15 days	To provide Trolley mounted mist cannons fogger system at CHP/coal stock yard within 3 month.	3 months	31.07.2024
12	C2R	Rs.25.0 Lakh	15 days	Operation and Maintenance of pollution control system so as to maintain consented standards prescribed in consent and towards compliance of consent conditions and Environment Clearance conditions.	Regular Activity	31.07.2024

Sr. No.	Consent (C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
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The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days from the date of issue of Consent.

#### BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

#### BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

### SCHEDULE-IV

#### General Conditions:

1. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2. If the MIDC pipeline is broken/ overflowing chamber, in such cases industry shall not discharge their treated effluent into MIDC drain, it shall be sent to CETP by tanker.
3. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
4. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
5. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipment, the production process connected to it shall be stopped.
6. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
7. The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
8. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the H&OW(M&TM) Rules 2016, which can be recycled/processed/ reused/ recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/ reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.

9. The industry should comply with the Hazardous & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
10. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
11. The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.
12. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website ([www.mpcb.gov.in](http://www.mpcb.gov.in)).
13. The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
14. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
15. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
16. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
17. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
18. The industry should not cause any nuisance in surrounding area.
19. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
20. The applicant shall maintain good housekeeping.

21. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end
22. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
23. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipment provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
24. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises
25. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
26. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 18.11.2009 as amended.

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This certificate is digitally & electronically signed.

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holding an official position in the CIL / Government

## ENVIRONMENTAL MONITORING REPORT

### BHATADI OC

CHANDRAPUR AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423068



APRIL 2023

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

**Environment Laboratory  
CMPDI RI-IV, NAGPUR**
**Test Report**


TEST REPORT NO.	RIN/TR/APRIL-23/31	DATE OF ISSUE	30-05-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2:IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		13-04-23 TO 15-05-23

BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-04-23	02-04-23	240	140	54	22	16	Clear Sky / Moderate Breeze
16-04-23	17-04-23	248	146	46	20	14	Clear Sky / Moderate Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-04-23	02-04-23	246	148	50	24	14	Clear Sky / Moderate Breeze
16-04-23	17-04-23	228	150	56	20	12	Clear Sky / Moderate Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-04-23	02-04-23	118	60	30	12	BDL	Clear Sky / Moderate Breeze
16-04-23	17-04-23	122	58	28	14	BDL	Clear Sky / Moderate Breeze
NAAQS, 2009		-	100	60	80	80	

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02-04-23	03-04-23	126	56	26	12	BDL	Clear Sky / Lightbreeze
17-04-23	18-04-23	127	60	24	12	10	Cloudy Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**FUGITIVE DUST MONITORING**

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	13-04-23 TO 15-05-23	


WORKSHOP CBOF1				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
15-04-23	16-04-23	426	268	Clear Sky / Light Breeze

CHP/MGR LOADING POINT CBOF2				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
15-04-23	16-04-23	446	278	Clear Sky / Light Breeze

WEIGH BRIDGE CBOF3				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
15-04-23	16-04-23	432	280	Clear Sky / Light Breeze



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SAMPLE DESCRIPTION		Water sample			
Test Required		pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O & G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)			
SAMPLING METHOD		LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES : 13-04-23 TO 15-05-23		

MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-04-23	7.95	34	40	BDL
16-04-23	7.46	38	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-04-23	8.06	44	32	BDL
16-04-23	8.04	42	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
01-04-23	56	9.6
16-04-23	50	10.8
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1		NOISE LEVEL IN dB(A)	
MONTH	DATE OF SAMPLE COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APRIL'23	13-04-23	63.7	62.4
APRIL'23	26-04-23	64.7	63.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY: CBON2		NOISE LEVEL IN dB(A)	
MONTH	DATE OF SAMPLE COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
APRIL'23	13-04-23	43.6	42.9
APRIL'23	26-04-23	43.6	42.3
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

### BHATADI OC

CHANDRAPUR AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423068



MAY 2023

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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**Environment Laboratory  
CMPDI RI-IV, NAGPUR**
**Test Report**


TEST REPORT NO.	RIN/TR/MAY-23/31	DATE OF ISSUE	30-06-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2:IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		15-05-23 TO 16-06-23

BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02-05-2023	03-05-2023	250	146	60	21	18	Cloudy Sky / Moderate Breeze
16-05-2023	17-05-2023	242	141	52	20	16	Clear Sky / Moderate Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02-05-2023	03-05-2023	240	142	56	22	16	Cloudy Sky / Moderate Breeze
16-05-2023	17-05-2023	233	154	51	20	14	Clear Sky / Moderate Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02-05-2023	03-05-2023	120	62	34	14	BDL	Cloudy Sky / Moderate Breeze
16-05-2023	17-05-2023	124	55	30	12	BDL	Clear Sky / Moderate Breeze
NAAQS, 2009		-	100	60	80	80	

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
03-05-2023	04-05-2023	130	54	23	12	BDL	Rainy / Lightbreeze
17-05-2023	18-05-2023	132	57	28	10	BDL	Cloudy Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	



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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report			
SAMPLE DESCRIPTION	Water sample				
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)				
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :		15-05-23 TO 16-06-23	


MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
02-05-2023	6.74	42	48	BDL
16-05-2023	7.45	36	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
02-05-2023	8.29	36	40	BDL
16-05-2023	8.5	30	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
02-05-2023	68	14
16-05-2023	54	13.2
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAY'23	13-05-2023	65.5	64.9
MAY'23	27-05-2023	64.5	63.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY: CBON2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAY'23	13-05-2023	43.6	42.5
MAY'23	27-05-2023	42.7	41.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

### BHATADI OC

CHANDRAPUR AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423068



JUNE 2023

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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**Environment Laboratory  
CMPDI RI-IV, NAGPUR**
**Test Report**


TEST REPORT NO.	RIN/TR/JUNE-23/31	DATE OF ISSUE	31-07-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2: IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		17-06-23 TO 15-07-23


BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-06-23	02-06-23	257	148	53	18	13	Cloudy Sky / Lightbreeze
16-06-23	17-06-23	247	142	55	21	16	Cloudy Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-06-23	02-06-23	236	140	50	20	14	Cloudy Sky / Lightbreeze
16-06-23	17-06-23	241	150	47	19	15	Cloudy Sky / Lightbreeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-06-23	02-06-23	121	57	33	11	BDL	Cloudy Sky / Lightbreeze
16-06-23	17-06-23	118	60	31	13	BDL	Cloudy Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
02-06-23	03-06-23	136	50	30	12	BDL	Cloudy Sky / Lightbreeze
17-06-23	18-06-23	127	53	25	10	BDL	Cloudy Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

BHATADI COLONY CBOA5							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01-06-23	02-06-23	126	57	36	14	12	Cloudy Sky / Lightbreeze
16-06-23	17-06-23	122	50	31	12	10	Cloudy Sky / Lightbreeze
NAAQS, 2009		-	100	60	80	80	

  
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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report		 TC-7102	
SAMPLE DESCRIPTION		Water sample			
Test Required		pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)			
SAMPLING METHOD		LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES : 17-06-23 TO 15-07-23		


MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-06-23	7.4	38	44	BDL
16-06-23	7.5	32	40	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-06-23	7.74	32	28	BDL
16-06-23	8.04	28	36	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
01-06-23	50	14
16-06-23	54	12
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JUNE'23	13-06-23	62.5	61.5
JUNE'23	19-06-23	64.7	63.9
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY: CBON2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JUNE'23	13-06-23	42.6	41.6
JUNE'23	19-06-23	42.8	41.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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**ENVIRONMENTAL MONITORING REPORT**

**BHATADI OC**

**CHANDRAPUR AREA**

**WESTERN COALFIELDS LTD.**

JOB NO. 4094423068



**JULY 2023**



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JULY-23/31	DATE OF ISSUE	31-08-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2:IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-07-23 TO 14-08-23	

BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01.07.2023	02.07.2023	253	145	54	22	15	Cloudy Sky/Light Breeze
16.07.2023	17.07.2023	241	140	51	19	13	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
01.07.2023	02.07.2023	244	142	49	21	11	Cloudy Sky/Light Breeze
16.07.2023	17.07.2023	236	139	43	17	14	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
02.07.2023	03.07.2023	62	29	10	BDL	Cloudy Sky/Light Breeze	
17.07.2023	18.07.2023	56	25	14	BDL	Cloudy Sky/Light Breeze	
NAAQS, 2009		100	60	80	80		

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
03.07.2023	04.07.2023	60	24	10	BDL	Cloudy Sky/Light Breeze	
17.07.2023	18.07.2023	63	26	14	BDL	Cloudy Sky/Light Breeze	
NAAQS, 2009		100	60	80	80		

BHATADI COLONY CBOA5							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
01-07-2023	02-07-2023	62	26	15	13	Cloudy Sky / Lightbreeze	
16-07-2023	17-07-2023	56	23	11	11	Cloudy Sky / Lightbreeze	
NAAQS, 2009		100	60	80	80		



Analysed by

Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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FUGITIVE DUST MONITORING

TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017) & PM2.5: USEPA Quality Assurance		
SAMPLE DESCRIPTION	Air sample(Fugitive)		
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-07-23 TO 14-08-23	


WORKSHOP CBOF1				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m³)		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
02-07-2023	03-07-2023	438	269	Clear Sky / Light Breeze

CHP/MGR LOADING POINT CBOF2				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m³)		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
02-07-2023	03-07-2023	453	284	Clear Sky / Light Breeze

WEIGH BRIDGE CBOF3				
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in µg/m³)		ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	
FROM	TO	5	5	
02-07-2023	03-07-2023	442	275	Clear Sky / Light Breeze



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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report		 TC-7102	
SAMPLE DESCRIPTION		Water sample			
Test Required		pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O &G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)			
SAMPLING METHOD		LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES : 16-07-23 TO 14-08-23		

MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-07-2023	7.35	38	36	BDL
16-07-2023	7.29	43	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
01-07-2023	7.48	26	24	BDL
16-07-2023	7.79	30	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
01-07-2023	30	16.8
16-07-2023	22	14.6
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



Analysed by

Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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NOISE LEVEL MONITORING DATA

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'23	07-07-2023	60.6	59.6
JULY'23	22-07-2023	56.7	55.7
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY: CBON2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JULY'23	07-07-2023	42.9	41.8
JULY'23	22-07-2023	42.6	41.6
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



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## ENVIRONMENTAL MONITORING REPORT

### BHATADI OC

CHANDRAPUR AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423068



AUGUST 2023

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/AUGUST-23/31	DATE OF ISSUE	30-09-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2: IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		15-08-23 TO 15-09-23

BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.08.2023	09.08.2023	279	175	55	24	17	Cloudy Sky/Light Breeze
23.08.2023	24.08.2023	265	163	52	21	19	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08.08.2023	09.08.2023	263	161	50	22	15	Cloudy Sky/Light Breeze
23.08.2023	24.08.2023	250	153	47	18	12	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
09.08.2023	10.08.2023	69	24	13	10	Cloudy Sky/Light Breeze	
24.08.2023	25.08.2023	65	23	10	BDL	Cloudy Sky/Light Breeze	
NAAQS, 2009		100	60	80	80		

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
09.08.2023	10.08.2023	63	22	9	BDL	Clear sky/Light Breeze	
24.08.2023	25.08.2023	69	25	12	10	Cloudy Sky/Light Breeze	
NAAQS, 2009		100	60	80	80		

BHATADI COLONY CBOA5							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
08.08.2023	09.08.2023	71	27	17	11	Cloudy Sky/Light Breeze	
23.08.2023	24.08.2023	68	24	14	10	Cloudy Sky/Light Breeze	
NAAQS, 2009		100	60	80	80		



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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report		 TC-7102	
SAMPLE DESCRIPTION	Water sample				
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O & G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)				
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :		15-08-23 TO 15-09-23	


MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.08.2023	6.97	32	40	BDL
23.08.2023	6.89	40	44	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.08.2023	7.28	22	16	BDL
23.08.2023	7.12	28	24	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
08.08.2023	27	13.8
23.08.2023	32	14.4
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
AUG'23	08-08-2023	58.5	57.6
AUG'23	26-08-2023	59.9	58.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY: CBON2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
AUG'23	08-08-2023	43.6	42.7
AUG'23	26-08-2023	42.5	41.7
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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## ENVIRONMENTAL MONITORING REPORT

### BHATADI OC

CHANDRAPUR AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423068



SEPTEMBER 2023

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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**Environment Laboratory  
CMPDI RI-IV, NAGPUR**
**Test Report**


TEST REPORT NO.	RIN/TR/SEPT-23/31	DATE OF ISSUE	27-10-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4:1999(RA 2019), PM-10: IS-5182 Part 23:2006(RA 2017), PM2.5: USEPA Quality Assurance guidance document volume-II (part-II)-2.12:2016, NO2: IS 5182 Part-06:2006(2017), SO2:IS 5182 Part-2:2001(RA 2017)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		15-09-23 TO 15-10-23

BHATADI SECURITY POST CBOA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08.09.2023	09.09.2023	312	198	57	28	20	Cloudy Sky/Light Breeze
24.09.2023	25.09.2023	301	190	54	26	19	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


BHATADI MANAGER OFFICE CBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08.09.2023	09.09.2023	256	146	48	20	15	Cloudy Sky/Light Breeze
24.09.2023	25.09.2023	273	157	53	24	18	Cloudy Sky/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

BHATADI VILLAGE CBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
09.09.2023	10.09.2023	72	27	17	12		Clear Sky/Light Breeze
25.09.2023	26.09.2023	69	22	13	10		Cloudy Sky/Light Breeze
NAAQS, 2009		100	60	80	80		

VADHOLI VILLAGE CBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
09.09.2023	10.09.2023	70	23	15	10		Clear sky/Light Breeze
25.09.2023	26.09.2023	75	26	18	13		Cloudy Sky/Light Breeze
NAAQS, 2009		100	60	80	80		

BHATADI COLONY CBOA5							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
08.09.2023	09.09.2023	74	29	19	13		Cloudy Sky/Light Breeze
24.09.2023	25.09.2023	70	26	15	11		Cloudy Sky/Light Breeze
NAAQS, 2009		100	60	80	80		

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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report			
SAMPLE DESCRIPTION	Water sample				
Test Required	pH: IS 3025 -Part 11:1983(RA 2017),TSS: IS 3025-Part 17:1984(RA 2017),COD: APHA (23rd Edition) 5220 C :2017,O & G: IS 3025-Part 39:1991(RA 2019) & BOD: IS 3025 (Part 44): 1993 (RA 2019)				
SAMPLING METHOD	LSOP 5	PERIOD OF PERFORMANCE OF LAB ACTIVITIES :		15-09-23 TO 15-10-23	


MINE WATER DISCHARGE: CBOW1				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.09.2023	6.42	35	36	BDL
24.09.2023	6.55	29	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

ETP DISCHARGE: CBOW2				
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS			
	pH	TSS (in mg/l)	COD(in mg/l)	O & G(in mg/l)
DETECTION LIMIT	2	10	4	2
08.09.2023	7.58	24	28	BDL
24.09.2023	7.02	19	24	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

STP(DOMESTIC EFFLUENT)TREATED: CBOW3		
DATE OF SAMPLE COLLECTION	ANALYSIS RESULTS	
	TSS (in mg/l)	BOD(in mg/l)
DETECTION LIMIT	10	2
08.09.2023	19	15.6
24.09.2023	22	13.2
GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS GSR 801E EPA 1993	100	30



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT, JUNE-2015
SAMPLING METHOD	LSOP 6

CHP: CBON1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
SEPT'23	09-09-23	58.5	57.9
SEPT'23	25-09-23	58.6	57.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY: CBON2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
SEPT'23	09-09-23	43.6	42.5
SEPT'23	25-09-23	43.7	42.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>



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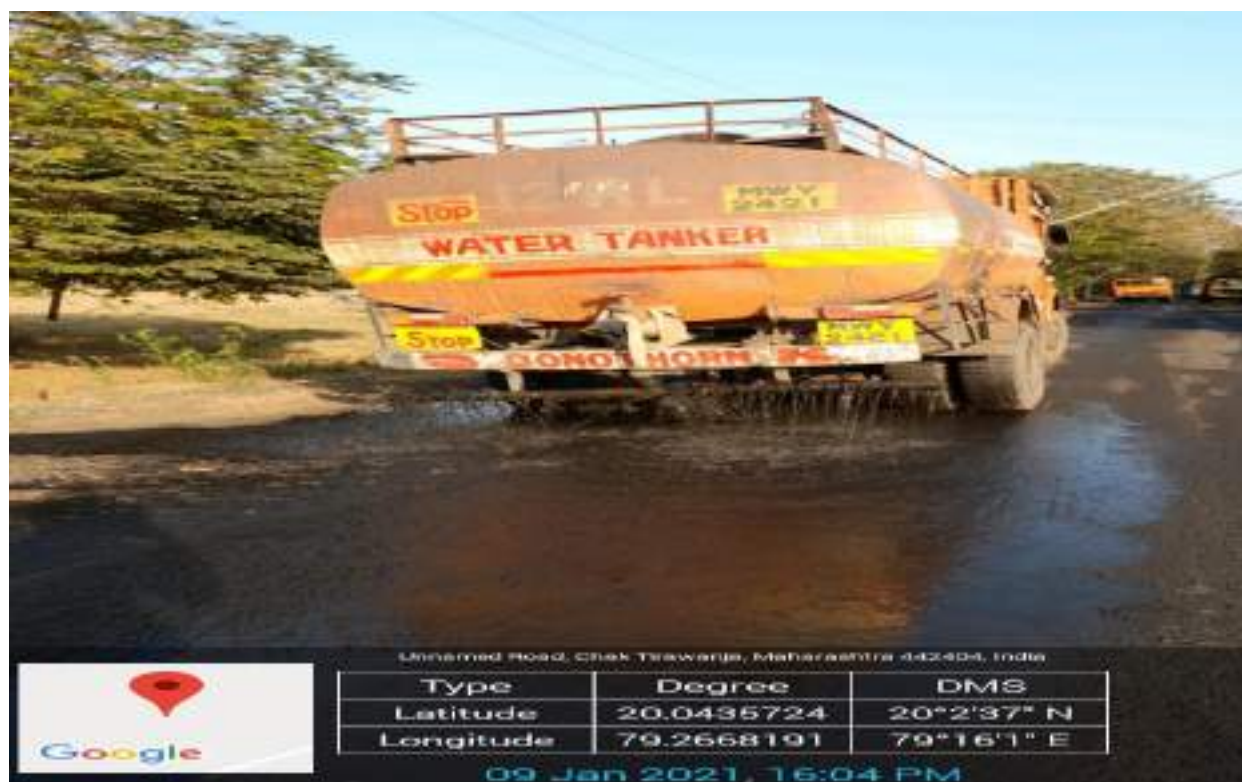


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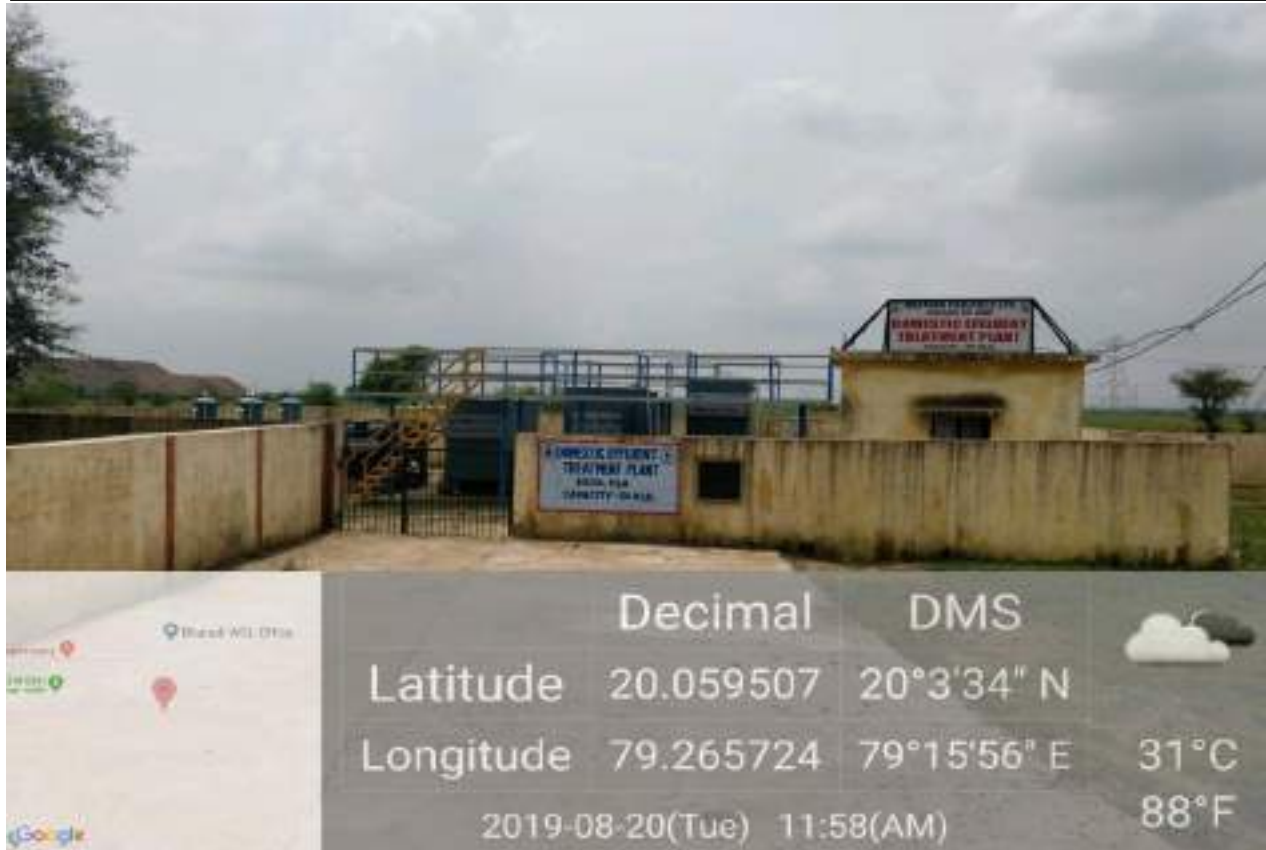
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**MOBILE TANKER DEPLOYED ON COAL TRANSPORTATION ROAD AT BHATADI OCP**



## DOMESTIC EFFLUENT TREATMENT PLANT AT BHATADI OCP



AVENUE PLANTATION ALONG COAL TRANSPORTATION ROAD AT BHATADI OCP



# RAIN WATER HARVESTING STRUCTURE AT SAM OFFICE BHATADI OCP



## PIPE CONVEYOR SYSTEM AT BHATADI OCP



## SEDIMENTATION POND AT BHATADI OCP



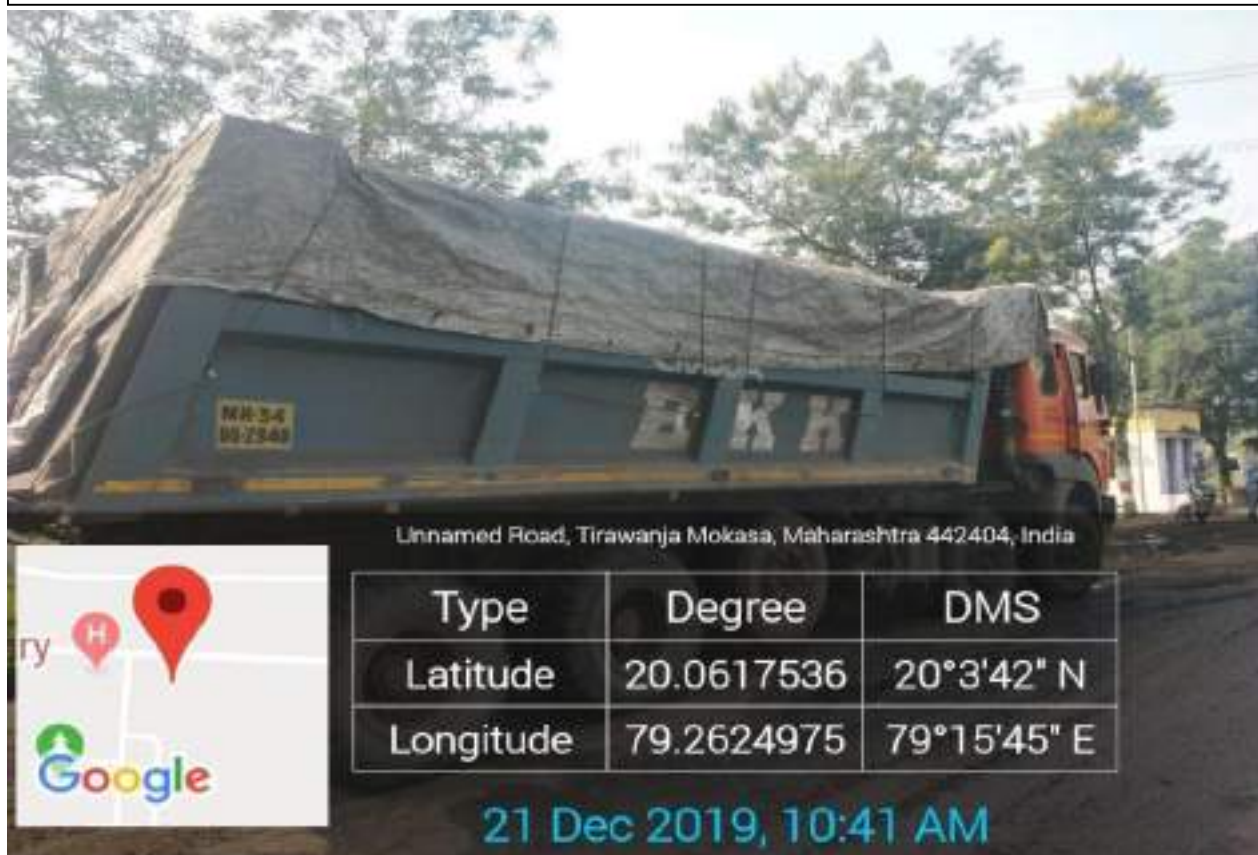
**EFFLUENT TREATMENT PLANT AT BHATADI OCP**



**SPRINKLERS AT COAL STOCK YARD AT BHATADI OCP**



# TARPAULIN COVERING TRUCKS AT BHATADI OCP



**MECHANICAL ROAD SWEEPING MACHINE DEPLOYED AT BHATADI OCP**





(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

**NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION**

Project Name:	M/s Bhatadi OC Expansion		
Project Address:	Near Bhatadi Village, WCL Chandrapur Area, Wardha Valley Coalfield		
Village:	Payali Bhatali	Block:	Chandrapur
District:	Chandrapur	State:	Maharashtra
Pin Code:	442404		
Communication Address:	General Manager (Env), WCL (HQ), Nagpur, Maharashtra - 440001		
Address of CGWB Regional Office :	Central Ground Water Board Central Region, N.S. Building, Civil Lines, Nagpur, Maharashtra – 440001		

1.	NOC No.:	CGWA/NOC/MIN/ORIG/2020/7631										
2.	Application No.:	21-4/333/MH/MIN/2016					3.	Category:	Mining			
4.	Project Status:	Existing Project					5.	NOC Type:	New			
6.	Valid from:	13/03/2020					7.	Valid up to:	12/03/2022			
8.	Ground Water Abstraction Permitted:											
Fresh Water			Saline Water			Dewatering			Total			
m³/day		m³/year		m³/day		m³/year		m³/day		m³/year		
31.00		11315.00						14820.00		5409300.00		
								14851.00		5420615.00		
9.	Details of ground water abstraction /Dewatering structures											
Total Existing No.:5						Total Proposed No.:0						
		DW	DCB	BW	TW	MP	DW	DCB	BW	TW	MP	
Abstraction Structure*		0	0	2	0	3	0	0	0	0	0	
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit												
10.	Quantum of ground water recharge/harvesting(m³/year):						84844.00					
11.	Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring mechanism.					No. of Piezometers		Monitoring Mechanism				
								Manual	DWLR**	DWLR With Telemetry		
	**DWLR - Digital Water Level Recorder					2		0	1	1		

(Compliance Conditions given overleaf)

सदस्य (केन्द्रीय भूमि जल प्राधिकरण)  
Member (CGWA)

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

पानी बचाये – जीवन बचाये  
SAVE WATER - SAVE LIFE

**Validity of this NOC shall be subject to compliance of the following mandatory conditions:**

1. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
2. The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
3. All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
4. In case the ground water abstraction is more than 10 m<sup>3</sup>/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m<sup>3</sup>/day, the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
5. In case ground water abstraction is more than 10 m<sup>3</sup>/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Office, CGWB. Wherever the extraction is less than 10 m<sup>3</sup>/day, ground water quality report shall be submitted by the proponent at the time of submission of self-compliance report.
6. Ground water augmentation/harvesting measures, as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the concerned Regional Director, CGWB.
7. Proof of recharge/water harvesting structures constructed (photographs of structures) shall be submitted to the concerned Regional Director, CGWB within 6 months from the date of issue of NOC. The firm shall also undertake periodic maintenance of recharge/water harvesting structures at its own cost.
8. **The firm shall submit a report on the impact of ground water withdrawal on the ground water regime in and around the project area within one year of issuance of this NOC.**
9. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
10. In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
11. The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
12. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
13. In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
14. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
15. The firm shall report compliance of the NOC conditions online in the website ([www.cgwa-noc.gov.in](http://www.cgwa-noc.gov.in)) within one year from the date of issue of this NOC.
16. This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
17. This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
18. The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
19. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
20. Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment(Protection)Act,1986.
21. **In case of any violation of NOC conditions or illegal extraction of Ground water the firm shall be liable to pay "Environmental Compensation"/ "Penalty", if any under Sec 15 of EPA 1986 as and when decided by statutory authorities.**  
**(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renewal of NOC to Dewater Ground Water for Mining Industry**  
**(Application for Renewal of NOC)**

**Application Number : 21-4/333/MH/MIN/2016**

**Applied For Renewal : 1st**

<b>1.</b>	<b>General Information:</b>	
	<b>Water Quality:</b>	Fresh Water
	<b>Purpose of Renewal Application:</b>	Existing with Additional Ground Water Requirement
	<b>Application Type Category/ Type of Application</b>	Coal
<b>2.</b>	<b>Name of Mine/Project:</b>	BHATADI OC EXPANSION
<b>3.</b>	<b>Location Details of the Mining Unit- (Attach Site, Approved Mining Plan, Toposketch of Surrounding 10km Radius Outside) (\$ ) :</b>	
	<b>Address Line 1 :</b>	NEAR BHATADI VILLAGE
	<b>Address Line 2 :</b>	WCL CHANDRAPUR AREA, WARDHA VALLEY COALFIELD
	<b>Address Line 3 :</b>	
	<b>State:</b>	MAHARASHTRA
	<b>District:</b>	CHANDRAPUR
	<b>Sub-District:</b>	CHANDRAPUR
	<b>Village/Town:</b>	Payali Bhatali
	<b>Latitude:</b>	
	<b>Logitude:</b>	
	<b>Area Type :</b>	Non-Notified
	<b>Area Type Category :</b>	Safe
	<b>Whether industry is MSME:</b>	No
<b>4.</b>	<b>Communication Address</b>	
	<b>Address Line 1:</b>	BHATADI OC EXPANSION PROJECT
	<b>Address Line 2:</b>	NEAR BHATADI VILLAGE
	<b>Address Line 3:</b>	WCL CHANDRAPUR AREA
	<b>State:</b>	MAHARASHTRA
	<b>District:</b>	CHANDRAPUR
	<b>Sub-District:</b>	
	<b>Pincode:</b>	442401
	<b>Phone Number with Area Code:</b>	
	<b>Mobile Number:</b>	91 8275967993
	<b>Fax Number:</b>	
<b>5.</b>	<b>Details of Existing NOC issued by CGWA (enclose copy)</b>	
	<b>E-Mail:</b>	wclchaenv@gmail.com
	<b>NOC Letter No:</b>	CGWA/NOC/MIN/ORIG/2020/7631
	<b>Date of Issuance:</b>	13/03/2020
	<b>Vailidity (Start):</b>	13/03/2020
	<b>Validity (End):</b>	12/03/2022

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	Reason for not applying for renewal before expiry of NOC Validity (Attach Affidavit):		Renewal applied on 11.03.2022.Application returned for submission of IAR with Modeling report	
6.	Change in Land Use Pattern after execution of Project and Surroundings (10 km Radius - Outside)			
	Due to mining activity, there is change in land use pattern only within the Mine boundary. The details of the same is mentioned in IAR with Modeling. However, outside the mine boundary there is no direct impact on land use pattern due to mining.			
7.	Land Use Detail of Project Area			
	Land Use Details	Existing (sq meter)	Proposed (sq meter)	Grand Total (sq meter)
	Green Belt Area	0.00	0.00	0.00
	Open Land	0.00	0.00	0.00
	Road/ Paved Area	0.00	0.00	0.00
	Rooftop area of building/ sheds	0.00	0.00	0.00
	Total	0.00	0.00	0.00
8.	Whether there is a change in Topography of the Area after the execution of the Project:		Yes	
	a) Regional		No change in regional topography due to coal mining	
	b) Project Area		Within the project area, the excavation of quarry and dumping of overburden takes place, due to which topography changes within the project area.	
9.	Whether there is change in Drainage pattern of the area after the execution of the Project:		No	
	a) Regional			
	b) Project Area			
10.	Present Townships / Villages within 10 km radius of the Project:-		34	

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<b>11.</b>	<b>Whether the Groundwater Table will be Intersected by Activity :-</b>										<b>Yes</b>	
	<b>(a) At What Depth (m bgl)</b>				<b>Pre-monsoon</b>				<b>Post-monsoon</b>			
	<b>Minimum (m bgl)</b>				3.40				2.92			
	<b>Maximum (m bgl)</b>				8.00				6.67			
	<b>(b) Maximum Depth Proposed to Dewater (m bgl)</b>				200.00							
	<b>(c) Groundwater Flow Direction (Attach Map)(\$)</b>				Uploaded as attachment							
	<b>(d) Any Other Information</b>				NA							
<b>12.</b>	<b>Total Water Requirement for various Purpose to be Mentioned</b>				<b>Existing (m3/day)</b>		<b>Additional (m3/day)</b>		<b>Existing (m3/year)</b>		<b>Additional (m3/year)</b>	
	<b>Ground Water Required through Abstract Structure</b>				31.00		0.00		11315.00		0.00	
	<b>Ground Water Abstracted on account of Dewatering / Mining Seepage</b>				14820.00		159.00		5409300.00		58035.00	
	<b>Total Ground Water Withdrawal</b>				14851.00		159.00		5420615.00		58035.00	
<b>13.</b>	<b>Details of De-Watering Structure</b>											
	<b>(a) De-Watering Existing Structure</b>											
	<b>Number of Existing Structures:</b>						3					
		<b>SNo.</b>	<b>Type of Structure Name / Year of Construction</b>	<b>Depth (Meter) / Diameter (mm)</b>	<b>Depth to Water Level (Meters below Ground Level)</b>	<b>Discharge (m3/Hour)</b>	<b>Operational Hours(Day) / Days (Year)</b>	<b>Mode of Lift Name</b>	<b>Horse Power of Pump</b>	<b>Whether fitted with Water Meter</b>	<b>Whether Permission Registered with CGWA /If so Details Thereof</b>	
		1	Mine Pumps / -	136.00 / -			- / -	Centrifugal Pump	603.00	Yes	Yes / -	
		2	Mine Pumps / -	136.00 / -			- / -	Centrifugal Pump	636.00	Yes	Yes / -	
		3	Mine Pumps / -	136.00 / -			- / -	Centrifugal Pump	136.00	Yes	Yes / -	
	<b>(b) De-Watering Requirement and Additional Structure Detail</b>											
	<b>Number of Proposed Structures:</b>						0					
		<b>SNo.</b>	<b>Type of Structure Name / Year of Construction</b>	<b>Depth (Meter) / Diameter (mm)</b>	<b>Depth to Water Level (Meters below Ground Level)</b>	<b>Discharge (m3/Hour)</b>	<b>Operational Hours(Day) / Days(Year)</b>	<b>Mode of Lift Name</b>	<b>Horse Power of Pump</b>	<b>Whether fitted with Water Meter</b>	<b>Whether Permission Registered with CGWA/If so Details Thereof</b>	
<b>14.</b>	<b>Details of Utilization of Pumped Water (Please Attach Details)(m3/year) (\$)</b>											
	<b>(a)</b>	<b>Water Supply</b>			No							
	<b>(b)</b>	<b>Agriculture</b>			No							
	<b>(c)</b>	<b>Green Belt Development</b>			No							

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	<b>(d) Suppression of Dust</b>	Yes	94900.00	260 m3/day						
	<b>(e) Recharge</b>	No								
	<b>(f) Any Other Item</b>	Domestic Use - 86 m3/day, Fire fighting - 40 m3/day, supply villages 80 m3/day, Workshop 10 m3/day								
<b>15. Monitoring of Ground Water Regime (Attach Map(\$))</b>										
	<b>(a) Location Details of the Wells / Piezometers (Latitude, Longitude, Reduced Level)</b>	Observation Well location plan uploaded in attachments								
	<b>(b) Number of Wells / Piezometers</b>	24								
	<b>(c) Attach Details of GW Level of Observation Wells / Piezometers( At Least for One Year )(\$)</b>	Uploaded in attachment section								
	<b>(d) General Quality of GW in the Area &amp; Surroundings (\$)</b>	Groundwater quality report Uploaded								
	<b>(e) Any Other Item</b>	Mine seepage quality uploaded								
<b>16. Give the details of change in groundwater regime and quality after execution of the project (Attach detailed report with Map showing GW flow direction(\$))</b>										
IAR with Modeling study attached under Extra Attachments head in attachment section										
<b>17. Proposed Pump / Pumping Groundwater Outside the Mine Pit for Domestic or Other Use (If so, give Details):</b>										
<b>Number of Existing Structures:</b>				2						
	<b>SNo.</b>	<b>Type of Structure Name / Year of Construction</b>	<b>Depth (Meter) / Diameter (mm)</b>	<b>Depth to Water Level (Meters below Ground Level)</b>	<b>Discharge (m3/Hour)</b>	<b>Operational Hours (Day) / Days (Year)</b>	<b>Mode of Lift Name</b>	<b>Horse Power of Pump</b>	<b>Whether fitted with Water Meter</b>	<b>Whether Permission Registered with CGWA/If so Details Thereof</b>
	1	Tubewell / -	100.00 / 203			- / -	Submersible Pump	7.50	Yes	Yes / -
	2	Borewell / -	130.00 / 203			- / -	Submersible Pump	5.00	Yes	Yes / -
<b>Number of Additional Structures:</b>				0						
	<b>SNo.</b>	<b>Type of Structure Name / Year of Construction</b>	<b>Depth (Meter) / Diameter (mm)</b>	<b>Depth to Water Level (Meters below Ground Level)</b>	<b>Discharge (m3/Hour)</b>	<b>Operational Hours (Day) / Days (Year)</b>	<b>Mode of Lift Name</b>	<b>Horse Power of Pump</b>	<b>Whether fitted with Water Meter</b>	<b>Whether Permission Registered with CGWA/If so Details Thereof</b>

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<b>18. (a). Compliance to the Condition prescribed in the NOC</b>				
	<b>SNo.</b>	<b>Conditions given in NOC</b>	<b>Compliance Conditions Applicable</b>	<b>Status of Compliance</b>
	1	Area Specific Plantation	Yes	Total area of 92.27 Ha is bought under plantation, this includes 19.20 Ha Ext. OB dump, decoaled area and 19.8 Ha along the periphery of the mine and 53.27 Ha over undisturbed area.
	2	Domestic Water School Sanitation	Yes	RO Plants are provided at Chota Nagpur Village, Tirwanja village and at Bhatadi Colony. Provision of hand pumps, concrete roads, solar lamps has also been done.
	3	Groundwater quality monitoring - Pre monsoon and Post monsoon	Yes	Ground Water Quality analysis is carried out at 14 locations in buffer zone of the subject mine
	4	Maintenance of recharge structures	Yes	Housekeeping of rain water harvesting pit / channels and desilting of checkdam are being carried out before onset of monsoon every year.
	5	Number of Pizometers as per NOC and Water Level Record	Yes	One no. of piezometers has been installed at Bhatadi OC mine of WCL. (20.062623N, 79.266164 E)
	6	Number of Tubewells Borewales as per NOC	Yes	Two nos. of Borewells are provided for domestic use with dewatering quantity (permitted) of 31 m3/day or 11315 m3/year.
	7	Pizometer fitted with AWLRs with telemetry as per NOC	Yes	One no. of piezometers has been installed at Bhatadi OC mine of WCL. (20.062623N, 79.266164 E)
	8	Quantum of Groundwater as per NOC	Yes	NOC no. CGWA/NOC/MIN/ORIG/2020/7631 with a validity from 13/03/2020 to 12/03/2022 pertaining to Dewatering quantity of 14851 m3/day or 5420615m3/year
	9	Recharge through ponds	Yes	Deliberated in IAR with Modeling report
	10	Recycle and reuse of water	Yes	Mine Pumped out water is used for dust suppression, firefighting purpose and plantation etc. ETP of capacity 75 KLD is in operation Treated water is recycled back and used for washing of HEMM.
	11	RWH and AR structures implemented	Yes	Deliberated in IAR with Modeling report
	12	Submission of Compliance report to the Region	Yes	Self-compliance report was submitted on 08/03/2021

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13	Water conservation measures	Yes	Mine Pumped out water is used for dust suppression, firefighting purpose and plantation etc. ETP of capacity 75 KLD is in operation Treated water is recycled back and used for washing of HEMM.
14	Water Security Plan of villages	Yes	Presently no water shortage has been observed in the nearby villages. However, if there is any water shortage in future it will be supplemented by necessary arrangement.
15	Well monitored around the plant premises	Yes	In case of Bhatadi Opencast mine, monitoring of ground water level from existing wells covering core and buffer zone, is being carried with a frequency of four times a year.
16	Wells fitted with water meter and its Record	Yes	All existing ground water abstraction structures are fitted with digital water flow meters, as per the NOC. Register/log book is also being maintained for ground water abstraction data.

**(b). Compliance to the Condition prescribed in the NOC - Other**

SNo.	Conditions given in NOC	Status of Compliance
1	NA	NA

**19. Gainful utilization of pump water:-**

Mine dewatering 14979 m3/day and pumping from tubewell 31 m3/day, out which Domestic Use of 86 m3/day, Dust Suppression of 260 m3/day, Fire fighting of 40 m3/day, Water supply to near by villages 80 m3/day, Workshop 10 m3/day

**20. Details of Rainwater Harvesting and Artificial Recharge Measures for Groundwater Recharge in the Area:-**

Deliberated in IAR with Modeling report

**MINING USE- Self Declaration**

☒ I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application Proforma is subject to modification from time to time.

2. Application is submitted online on website <http://cgwa-noc.gov.in> to following office.

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**Applied For Renewal : 1st**

**Regional Director, Central Ground Water Board Central Region, N.S. Building, Civil Lines, NAGPUR, MAHARASHTRA, 440001**

3. Incomplete application will be summarily rejected.

**Scanned copy of last page of application with signature and seal should be attached at prescribed place before submission of application.**

4. Receipt of Processing Fee of Rs. 5000.00/- (Rupees Five Thousand Only) submitted through NON TAX RECEIPT PORTAL (<https://bharatkosh.gov.in>) should be attached along with hard copy of application.

**Processing Fee:-**

Bharat Kosh Transaction  
Ref. No:-

Bharat Kosh Transaction  
Date:-

**Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.**

5.	Hard copy of application required:	No	
6.	Ground Water Quality Approved	Not Define	Ground Water Charge Required: Not Define
	Ground Water Charge Recieve:	No	Ground Water Charge Amount:
			Ground Water Area Amount:

**Attached Files:**

**1). GroundWater flow Direction Map: (Refer:11-C)**

S.No	Attachment Name	File Name
1	Hydrogeological Map	Hydrogeological Map_.pdf

**2). GW Level of Observation Wells / Piezometer : (Refer:15-C)**

S.No	Attachment Name	File Name
1	GW Level	GW level.pdf

**3). General Quality of Ground Water in the Area : (Refer:17-D)**

S.No	Attachment Name	File Name
1	GW Quality	GW Quality.pdf

**4). Changes in Topography : (Refer: 8)**

No Attachment Found!

**5). Changes in Drainage Pattern : (Refer: 9)**

No Attachment Found!

**6). Reason for Not Applying for Renewal before Expiring NOC : (Refer: 5)**

**Government of India**  
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No Attachment Found!

**7). Existing NOC : (Refer: 5)**

S.No	Attachment Name	File Name
1	CGWA NOC	NOC Bhatadi OC.pdf

**8). Compliance to the Condition prescribed in the NOC : (Refer: 17-a)**

S.No.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	Area Specific Plantation	No Attachment Found!		
2	Domestic Water School Sanitation	No Attachment Found!		
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	No Attachment Found!		
4	Maintenance of recharge structures	No Attachment Found!		
5	Number of Pizometers as per NOC and Water Level Record	No Attachment Found!		
6	Number of Tubewells Borewales as per NOC	No Attachment Found!		
7	Pizometer fitted with AWLRs with telemetry as per NOC	No Attachment Found!		
8	Quantum of Groundwater as per NOC	No Attachment Found!		
9	Recharge through ponds	No Attachment Found!		
10	Recycle and reuse of water	No Attachment Found!		
11	RWH and AR structures implemented	No Attachment Found!		
12	Submission of Compliance report to the Region	No Attachment Found!		
13	Water conservation measures	No Attachment Found!		
14	Water Security Plan of villages	No Attachment Found!		
15	Well monitored around the plant premises	No Attachment Found!		
16	Wells fitted with water meter and its Record	No Attachment Found!		

**9). Compliance to the Condition prescribed in the NOC - Other : (Refer: 17-b)**

S.No.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	NA	No Attachment Found!		

**10). Extra Attachment :**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renewal of NOC to Dewater Ground Water for Mining Industry**  
**(Application for Renewal of NOC)**

**Application Number : 21-4/333/MH/MIN/2016**

**Applied For Renewal : 1st**

S.No	Attachment Name	File Name
1	Borewell Quality	Borewell Test Report_.pdf
2	Checklist Affidavit	Checklist Salient Affidavit.pdf
3	CTE CTO	CTE CTO_.pdf
4	Land Use Wetland	Land Use and Wetland affi.pdf
5	IAR with Modeling including CHR	Bhatadi OC_IAR with Modelling including CHR.pdf

**11). Bharat Kosh Receipt (Processing Fee):**

No Attachment Found!

**12). Application with Signature and Seal:**

S.No	Attachment Name	File Name
1	Sign and Seal	Sign and Seal.pdf

**13). MSME certificate in case of MSME:**

No Attachment Found!

Date :

Name & Signature of the applicant

Place :

(With official seal)

**Associated User :** gmwcl

**Submitted By User :** gmwcl

**Submission Date :** 29/09/2022

\* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

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**CORPORATE SOCIAL RESPONSIBILITY ACTIVITIES**  
**OF CHANDRAPUR AREA, W.C.L.**  
**(from 2012-13 to 2019-20)**

<b>ACTIVITY OF THE YEAR- 2012-13</b>				
<b>Sl. No.</b>	<b>VILLAGE NAME</b>	<b>CSR ACTIVITIES WORK</b>	<b>YEAR</b>	<b>TOTAL EXPENDITURE (Rs. In lakhs)</b>
<b>EDUCATION AND HEALTH</b>				
1	Kitadi	Providing one set Sound System , 5 Dari , 2 Book Shelf, 3 Ceiling Fans & Musical Instrument for Upper Primary School Kitadi village	2012-13	0.16
2	Kawthi	Providing 50 Desks , Benches, Almari Toys, Swing etc. for Z.P School Kawthi.	2012-13	1.17
3	Bhatadi	Providing Educational Notebook School Uniform, Cycle for girls Students under BPL at Bhatadi Village.	2012-13	0.12
4	Payali	Providing educational and Musical Instrument material at Payali Village	2012-13	0.12
5	Nandgaon Poda	Providing Books Rs. 10,000/- and Furniture Rs. 25,000/- for Students of Z.P upper Primary School, Nandgaon Poda.	2012-13	0.39
6	Sinhana	Providing uniform and Sports material to Anganwadi at Sinhana village.DOC SA	2012-13	0.16
7	Bhatadi	Providing 2 Computer with printer, Chair, sound system & Electric Bell for Z.P. School Bhatadi	2012-13	1.13
8	Chandrapur Area	Providing educational books for Non-English Medium School Children for exposure to English language from Jaiditya Publication New Delhi (Rs. 20.000/- Per Month for 100 Books)	2012-13	0.48
9	Chandrapur	Providing Water Cooler to Govt. ITI, Chandrapur	2012-13	0.88
10	Bhadadi	Construction of Toilet and Bathroom at Z.P Upper primary School Bhatadi	2012-13	2.63
11	Nandgaon Poda	Construction of Wall Compound Wall at Late Gopalrao Wankhed Vidyalaya, Nandgaon Poda village.	2012-13	3.95
12	Chandrapur Area	Conducting Health Camps in Arwat, Visapur payli & Kitadi ( Population 10,000 each Village) -- Aids Awareness Camp in Lalpeth, Durgapur (1000each) --- Eye Camps " Jyoti Vision" at Lalpeth --- Dental Check-up Camp in village School (10 Different Schools)	2012-13	0.41
<b>INFRASTRUCTURE</b>				
13	Trivenja	Construction of 100 Mtrs.C.C. Road at Check Trivenja Village	2012-13	3.44
14	Mokasa	Construction of 200 Mtrs. Drain at Trivenja Mokasa Village	2012-13	9.11
15	Hadasti	Construction of 300 Mtrs. C.C Road (Rs.10.00 Lakhs) with 300 Mtr. Drain ( Rs.4.00 Lakhs)at Hadasti Village.	2012-13	10.85
16	Bhatadi	Construction Cement Concrete of Drain at Bhatadi.	2012-13	8.26
17	Binba gate	Protective work at Shantidham Near Binba Gate, Chandrapur ( In Place of making stair case)	2012-13	8.77

18	Patanpura gate	Protective work like retaining wall, Stone Pitching etc. at Mokshadham at patanpura Gate.	2012-13	9.36
19	Dhidsi	Construction of WBM Road towards Cremation Ground at Dhidsi Village	2012-13	9.52
20	Tirwanja	Black Topping of Village approach Road at Tirwanja (650 Mtr)	2012-13	20.02
21	Nandgaon Poda	Construction of 200 Mtrs Road at Nandgaon Poda.	2012-13	7.29
22	Tirwanja	Construction of 200 Mtrs. C.C Road and 200 Mtrs. Drain at Tirwanja Mokasa( Rs. 7 Lakhs for roads & 3.00 lakhs for Drain )	2012-13	11.03
23	Nandgaon	Construction of 100 Mtrs.C.C Drain at Nandgaon Village.	2012-13	10.86
24	Tirwanja	Construction of 200 Mtrs.C.C Drain at check Trivanja	2012-13	2.55
25	Tukum	Construction of 2 Km WBM approach Road from Masala Tukum to Padmapur	2012-13	14.06
26	Tukum	Construction of 300 Mtrs. C.C. Road at Tukum Ward.	2012-13	8.24
27	Babupeth	Construction of 300 Mtrs. C.C. Road at Ambedkar Nagar, Babupeth Ward from Mata Chowk to Tukaram Chowk, from Sri Akkewar House to Rajeswar Kumare House, from Sri Gunwant Bankar House to Sri Dilip Mankar house, under HLUG	2012-13	8.32
28	Agarzari	Construction of Bus Shed at Agarzari Village	2012-13	1.39
29	Padmapur	Black Topping of Road from Check post to turning of Sector-IV via PWD Bridge under Padmapur OC Sub Area.	2012-13	22.68
	<b>CULTURAL AND SOCIAL</b>			
30	Nandgaon	Construction of Cultural Hall at Nandgaon poda. (6 x 6 Mtr. )	2012-13	5.52
31	Padmapur	Construction of Common Community Shed near Hanuman Mandir, Padmapur.	2012-13	3.88
32	Tirwanja	Construction of Mokshdham at Tirwanja Mokasa Village.	2012-13	2.87
33	Durgapur	Construction of Compound Wall for Burial Ground , Durgapur (150 Mtr)	2012-13	4.41
34	Mata Nagar	Construction of Community Hall near Gomukh Hanuman mandir at Mata Nagar Ward, Chandrapur ( 9 Mtr. X 6 Mtr)	2012-13	12.62
35	MKC	Development work like Stage, Pathway and work Place at Cremation shed at MKC	2012-13	2.53
36	Tirwanja	Providing 5 table, 2 almirah , 5 Fibre Chairs, 3 Dari to Gram Panchayat office, Tirwanja Mokasa.	2012-13	0.40
37	Babupeth	Providing Fibre Chair, table to Phule Shash Ambedkar vichar Pravartak Vachnalaya, Babupeth	2012-13	0.09
38	Bhiwapur Basti	Providing 3 Nos. Sewing Machine, 2 No. Almirah, 25 No.Fibre Chair, 2 No. Table , 2 No. Dari to mahakranti Bahuuddeshiya Mahila Mandl bhiwapur Basti under HLUG SA	2012-13	0.65
39	Chandrapur	Conducting 2 Nos. Village Sports with Uniforms to Players at Sinhala & Nandgaon Villages. ( Joint tournament consisting of all Players from adjoining Villages)	2012-13	3.20
40	Vichoda Bhuj	Construction of 2 Nos. Dhobi Ghat at Vichoda bhuj and Vichoda Ray	2012-13	2.93

41	Balaji Ward	Providing LPG Connection to 1547 BPL families residing in Buffer Zone of Tadoba Anchri Tiger Reserve	2012-13	26.43
	<b>DRINKING WATER SUPPLY/ENVIRONMENT</b>			
42	Padmapur	Construction of Bandhara ( Talav Making ) for Drinking Water Arraangement for animals	2012-13	6.76
43	Mahakali ward	Digging Borewell at Mahakali Ward No. 33.2 Hand pumps 1 at Primary School , 1 at Mahakali Canteen Chowk.	2012-13	1.43
44	Saibaba Mandir	Providing 2 No. Hand Pumps near Saibaba Mandir Junona and Shedmake House Babupeth	2012-13	1.21
45	Chandrapur	Plantation with Barbed wire fencing in open spaces in Chandrapur	2012-13	25.15
		<b>TOTAL</b>		<b>277.43</b>
<b>ACTIVITY OF THE YEAR- 2013-14</b>				
SL. NO.	VILLALGE NAME	NAME OF THE WORK	YEAR	TOTAL EXP. (Rs. In lakhs)
	<b>INFRASTRUCTURE</b>			
1	Bichoda Ray	Constn.of 400 metres cement concrete road at vichoda Ray	2013-14	13.850
2	Nandgaon	Constn.of one side drain from Nandgaon pode towards Chandrapur [length-400 metres]	2013-14	1.690
3	Charwat	Constn.of road for rehabilitation of flood affected Charwat village [Letter recd.from Hansraj Ahir]	2013-14	15.390
	<b>EDUCATION AND HEALTH</b>			
4	Nandgaon, Mana, Visapur, Arwat, Charwat, Junona.	Providing 50 cycles to school going girls from distant villages – Nandgaon, Mana, Visapur, Arwat, Charwat, Junona.	2013-14	1.850
5	Nandgaon, Mana, Visapur, Arwat, Charwat, Junona.	Providing 50 cycles to school going girls from distant villages – Bhatadi, Kitadi, Payli, Trivanja, Chek Trivanja, Vichoda, Badholi, Kadholi, Padoli, Sinhala	2013-14	1.870
6	Chichpalli, Lohara, Borda, Mamla, Ghanta Chowki.	Providing 50 cycles to school going girls from distant villages – Chichpalli, Lohara, Borda, Mamla, Ghanta Chowki.	2013-14	1.850
7	Chandrapur.	Providing Computer, 100 nos. chairs, 2 nos. Table, 2 Nos. wheel chairs for Physically and Mentally challenged people/ children of Jeevan Sangarsh Sanstha, chandrapur.	2013-14	1.030
8	Bichoda Bu, Tadali.	Providing one book shelf, one steel Almirah, 20 chairs, 2 tables, 1 Dari for Z.P. Primary School, Bichoda Bu, Tadali.	2013-14	0.250
9	Indira Nagar	Providing school uniforms to students during Independence Day at Indira Nagar	2013-14	0.490
10	Wadoli	Providing 2 Almirahs, 12 fibre chairs 2 tables, 2 Dari, sound system, 2 ceiling fans, books & 12 sports dress for Z.P.School Wadoli	2013-14	0.843

11	Babupeth	Providing bookshelf, chair, reading table to Phule Sahu Ambedkar Vichar Pravartak Vachnalaya, Babupeth [Letter received from President]	2013-14	0.280
12	Chandrapur	Conducting 4 Nos. Coaching Camps at 4 different rural villages	2013-14	0.800
13	Chandrapur	Conducting 2 Nos. village sports with uniforms to players at 2 different rural villages.	2013-14	2.530
14	Chandrapur	Conducting Medical Health Camps in different rural villages.	2013-14	1.770
15	Chandrapur	Dental Check-up Camps in village school [10 different villages]	2013-14	0.100
16	Chandrapur	Mobile Van facilities	2013-14	1.000
<b>WATER SUPPLY, SANITATION AND PLANTATION</b>				
17	Forest	Plantation on 100 Ha. Degraded forest land	2013-14	180.000
18	Anchareshwar Ward	Digging Bore Well at Ravidas Chowk Anchareshwar Ward Chandrapur	2013-14	0.640
19	Bagad Khidki	Digging Bore Well at Bagad Kidki Near House of Hera lal Thakur	2013-14	0.640
20	Bhiwar	Digging Bore Well at Bhiwar Prantik Collony Near Wagmare House	2013-14	0.664
21	Rajiv Gandhi Nagar	Digging Bore Well at Rajiv Gandhi Nagar Near Gukul Shau House	2013-14	0.664
22	Nurani Masjid	Digging Bore Well at Nurani Masjid Near Ibrahim House	2013-14	0.664
23	Lalpet Nurani Basti	Digging Bore Well at Lalpet Purana Basti Near Dlip M. House	2013-14	0.664
24	Lalpet Nurani Basti	Digging Bore Well at Lalpet New Basti Near Satpute House	2013-14	0.664
25	Bagad Khidki	Constn.of 2 class rooms with Toilet for Priyadarshini Kanya Vidyalaya, Bagad Khidki, Chandrapur.	2013-14	5.780
<b>TOTAL</b>				<b>229.053</b>
<b>ACTIVITY OF THE YEAR- 2014-15</b>				
<b>Sr. No.</b>	<b>AREA</b>	<b>ACTIVITIES</b>	<b>Year</b>	<b>Expenditure (Rs. In lakhs)</b>
<b>ENVIRONMENT</b>				
1	Chandrapur	Implementation of Rainwater Harvesting schemes at Chandrapur (SD)	2014-15	5.20
2	Chandrapur	Afforestation on 50 HA. degraded forest land	2014-15	91.58
<b>HEALTH AND SOCIAL EMPOWERMENT</b>				
3	Chandrapur	Conducting Medical Health Camps in different rural villages.	2014-15	0.32
4	Chandrapur	Self employment training to 50 rural youths of villages around Chandrapur Area as per CIL CSR policy(MOU)	2014-15	1.00
5	Chandrapur	Providing LPG connections to poor families of Chandrapur	2014-15	38.39
6	Chandrapur	Development of Disaster Relief Fund Management Software for Collector office, Chandrapur(SD)	2014-15	26.96
<b>TOTAL</b>				<b>163.45</b>

ACTIVITY OF THE YEAR- 2015-16				
SL. NO.	Area	NAME OF CSR ACTIVITY	Year	Expenditure (Rs. In lakhs)
		<b>SOCIAL EMPOWERMENT</b>		
1	Chandrapur	Skill development training under MoU to 100 Rural Youths	2015-16	1.99
2	Chandrapur	Skill Development Training undertaken by CIPET for Rural Youth under CSR Activities.	2015-16	37.20
3	Chandrapur	Distribution of Bicycle to 553 Rural School going girls of Chandrapur	2015-16	27.65
		<b>ENVIRONMENT AND ECOLOGY</b>		
4	Chandrapur	Financial Assistance for construction of Bharat Ratna Dr. A. P. J Abdul Kalam Nisarg Udyan at Chandrapur	2015-16	302.07
		<b>TOTAL</b>		<b>368.91</b>

ACTIVITY OF THE YEAR- 2016-17				
SL. NO.	Area	NAME OF THE ACTIVITY	Year	Expenditure (Rs. In lakhs)
		<b>WOMEN EMPOWERMENT</b>		
1	Chandrapur Area	Distribution of Bicycle to 553 Rural School Going Girls.	2016-17	<b>27.65</b>
		<b>ENVIRONMENT AND ECOLOGY</b>		
2	Chandrapur Area	Plantation on 50 Ha. Degraded Forest land by FDCM at Babupeth Compartment No. 484	2016-17	<b>25.63</b>
3	Chandrapur Area	Plantation on 100 Ha. Degraded Forest Land by FDCM at Babupeth & Morwa Compartment No. 485/486	2016-17	<b>6.92</b>
		<b>TOTAL</b>		<b>60.20</b>

ACTIVITY OF THE YEAR- 2017-18				
SL. NO.	Area	NAME OF THE ACTIVITY	Year	Expenditure (Rs. In lakhs)
1	Chandrapur Area	Purchasing Of Plant Saplings for distribtution to different units Under Special Swachata Pakhwada	2017-18	0.12
2	Chandrapur Area	Purchase Of Dustbins On Occasion Of Extended Swachata Pakhawada for distribution to villages.	2017-18	0.50
3	Chandrapur Area	Purchase Of Plants for distribution to different units	2017-18	0.38
4	Chandrapur Area	Construction Of Class Room At Bagini Niveditha Vidya Mandir	2017-18	4.06
5	Chandrapur Area	Providing Of Led Screen	2017-18	4.20

6	Chandrapur Area	Providing Of Led Screen	2017-18	4.20
7	Chandrapur Area	Providing Of Led Screen	2017-18	4.20
8	Chandrapur Area	Providing Of Led Screen	2017-18	4.20
9	Chandrapur Area	Providing Of Led Screen	2017-18	4.20
10	Chandrapur Area	Cleaning Works To Be Carried Out At Bhatadi And Tirwanja Village Under Swacchata Action Plan Of Bocm.	2017-18	1.35
11	Chandrapur Area	Development Of Disaster Relief Fund Management Software For Collector Office, Chandrapur( Sustainable Development Activity)	2017-18	3.12
		<b>TOTAL</b>		<b>30.53</b>

<b>ACTIVITY OF THE YEAR- 2018-19</b>				
<b>SL. NO.</b>	<b>Area</b>	<b>NAME OF THE ACTIVITY</b>	<b>Year</b>	<b>Expenditure (Rs. In lakhs)</b>
1	Chandrapur Area	CLEANING WORKS TO BE CARRIED OUT AT BHATADI AND TIRWANJA VILLAGE UNDER SWACCHATA ACTION PLAN OF BOCM(2017-18 ACTIVITY)	2018-19	0.79
2	Chandrapur Area	PROVIDING DUSTBIN TO NEARBY SCHOOL	2018-19	0.33
3	Chandrapur Area	BEAUTIFICATION AND DEVELOPMENT OF GARDEN AT TALAV OF TIRWANJA VILLAGE AT BOCM UNDER PSA	2018-19	0.17
4	Chandrapur Area	PUBLICITY AND PROPOGANDA THROUGH BANNERS IN ALL CONSPICUOUS PLACES LIKE OFFICEES,WORKSHOP TIME OFFICE COLONIES ETC INCLUDING AREA WORKSHOP. FOR ORGANISING SWACCHTA RELATED COMPITITION WITH CASH PRIZES.	2018-19	15.00
5	Chandrapur Area	FINANCIAL ASSISTANCE TO DISTRICT COLLECTOR CHANDRAPUR FOR RENOVATION OF PRIYADARSHNI HALL AT CHANDRAPUR	2018-19	10.00
6	Chandrapur Area	INSTALLATION OF SANITARY NAPKIN VENDING MACHINE THROUGH PRAYAS FOUNDATION	2018-19	1.20
7	Chandrapur Area	PROVIDING WATER COOLER CAPACITY 150 LTR AND WATER PURIFIER(100 LITRE)TO BUS STAND	2018-19	3.34
8	Chandrapur Area	PROVIDING WATER PURIFIER RO TYPE CAPACITY 50 LTRS AND WATER COOLER(80 LTRS) TO 5 SCHOOLS IN CHANDRAPUR	2018-19	0.67
9	Chandrapur Area	CONSTRUCTION OF TOILETS AT PRIYADARSHANI GIRLS SCHOOL AT CHANDRAPUR	2018-19	4.00

10	Chandrapur Area	RENOVATION OF TOILETS AT Z.P. SCHOOL, NANDGAON UNDER SWACHTA ACTION PLAN	2018-19	0.79
11	Chandrapur Area	PROVIDING WATER COOLER CAPACITY 150LTR TO RAILWAY STATION, CHANDRAPUR	2018-19	0.43
12	Chandrapur Area	INTER AREA KABADDI TOURNAMENT 18-19 AT CHANDRAPUR AREA	2018-19	2.97
13	Chandrapur Area	PROVIDING 5 NOS. WATER PURIFIERS IN PHC ACROSS CHANDRAPUR	2018-19	0.91
14	Chandrapur Area	PROVIDING TWO COMPUTERS TO INDIRA GANDHI VIDHYALAYA, PADOLI	2018-19	1.06
		<b>TOTAL</b>		<b>41.66</b>

<b>ACTIVITY OF THE YEAR- 2019-20</b>				
<b>SL. NO.</b>	<b>Area</b>	<b>NAME OF THE ACTIVITY</b>	<b>Year</b>	<b>Expenditure (Rs. In lakhs)</b>
1	Chandrapur Area	Construction of multipurpose hall for Priyadarshini Kanya Vidhyalaya.	2019-20	9.32
2	Chandrapur Area	Village health camps	2019-20	1.97
3	Chandrapur Area	Payment towards third year operation to FDCM against plantation on 50 Ha degraded forest land- Babupeth Compartment No.484	2019-20	12.38
4	Chandrapur Area	Construction of 1 No RO plant with maintenance of one year at Check Tirvanja Village	2019-20	9.00
5	Chandrapur Area	Village sports in Kabaddi and Volley ball	2019-20	1.00
6	Chandrapur Area	Financial assistance to District administration Chandrapur for rain water harvesting scheme in Chandrapur	2019-20	37.5
7	Chandrapur Area	Publicity through rallies, competitions in schools, display of hoardings and banners, etc of Chandrapur Area	2019-20	0.79
8	Chandrapur Area	Construction of separate public toilet blocks with urinals and water connections for ladies and gents at Nandgaon village of Chandrapur area.	2019-20	6.00
9	Chandrapur Area	Skill development activities	2019-20	3.44
		<b>Total</b>		<b>81.40</b>

## Various CSR Activities near Durgapur Opencast Mine and in Chandrapur Area

### Handpump/Borewell installation at various locations



Handpump at Biyani Nagar



Handpump at Baggad khidki



Borewell at KVC Central school



Handpump at Sarkar nagar



Handpump at Sashtarak Lay-out



Handpump at DRC-V, Nehru Nagar



Construction of Platform at Motaghat Nallah



Construction of 150 mtr. Concrete road at Sangeet Nagar



Construction of Community Hall at Asthbhuja Mandir



Construction of 200 mtr. Road from Tadoba to Kalimata Temple



Construction of Compound wall of Community hall of Durgapur Village



Furniture for Gram Panchayat (Sinhala)



Furniture for Kendriya Vidyalaya(Chandrapur)



Distribution of Uniform to Economically weaker section



Repair of Slab Zila Parishad School(Durgapur)



Repair of Mahakali Cremetery (Chandrapur)



Toilet for Handicapped student at KVC, Chandrapur



Tarfelting work at NP Telgu Highschool



Bicycle distribution to female students of Chandrapur district schools



Distribution of Grains and medical help to Flood victims



Distribution of LPG gas connections to BPL families



Medical Camp for Pilgrims to Mahakali Temple



De-silting and widening of Erai River

[illegible]A photograph showing a young mangrove seedling with several green leaves growing out of a patch of reddish-brown sand. The background consists of a flat, open landscape with sparse, low-lying green vegetation under a clear sky. A shadow is cast by the seedling onto the sand to its left.A man wearing a white long-sleeved shirt, dark trousers, and a white cap is standing in a field. He is holding a wooden marker that has the number '07' written on it. The field is covered with green grass and some bare soil. There are trees in the background under a blue sky with some clouds.

**REPORT ON**  
**MONITORING OF GROUND WATER LEVEL**  
**OF**  
**BHATADI OC EXPN.**  
**CHANDRAPUR AREA**  
**(M.S)**  
**WESTERN COALFIELDS LTD.**



**PERIOD- DEC 2022 (POST-MONSOON), JAN-FEB -2023 (WINTER) & MAY-2023  
(PRE-MONSOON)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) and NABL Recognized Laboratory**  
**ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**  
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Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)  
**Report No. ANqr /PD/20A/2023/199**

**2022-23 & 2023-24**

## Certificate

The Ground water Level monitoring has been carried out with due diligence and the Monitoring of Ground Water Level of all observation wells Report have been prepared as per the scope of work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/77 on date: 08.12.2022.

The report encompasses the Monitoring of Ground water level reports of observation wells pertaining to the BHATADI OC EXPN MINE, of the Chandrapur District, Maharashtra.

Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by concerned WCL Officials for timely completion of the project.



**Ajinkya Nakod**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology

Nagpur.  
August-2023



**(Dr. D. G. Garway)**  
Head of Organization  
Anacon Laboratories Pvt. Ltd., Nagpur

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**BHATADI OC EXPN.  
CHANDRAPUR AREA  
WESTERN COALFIELDS LTD.**

**PERIOD- DEC 2022(POST-MONSOON), JAN-FEB 2023 (WINTER) & MAY-2023 (PRE-MONSOON)**

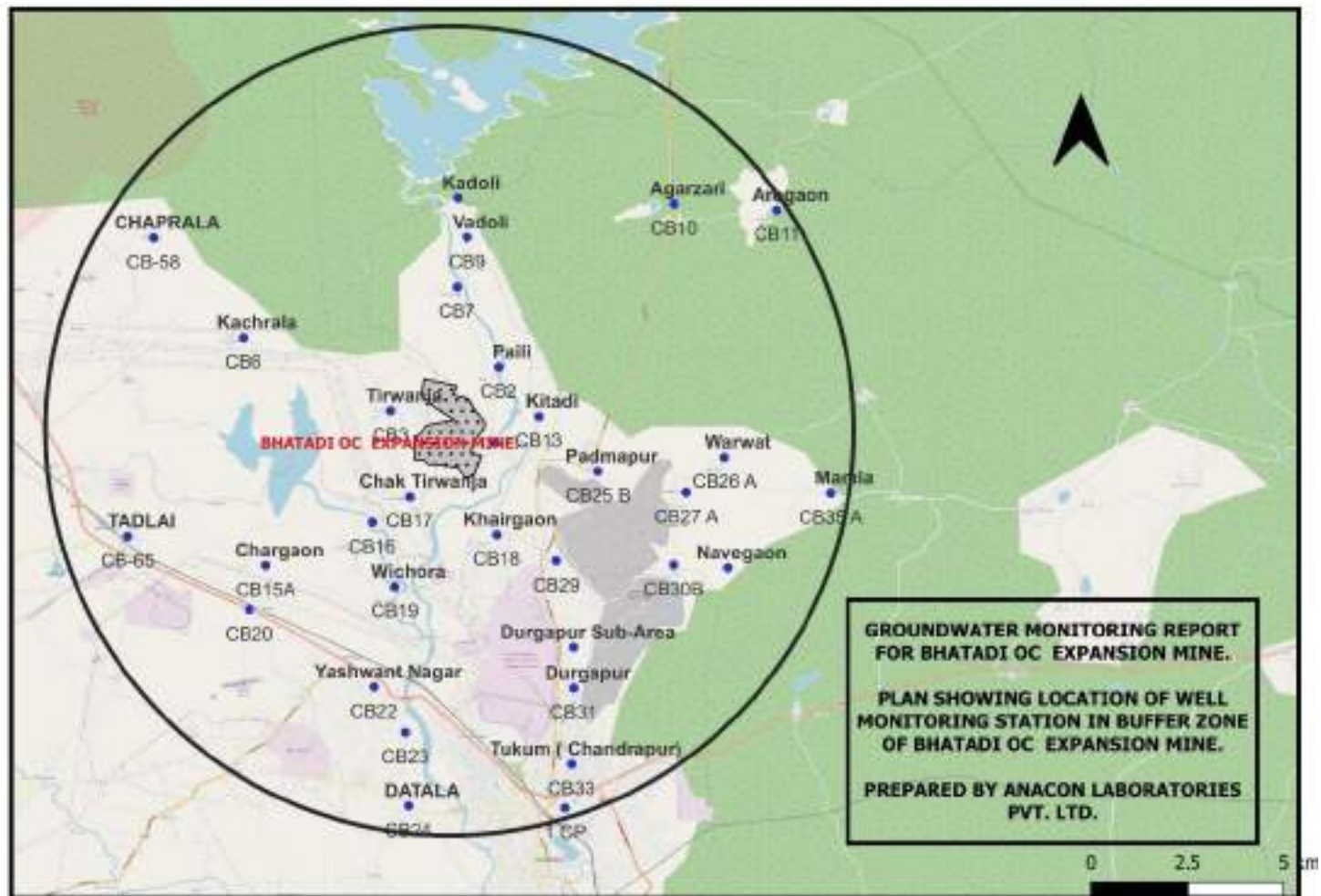


FIGURE-I: GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF BHATADI OC EXPN)

**Table: I Ground Water Level Monitoring Data From Dugwells/Piezometer in Buffer Zone of Bhatadi OC Expn., Chandrapur Area, WCL**

Sr. NO	Well No.	Name of village	Well location	LAT	LONG	R.L. in m	Well dia (m)	Well depth (m bmp)	Height of measuring point (m agl)	Depth to water level (m bgl)			Utility / Owner	Formation Tapped
										Dec-22	JAN-FEB-23	May-23		
1	CB1	Bhatadi	Centre of village , near OHT	20°3'13.7"	79°17'5.86"	212	8.84	3.81	0.61	3.5	4.95	6.19	agriculture	basalt
2	CB2	Paili	Centre of village , near Budha Samaj Mandir	20°4'21.18"	79°17'9.08"	230	9.76	2.73	0.81	3.85	5.25	2.41	agriculture	limestone
3	CB3	Tirwanja	North of village , near Primary school & Hanuman Mandir	20°3'42.12"	79°15'33.03"	189	7.67	3.85	0.85	4.35	6.15	6.11	domestic	limestone
4	CB6	Kachrala	West of village , 100m S of Zila Parishad school.	20°4'47.27"	79°13'21.85"	195	8.82	3.15	0.72	5.75	7	7.42	agriculture	laterite
5	CB7	Chincholi	Centre of village , near Vittal Jungani house ( East)	20°5'32.43"	79°16'32.14"	187	9.83	4.82	0.62	4.65	6.35	7.83	agriculture	laterite
6	CB8	Kadoli	East of village at the entrance	20°6'51.56"	79°16'32.69"	196	12.82	3.12	0.75	4.85	4.9	11.42	agriculture	basalt
7	CB9	Vadoli	West of village ,near There's home	20°6'16.67"	79°16'41.17"	200	12.86	4.12	0.91	3.65	5.35	9.19	agriculture	laterite

Sr. NO	Well No.	Name of village	Well location	LAT	LONG	R.L. in m	Well dia (m)	Well depth (m bmp)	Height of measuring point (m agl)	Depth to water level (m bgl)			Utility / Owner	Formation Tapped
										Dec-22	JAN-FEB-23	May-23		
8	CB10	Agarzari	Adjacent (west) to Tadoba road , near Bus stop & Hanuman Mandir	20°6'46.4"	79°19'45.41"	241	9.91	2.93	0.47	4.15	6	7.72	domestic	basalt
9	CB11	Aregaon	700m west of village , adjacent to Agarzari - Aregaon road	20°6'40.82"	79°21'17"	236	8.61	3.95	0.81	2.85	5.85	6.19	domestic	laterite
10	CB13	Kitadi	North of village , near Zila Parishad school	20°3'37.1"	79°17'44.99"	197	10.4	4.12	0.76	5.25	7.75	8.82	agriculture	basalt
11	CB15A	Chargaon	North of village , near Hanuman temple	20°1'24.53"	79°13'41.68"	201	8.78	4.39	0.45	4.35	7.35	7.73	domestic	limestone
12	CB16	Nagpur	About 200m NE of village , adjacent to Tirwanja road	20°2'2.86"	79°15'16.59"	239	9.87	3.13	0.51	6.45	8	8.13	domestic	limestone
13	CB17	Chak Tirwanja	W of village , near Zila Parishad school	20°2'25.76"	79°15'50.06"	199	12.31	2.76	0.73	7.15	10.25	11.42	domestic	basalt

Sr. NO	Well No.	Name of village	Well location	LAT	LONG	R.L. in m	Well dia (m)	Well depth (m bmp)	Height of measuring point (m agl)	Depth to water level (m bgl)			Utility / Owner	Formation Tapped
										Dec-22	JAN-FEB-23	May-23		
14	CB18	Khairgaon	North of village , near Primary school	20°1'51.9"	79°17'7.44"	205	11.42	2.41	0.55	6.85	7.65	8.91	agriculture	laterite
15	CB19	Wichora	West of village , near Budha Samaj	20°1'5.57"	79°15'36.64"	215	11.02	2.14	0	7	9.45	10.10	agriculture	laterite
16	CB20	Marwa	West of village & Nagpur - Chandrapur road ( in the field )	20°0'45.11"	79°13'27.1"	219	8.82	4.31	0.76	4.25	6.35	7.16	agriculture	basalt
17	CB22	Yashwant Nagar	Centre of village , near Zila Parishad school & Hanuman Mandir	19°59'36.44"	79°15'18.15"	217	7.87	3.97	0.82	3.65	4.25	6.35	agriculture	limestone
18	CB23	Kosara	West of village , adjacent to road	19°58'55.9"	79°15'46.1"	238	12.25	3.91	0.94	4.45	5.35	11.42	agriculture	basalt
19	CB25 B	Padmapur	About 50 m E of Tadoba road in the field, About 400 m N of new village	20°2'48.37"	79°18'37.75"	248	15.87	3.14	1.31	5.35	6.25	11.19	domestic	limestone

Sr. NO	Well No.	Name of village	Well location	LAT	LONG	R.L. in m	Well dia (m)	Well depth (m bmp)	Height of measuring point (m agl)	Depth to water level (m bgl)			Utility / Owner	Formation Tapped
										Dec-22	JAN-FEB-23	May-23		
20	CB26 A	Warwat	Centre of village, near temple	20°3'0.76"	79°20'30.41"	233	8.81	2.42	0.81	3.15	4.15	7.93	agriculture	basalt
21	CB27 A	Masala Tukum	South of village , adjacent to Warwat road	20°2'29.65"	79°19'56.29"	240	8.41	2.87	0.62	6.15	7.75	7.95	agriculture	limestone
22	CB24	DATALA	SE of village , in Shanti Kunj Nagar	19°57'50.51"	79°15'48.89"	187	14.28	4.3	0.62	5.85	7.45	12.14	agriculture	laterite
23	CB28 A	Navegaon	Near OH Tank, South of village , East of Warwat road	20°1'22.36"	79°20'33.62"	215	8.42	3.88	0.61	4.75	6.4	6.91	agriculture	laterite
24	CB29	Padmapur Sub -Area Office	Outside SAM office, adjacent to Tadoba road (E)	20°1'28.65"	79°18'0.69"	222	10.13	2.61	0.63	4.25	5.75	8.85	agriculture	basalt
25	CB31	Durgapur	East of Tadoba road , inside St. Mary's Convent compound	19°59'35.39"	79°18'16.18"	198	11.47	3.27	0.45	3.85	4.85	10.15	agriculture	basalt
26	CB32	Durgapur Sub-Area	Trade Union office compound	20°0'11.63"	79°18'15.98"	243	8..93	2.34	0.72	7.35	7.9	7.28	agriculture	limestone

Sr. NO	Well No.	Name of village	Well location	LAT	LONG	R.L. in m	Well dia (m)	Well depth (m bmp)	Height of measuring point (m agl)	Depth to water level (m bgl)			Utility / Owner	Formation Tapped
										Dec-22	JAN-FEB-23	May-23		
			(INTUC), MQ type quarters											
27	CB30B	SINHALA	100 m East from Road between Sinhala nad Navegaon	20°1'25"	79°19'45"	240	12.48	3.29	0.91	8.25	9.35	11.49	agriculture	basalt
28	CB33	Tukum (Chandrapur)	Adjacent (East) to Tadoba road in garden , near Petrol pump.	19°58'27.68"	79°18'14.23"	212	9.85	3.3	0.77	7.25	8.25	9.10	agriculture	basalt
29	CB35 A	Mamla	C of village	20°2'29"	79°22'5"	189	9.82	3.24	72	4.15	6.2	8.60	agriculture	basalt
30	CB-58	CHAPRALA	EAST 200M FROM ZP SCHOOL.	20°6'16.23"	79°12'1.75"	205	9.6	4.8	0.5	2.1	4.5	6.89	agriculture	limestone
31	CB-65	TADLAI	NORTH 30M FROM RAMCHADRA DHENGARE HOUSE	20°1'50.34"	79°11'38.9"	208	9.2	5.2	0.4	3.5	5.3	8.48	Agriculture And Domestic use	limestone
32	1 CP	Chandrapur	Infront of Telephone exchange LIC office	19°57'48.74"	79°18'8.45"	223	8.41	2.73	0.61	3.65	6.95	7.25	agriculture	laterite

# **ANALYSIS REPORT**



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TC 5458

## Test Report

ULR No.- TC54582300001925F

Test Report No.: ALPL/18072023/08-46

Dated 18.07.2023

Page 1 of 1

<b>Issued To :</b> M/s Western Coalfields Limited (WCL) Futala Road, Coal Estate, Civil Lines, Nagpur, WCL HQ (M.S.), 440001	<b>Sample Inward No.</b> ALPL/24062023/W-1/54-46	<b>Analysis Start</b> 24.06.2023
	<b>Inward Date</b> 24.06.2023	<b>Analysis End</b> 14.07.2023
<b>Reference</b> -		<b>Sample Category</b> Water
<b>Sample Name</b> Ground Water	<b>Sample Particulars/Details</b> Ground Water (Sample ID: 1 CP); (Chandrapur Area)	<b>Purpose of analysis</b> Drinking
<b>Sample Collected By</b> Mr. Akash Kirmake	<b>Sampling Date</b> 19.05.2023 <b>Sampling Time</b> Not Mentioned	<b>Quantity Received</b> 1 Lit
<b>Sampling Location</b> Chandrapur		

Tests Required: Chemical Testing.

### TEST RESULTS

TEST RESULTS						
S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
1	Chemical Testing 1. Water					
1	Alkalinity	mg/l	IS 3025 (Part 23) : 1986	200	600	83.21
2	Colour	Hazen	IS 3025 (Part 4) : 2021	5	15	1
3	Chloride (as Cl)	mg/l	IS 3025 (Part 32) : 1988	250	1000	35.73
4	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	25.92
5	Residual Chlorine	mg/l	IS 3025 (Part 26) : 2021	0.2	1	BDL (DL - 0.1)
6	Fluoride (as F)	mg/l	IS 3025 (Part 60) : 2008	1.0	1.5	0.12
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) : 1994	30	100	8.76
8	Nitrate (as NO <sub>3</sub> )	mg/l	APHA method 23rd edition: 2017	45	No relaxation	BDL (DL - 2)
9	Odour	-	IS 3025 (Part 5) : 2018	Agreeable	Agreeable	Agreeable
10	pH	-	IS 3025 (Part 11) : 2022	6.5 to 8.5	No relaxation	8.09
11	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24) : 2022	200	400	3.86
12	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	344
13	Turbidity	NTU	IS 3025 (Part 10) : 1984	1	5	0.3
14	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) : 2009	200	600	100.5
15	Chemical Testing 2. Residues In Water					
15	Arsenic (as As)	mg/l	IS 3025 (Part 37) : 2022	0.01	No relaxation	BDL (DL - 0.01)
16	Aluminium (as Al)	mg/l	IS 3025 (Part 2) : 2019	0.05	0.2	BDL (DL - 0.01)
17	Boron (as B)	mg/l	IS 3025 (Part 2) : 2019	0.5	2.4	BDL (DL - 0.1)
18	Copper (as Cu)	mg/l	IS 3025 (Part 2) : 2019	0.05	1.5	BDL (DL - 0.03)
19	Cadmium (as Cd)	mg/l	IS 3025 (Part 2) : 2019	0.003	No relaxation	BDL (DL - 0.001)
20	Iron (as Fe)	mg/l	IS 3025 (Part 2) : 2019	1.0	No relaxation	0.01
21	Lead (as Pb)	mg/l	IS 3025 (Part 2) : 2019	0.01	No relaxation	BDL (DL - 0.001)
22	Manganese (as Mn)	mg/l	IS 3025 (Part 2) : 2019	0.1	0.3	BDL (DL - 0.05)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2) : 2019	0.02	No relaxation	BDL (DL - 0.01)
24	Selenium (as Se)	mg/l	IS 3025 (Part 56) : 2003	0.01	No relaxation	BDL (DL - 0.001)
25	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2) : 2019	0.05	No relaxation	BDL (DL - 0.03)
26	Zinc (as Zn)	mg/l	IS 3025 (Part 2) : 2019	5	15	BDL (DL - 0.1)

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**REMARKS:** As requested by the client, sample was tested for above parameters only. The submitted Sample complies with IS:10500:2012, for tests conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

Verified By

for   
Mangesh Fande  
Technical Manager

Snehal Raut  
Deputy Technical Manager

Authorized Signatory

Chintan Gokhale  
Deputy Quality Manager

-----END OF REPORT-----

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TC 5458

## Test Report

ULR No.- TC545823000001925F

Test Report No.: ALPL/18072023/04-1

Dated 18.07.2023

Page 1 of 1

Issued To : M/s Western Coalfields Limited (WCL) Futala Road, Coal Estate, Civil Lines, Nagpur, WCL HQ (M.S), 440001		Sample Inward No. ALPL/24062023/W-1/54-1	Page 1 of 1	
		Inward Date 24.06.2023	Analysis Start 24.06.2023	
		Reference .	Analysis End 14.07.2023	
Sample Name Ground Water	Sample Particulars/Details Ground Water (Sample ID: CB1); (Chandrapur Area)		Sample Category Water	
Sample Collected By Mr. Akash Kirnake		Sampling Date 15.05.2023	Purpose of analysis Drinking	Quantity Received 1 Ltr
Tests Required: Chemical Testing.		Sampling Time Not Mentioned	Sampling Location Bhatadi	

### TEST RESULTS

TEST RESULTS						
S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	Chemical Testing I. Water					
1	Alkalinity	mg/l	IS 3025 (Part 23) : 1986	200	600	83.21
2	Colour	Hazen	IS 3025 (Part 4) : 2021	5	15	1
3	Chloride (as Cl)	mg/l	IS 3025 (Part 32) : 1988	250	1000	42.11
4	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	26.88
5	Residual Chlorine	mg/l	IS 3025 (Part 26) : 2021	0.2	1	BDL (DL - 0.1)
6	Fluoride (as F)	mg/l	IS 3025 (Part 60) : 2008	1.0	1.5	0.13
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) : 1994	30	100	6.42
8	Nitrate (as NO <sub>3</sub> )	mg/l	APHA method 23rd edition: 2017	45	No relaxation	BDL (DL - 2)
9	Odour	-	IS 3025 (Part 51) : 2018	Agreeable	Agreeable	Agreeable
10	pH	-	IS 3025 (Part 11) : 2022	6.5 to 8.5	No relaxation	8.13
11	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24) : 2022	200	400	6.34
12	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	226
13	Turbidity	NTU	IS 3025 (Part 10) : 1984	1	5	0.2
14	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) : 2009	200	600	93.6
II	Chemical Testing 2. Residues In Water					
15	Arsenic (as As)	mg/l	IS 3025 (Part 37) : 2022	0.01	No relaxation	BDL (DL - 0.01)
16	Aluminium (as Al)	mg/l	IS 3025 (Part 2) : 2019	0.03	0.2	BDL (DL - 0.01)
17	Boron (as B)	mg/l	IS 3025 (Part 2) : 2019	0.5	2.4	BDL (DL - 0.1)
18	Copper (as Cu)	mg/l	IS 3025 (Part 2) : 2019	0.05	1.5	BDL (DL - 0.03)
19	Cadmium (as Cd)	mg/l	IS 3025 (Part 2) : 2019	0.003	No relaxation	BDL (DL - 0.001)
20	Iron (as Fe)	mg/l	IS 3025 (Part 2) : 2019	1.0	No relaxation	BDL (DL - 0.01)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2) : 2019	0.01	No relaxation	BDL (DL - 0.001)
22	Manganese (as Mn)	mg/l	IS 3025 (Part 2) : 2019	0.1	0.3	BDL (DL - 0.05)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2) : 2019	0.02	No relaxation	BDL (DL - 0.01)
24	Selenium (as Se)	mg/l	IS 3025 (Part 56) : 2003	0.01	No relaxation	BDL (DL - 0.001)
25	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2) : 2019	0.05	No relaxation	BDL (DL - 0.03)
26	Zinc (as Zn)	mg/l	IS 3025 (Part 2) : 2019	5	15	BDL (DL - 0.1)

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• Test report shall be valid only for the specified period.

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REMARKS: As requested by the client, sample was tested for above parameters only. The submitted Sample complies with IS:10500:2012, for tests conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

Verified By

Authorized Signatory

For   
Manish Fande  
Technical Manager

Sachin Raut  
Deputy Technical Manager

Chaitany Grewal  
Deputy Quality Manager

-----END OF REPORT-----

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# Test Report

ULR No.: TC54582300001925F  
Test Report No.: ALPL/18072023/08-2

Dated 18.07.2023

Page 1 of 1

Issued To : M/s Western Coalfields Limited (WCL) Futala Road, Coal Estate, Civil Lines, Nagpur, WCL HQ (M.S.), 440001		Sample Inward No. ALPL/24062023/W-1/54-2	Analysis Start 24.06.2023
		Inward Date 24.06.2023	Analysis End 14.07.2023
		Reference -	
Sample Name Ground Water	Sample Particulars/Details Ground Water (Sample ID: CB2); (Chandrapur Area)		Sample Category Water
Sample Collected By Mr. Akash Kirnake	Sampling Date 15.05.2023	Purpose of analysis Drinking	Quantity Received 1 Ltr
Tests Required: Chemical Testing		Sampling Location Paili	

## TEST RESULTS

TEST RESULTS						
S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	Chemical Testing 1. Water					
1	Alkalinity	mg/l	IS 3025 (Part 23) : 1986	200	600	78.5
2	Colour	Hazen	IS 3025 (Part 4) : 2021	5	15	1
3	Chloride (as Cl)	mg/l	IS 3025 (Part 32) : 1988	250	1000	40.83
4	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	29.76
5	Residual Chlorine	mg/l	IS 3025 (Part 26) : 2021	0.2	1	BDL(DL- 0.1)
6	Fluoride (as F)	mg/l	IS 3025 (Part 60) : 2008	1.0	1.5	0.14
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) : 1994	30	100	10.51
8	Nitrate (as NO <sub>3</sub> )	mg/l	APHA method 23rd edition: 2017	45	No relaxation	BDL(DL- 2)
9	Odour	-	IS 3025 (Part 5) : 2018	Agreeable	Agreeable	Agreeable
10	pH	-	IS 3025 (Part 11) : 2022	6.5 to 8.5	No relaxation	8.04
11	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24) : 2022	200	400	7.35
12	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	245
13	Turbidity	NTU	IS 3025 (Part 10) : 1984	1	5	0.2
14	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) : 2009	200	600	117.6
II	Chemical Testing 2. Residues In Water					
15	Arsenic (as As)	mg/l	IS 3025 (Part 37) : 2022	0.01	No relaxation	BDL (DL - 0.01)
16	Aluminium (as Al)	mg/l	IS 3025 (Part 2) : 2019	0.03	0.2	BDL(DL- 0.01)
17	Boron (as B)	mg/l	IS 3025 (Part 2) : 2019	0.5	2.4	BDL (DL - 0.1)
18	Copper (as Cu)	mg/l	IS 3025 (Part 2) : 2019	0.05	1.5	BDL (DL - 0.03)
19	Cadmium (as Cd)	mg/l	IS 3025 (Part 2) : 2019	0.003	No relaxation	BDL (DL - 0.001)
20	Iron (as Fe)	mg/l	IS 3025 (Part 2) : 2019	1.0	No relaxation	0.01
21	Lead (as Pb)	mg/l	IS 3025 (Part 2) : 2019	0.01	No relaxation	BDL (DL - 0.001)
22	Manganese (as Mn)	mg/l	IS 3025 (Part 2) : 2019	0.1	0.3	BDL (DL - 0.05)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2) : 2019	0.02	No relaxation	BDL (DL - 0.01)
24	Selenium (as Se)	mg/l	IS 3025 (Part 56) : 2003	0.01	No relaxation	BDL (DL - 0.001)
25	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2) : 2019	0.05	No relaxation	BDL (DL - 0.03)
26	Zinc (as Zn)	mg/l	IS 3025 (Part 2) : 2019	5	15	BDL (DL - 0.1)

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REMARKS: As requested by the client, sample was tested for above parameters only. The submitted Sample complies with IS:10500:2012, for tests conducted, indicating that it is fit for drinking purpose with respect to tested parameters.

Verified By

*Mangesh Fande*  
Mangesh Fande  
Technical Manager

*Snehal Raut*  
Snehal Raut  
Deputy Technical Manager

-----END OF REPORT-----

Authorized Signatory

*Chandray Garway*  
Chandray Garway  
Deputy Quality Manager

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**Anacon Laboratories Pvt. Ltd. Nagpur Lab**

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☎ + 91 8045685558 ✉ Email : [info@anacon.in](mailto:info@anacon.in)

🌐 <https://www.anaconlaboratories.com>





भारत सरकार  
GOVERNMENT OF INDIA  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
MINISTRY OF ENVIRONMENT, FORESTS  
& CLIMATE CHANGE

**Annexure-H**  
Regional Office (WCZ)  
Ground Floor, East Wing  
New Secretariat Building  
Civil Lines, Nagpur - 440001  
E-mail: apccfcentral-ngp-mef@gov.in

F No:3-16/2015

Date: 05.02.2018

To,

Scientist 'E'  
IA Division (Coal Mining)  
Ministry of Environment, Forest & Climate Change  
Indira Paryavaran Bhawan,  
Aliganj, Jorbagh Road,  
New Delhi-110003

Sub: Environmental clearance granted for expansion of Bhatadi OC Expn. Project from 0.65 MTPA to 0.975 MTPA within existing ML area of 847.37 ha. of M/s. Western Coalfields Limited located at Chandrapur, Maharashtra

Ref:

1. Ministry of Environment, Forests & Climate Change letter no. J-11015/151/2014-IA-II(M) dated 19.03.2015

Sir,

I am directed to invite your kind attention on the above subject and letter under reference. Monitoring report of compliance to conditions stipulated in Environment Clearance accorded expansion of Bhatadi OC Expn. Project from 0.65 MTPA to 0.975 MTPA within existing ML area of 847.37 ha. of M/s. Western Coalfields Limited located at Chandrapur, Maharashtra is enclosed herewith. Site inspection has been carried out on 22.01.2018.

Ministry vide letter dated 19.03.2015 granted environmental clearance for the project for a production capacity of 0.975 MTPA over an area of 847.37 ha. Effluent treatment plant has been provided for the workshop. Sewage treatment plant for the colony is under construction.

Green belt has been developed over an area of 56.37 ha. with 182350 no.s of trees of different species. Plantation has been carried out on waste dumps, road side, near offices and colony. Environmental quality monitoring is being carried out regularly through CMPDIL, Nagpur, a NABL accredited Laboratory. An amount of Rs. 429.11 Lakhs have been spent on CSR works in the surrounding areas of the project. CSR activities included social empowerment, women empowerment and plantation. Compliance status of conditions stipulated in environmental clearance granted for the project found to be satisfactory.

This issues with the approval of APCCF(Central), Regional Office, Nagpur.

*A. Suresh Kumar*  
05/02/18  
Suresh Kumar Adapa  
Scientist 'D'

Encl: as above

Copy to:

1. Director RO HQ, Ministry of Environment, Forest & Climate Change, Government of India, 1st Floor Agni Wing, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi-110 003
2. Director (Monitoring Cell), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Aliganj, Jorbagh Road, New Delhi-110003
3. Sub Area Manager, Padmapur Sub Area, Office of the Area General Manager, Chandrapur Area, Near Mahakali Coliary, Post Babupeth, Chandrapur-442403
4. Guard file

*A-Suresh Kumar*  
Suresh Kumar Adapa  
Scientist 'D'

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The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL / Government

**ENVIRONMENTAL MONITORING REPORT**  
**w.r.t. HEAVY METALS IN AMBIENT AIR**  
**CHANDRAPUR AREA**

**WESTERN COALFIELDS LTD.**



**APRIL 2023 TO JUNE 2023**

**Environment Laboratory**  
**CMPDI**

REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

## **INDEX**

<b>Sl. No.</b>	<b>PARTICULARS</b>	<b>PAGE NO.</b>
<b>1</b>	<b>HEAVY METAL ANALYSIS REPORT</b>	<b>1 TO 19</b>

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Air quality monitoring data for heavy metals	<b>Ambient</b>
---	--	----------------

TEST REPORT NO.	RIN/TR/JUNE /HM37	DATE OF ISSUE	31-08-2023
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	CHANDRAPUR	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	BHATADI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

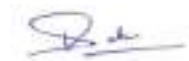
Sl No.	Name of location	Location Code	Date of sampling
1	BHATADI SECURITY POST	CBOA-1	01-04-2023
2	BHATADI MANAGER OFFICE	CBOA-2	01-04-2023
3	BHATADI VILLAGE	CBOA-3	01-04-2023
4	VADOLI VILLAGE	CBOA-4	02-04-2023

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value				National Ambient Air Quality Standard NAAQS, 2009
				CBOA-1	CBOA-2	CBOA-3	CBOA-4	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ (24 Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	0.0079	0.0071	BDL	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**
6	Mercury, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



SCIENTIFIC ASSISTANT


DEEPANSHU SAHU  
AUTHORIZED SIGNATORY

1	This Report refers to the values related to the items tested.
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3	** This parameter not regulated as per NAAQS

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b> Air quality monitoring data for heavy metals	<b>Ambient</b>
---	--	----------------

TEST REPORT NO.	RIN/TR/JUNE /HM41	DATE OF ISSUE	31-08-2023
NAME OF CUSTOMER	GM(ENV.),WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	AIR SAMPLE
TEST REQUIRED	Heavy metals (As, Pb, Ni, Cr & Cd ) in air samples (ASTM D 4185)		
NAME OF AREA	CHANDRAPUR	SAMPLING METHOD : LSOP 4	
NAME OF PROJECT	BHATADI OC	SAMPLING PLAN : LQR 47	
No. of Pages	1		

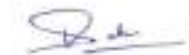
Sl No.	Name of location	Location Code	Date of sampling
1	CHP/MGR LOADING POINT	CBOF-1	15-04-2023
2	WEIGH BRIDGE	CBOF-2	15-04-2023
3	WORKSHOP	CBOF-3	15-04-2023

Sl. No.	Parameter	Method of analysis	Detection limit	Observed Value			National Ambient Air Quality Standard NAAQS, 2009
				CBOF-1	CBOF-2	CBOF-3	
1	Arsenic, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	0.006 $\mu\text{g}/\text{m}^3$ (Annual average)
2	Lead, $\mu\text{g}/\text{m}^3$	IS 5182 PART 22	7.0 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	1.0 $\mu\text{g}/\text{m}^3$ (24 Hourly average)
3	Nickle, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.007 $\mu\text{g}/\text{m}^3$	0.0081	0.0076	BDL	0.02 $\mu\text{g}/\text{m}^3$ (Annual average)
4	Total Chromium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0045 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
5	Cadmium, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0015 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**
6	Mercury, $\mu\text{g}/\text{m}^3$	ASTM D 4185	0.0007 $\mu\text{g}/\text{m}^3$	BDL	BDL	BDL	**

BDL: BELOW DETECTION LIMIT



SCIENTIFIC ASSISTANT


DEEPANSHU SAHU  
AUTHORIZED SIGNATORY

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WESTERN COALFIELDS LIMITED  
(A Subsidiary of Coal India Ltd.)  
OFFICE OF THE AREA GENERAL MANAGER  
Ph.No. (07172)-253325-25 Fax : (07172)-251882  
CHANDRAPUR (MS) - 442403

Ref.No. WCL/CHA/AGM/CMC/BOC/COAL/2020-21/W.O.No.6/602

DT. 26.12.2020

To

M/s.Sherawali Coal Carriers (Pvt.) Ltd.  
(Ex-Servicemen Agency)  
Regd. Off: 1062, street No.70, Devaram Park  
Trinagar, New Delhi-35

**Site Office:** Near Padmapur Weigh bridge  
**Padmapur**  
PO: Urja Naga,  
CHANDRAPUR (M.S.)

### WORK ORDER

Ref : 1) LOA NO:WCL/GM(CMC)/LOA/Ex-servicemen/2020-21/53 dated 23.12.2020.

Dear Sir,

With reference to the above LOA issued by GM(CMC), WCL, we are pleased to issue you this Work Order for the Coal transportation work as detailed below on the terms and conditions of MOU between DGR and CIL, as applicable to all transportation contract works to DGR sponsored Ex-servicemen Transport Companies.

Description of work	Quantity (in Te.)	Rate/Te. in Rs. and Paise (Excluding Goods & Service Tax)	Value of the work in Rs. (Excluding Goods & Service Tax)
<b>Job:</b> Transportation of ROM coal from coal stock yard, Heap No.1 & 4 of Bhatadi OC Mine to New CHP Crusher at Padmapur OCM via Excavation workshop weighbridge at Bhatadi OCM (for weighment), New Embankment Road, New coal transportation road behind Hanuman Mandir of Bhatadi village, New Erai South side Bridge, Padmapur coal stock heap no. 7, New Weigh Bridge at POCM (for re-weighment) by hiring of tippers, loaded by hired Pay loader & unloading, at receiving end / hopper of the New CHP at Padmapur OCM. <b>Lead slab:- 8 to 9 Km</b> Average daily quantity to be loaded & transported for job will be: 3000 Te.	5,40,000	Loading : 11.216 Transportation : 75.865 Total = 87.081	Rs.4,70,23,740.00
<b>Total value of the work (Excluding Goods &amp; Service Tax): Rs. 4,70,23,740.00</b> <b>(Total Rupees Four Crore Seventy Lakh Twenty Three Thousand Seven Hundred Forty Only)</b>			

The period of contract is 180 (One Hundred Eighty) days.

The actual date of commencement of the work is 24.12.2020 as certified by Mine Manager, Bhatadi OCM vide letter No.WCL/CHA/PSA/BOCM/MGR/741 Dtd.24.12.2020. The date of commencement of work will be reckoned from 24.12.2020 as actual date of commencement is earlier. Thus the date of completion will be on Dt.21.06.2021.

These rates are approved by Competent Authority for higher capacity tippers & communicated vide letter No. WCL/GM(CMC)/ESM/2020/253 Dt.10.07.2020 and the rates are effective from 09.07.2020. The rates are based on diesel price of Rs.77.71/ltr. as on 01.07.2020.

You will have to execute the work as per the terms and conditions prevailing as agreed upon unless otherwise instructed by the Sub Area Manager, Padmapur Sub Area who will be the Engineer-In-Charge for this work who is responsible for supervising and administering the contract as per terms and conditions of MOU between DGR and CIL and circular No.WCL/D(T)/secy/90/226 dated 23.01.2012 of D.T (Opn.).

### 1) SECURITY DEPOSITS-

A) As per MOU entered into the security deposit amount will be governed by the following clause:-

\*An Ex-servicemen Co. will be required to deposit 5% of annual work order value subject to a maximum of Rs.3.00 Lakhs as security deposit to the concerned coal subsidiary. This amount will be recovered by coal subsidiary in monthly installment at the rate of 3% of each running bill or of Rs.10,000/- per month whichever is more. However, total security amount will be recovered within maximum of 30 monthly installment. The first installment shall begin from fifth month of the commencement of work. However, if Ex-servicemen company desires, it may substitute the amount of three lakhs by a Bank Guarantee for the balance period in the format approved by the Company."

### 2) PENALTY CLAUSE-

In the event of the ESM Agency failure to comply with the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the date of completion of contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, shall become liable to pay for penalty as under :-

(a) If the average daily progress of work during the calendar month is less than the stipulated rate indicated in the detailed tender notice, penalty as detailed below will be levied:-

- (i) If the average daily progress of work executed during the calendar month is more than 80% and less than 100% of the stipulated rate of progress, penalty equal to 10% of the contract value of shortfall in work shall be levied.
- (ii) If the average daily progress of work executed during the calendar month is less than 80% of the stipulated rate, penalty equal to 20% of the contract value of the shortfall in work will be levied.
- (iii) The aggregate of the penalties levied shall not exceed 10% of the total contract value.

Penalties will be calculated every month and withheld. The contractor shall be allowed to make up the shortfall in the succeeding three months within the stipulated time of completion once the shortfall is fully made up, the so withheld penalty will be released.

### 3) PAYMENT OF BILLS

As per MOU between CIL and DGR, you shall submit Fortnightly running on account bills to Sub Area Manager, Padmapur Sub Area supported with receipt / challans for the measurement of work certified by the Official authorized by Sub Area Manager, Padmapur Sub Area. Bills for the work done shall be paid at the Area Finance Deptt., Chandrapur Area, in the following fortnight.

A certificate is to be endorsed by the unit that the required quantity of coal has been transported by contractor.

Paying Authority -- Area Finance Manager, Chandrapur Area.  
Income-tax shall be deducted at source as per Income-tax rules.

### 4) ESCALATION IN RATES

Escalation will be paid as per MOU entered with Ex-servicemen and the terms and condition decided by CMC, WCL HQ, Nagpur.

5) You shall submit your EFT No. to the Area Finance, Chandrapur Area for depositing your payment directly in your Bank account.

6) The onus of payment of goods and service tax for the job is on WCL as job is covered under GTA services.

### 7) STATUTORY OBLIGATION ON CONTRACTOR'S ACCOUNT

Statutory obligations for engagement of contract labour (to be on contractor's account) are to be specified as under:-

- Maintenance of Statutory records.
- Payment of workmen's compensation.
- Holding of License as required under statute.
- Compliance with the provisions of safety regulations
- provision of medicines/medical facilities to workmen to be engaged by the contractor
- Any other laws which may be applicable during tenure of contract or extension granted by the management.
- Any other items of special nature for a particular unit.

8) CONTRACTOR'S REPRESENTATION AT SITE.


- You shall depute your Agent/representative to be in charge of the work during the period of contract. The Agent/Representative shall receive instructions on the contractor's behalf from the Sub Area Manager, Padmapur Sub Area / Mine Manager, BOCM or any other official authorised by him for the purpose.
- 9) You shall comply with all the provisions of Contract Labour (Regulation & Abolition) Act, 1970 and rules framed there under. You shall have to obtain license from license granting authority as required under statute.
- 10) You should not engage contractual workers i.e. to say that he should employ his regular Employees as per MOU only against whom PF and other statutory deduction are made as a proof of being on his role.
- 11) You shall ensure that the driver engaged by him does not drive the vehicle at a Speed more than the speed limit as prescribed by the Manager/Agent for different parts of Colliery premises.
- 12) You shall be responsible for maintenance of attendance for persons engaged by him in different shifts in appropriate register and the same shall be produced for inspection as and when demanded by Manager/Agent or any other authorized person from Company Hqrs or DGMS.
- 13) You shall provide Photo Identity cards to all persons engaged by him and submit photocopies of the same in the Office of the Sub Area Manager, Padmapur Sub Area. All the workers will carry their Photo-identity Cards while on duty.
- 14) All workmen will be trained under mine vocational Training Rules, 1966.
- 15) Contractors will deposit Xerox copies of the driving license of the drivers to the Manager of the Mine.
- 16) You shall maintain the daily attendance register of his workmen and submit it to the Safety Officer of the Mine daily for checking.
- 17) You shall post supervisors to regulate the work at loading and unloading points.
- 18) You shall ensure that your workmen are engaged for maximum number of hours applicable as per Mines Rules. No worker should be engaged beyond the limit of working hours as stipulated in Mines Rules.
- 19) You will make payments to your workers by issuing cheque or by depositing their wages in their Saving Bank accounts in terms and conditions of the work award/agreement. The wages to be paid should be as per recommended HPC rates. It is further to be noted that all wage bills should contain the cheque No. and date.
- 20) You will nominate one competent person to check the brakes and lights of the vehicles and maintain register in this respect. This register shall be submitted to Colliery Engineer periodically for verification.
- 21) You shall be liable for prosecution for breach of any provision of the Mines act, C.M.R. or any other rules made under Mines act by him or his workers.
- 22) Temporary passes/Token to be issued to the contract labourers which may be collected back at the end of their working shift.
- 23) You are advised to submit an undertaking to the effect that, the particulars of labourers provided by you are correct and you would be responsible for their conduct inside the Area.
- 24) Tippers will be loaded up to the maximum limit permissible by the R.T.O. The coal transportation tippers should be made totally covered by leak proof tarpaulin properly secured.
- 25) All workmen will have to be undergone for initial/periodical medical examinations, the cost of IME/PME shall be borne by the contractor and only those persons found fit for working under IME/PME shall be employed by the contractor.
- 26) Electric supply may be provided to the contractor and payment of electricity charges will be made by the contractor as per the actual reading of the electric meter fitted at the site. No coal is to be issued to the contractor for domestic purpose.
- 27) RESPONSIBILITY OF THE CONTRACTOR:- Precautions shall be exercised at all times for the protection of persons (including employees) and property. The Safety required or recommendation by all applicable laws, codes, statutes and regulations will be observed. In case of accidents, the contractor shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force, and shall indemnify the company against any claim on this account.
- 28) All other terms and conditions as is applicable for works awarded to Ex-servicemen Agencies shall apply for the above work.

You should also follow the circular No.WCL/D(T)/secy/90/226 dated 23.01.2012 of D.T (Opr.), WCL & MOU between DGR & CIL.

Work order is being issued to you in duplicate. You are requested to return sign and sealed copy of the same to the undersigned as a token of your acceptance within seven days, along with non-judicial Stamp Paper worth Rs.500/- (2 Nos.) for execution of the Agreement.

This work order is issued with the approval of Competent Authority.

Yours faithfully

  
Area General Manager  
Chandrapur Area

Distribution:-

- General Manager (CMC), WCL, Nagpur
- General Manager (Vigilance), WCL, Nagpur
- General Manager (Oprn.), Chandrapur Area
- Staff Officer (Mining), Chandrapur Area
- Area Finance Manager, Chandrapur Area
- Area Personnel Manager, Chandrapur Area
- Area Sales Manager, Chandrapur Area
- Sub Area Manager, Padmapur Sub Area – He will be the Engineer-In-Charge for this work and will be responsible for supervising and administering the contract as per terms & conditions of MOU between DGR and CIL and circular No.WCL/D(T)/secy/90/226 dated 23.01.2012 of D.T (Opr.), WCL.
- Mine Manager, Bhatadi OCM
- Asstt. Labour Commissioner(Central), 1st Floor, Kamal Complex, Near Ambedkar College, Ramnagar, Chandrapur.

F.C. NO. RB/CHA/BOC/Coal Tr./23/36/2020-21 DTD 25.12.2020 for Rs. 1,50,00,000/- (Rupees One Crore Fifty Lakh only).

  
Area General Manager  
Chandrapur Area



# POLLUTION UNDER CONTROL CERTIFICATE

Issued By: CHANDRAPUR

Authorised by Motor Vehicles Department, Maharashtra



TEST RESULT : PASS

VALID TILL: 27/Feb/2021

Certificate SL No.: MH03400090001518  
Registration No.: **MH34AB3726**  
Chassis No.: MAT447212B3H24655  
Engine No.: B591803111H63176393  
Class of Vehicle: Articulated Vehicle  
Make: TATA MOTORS LTD  
Model: LPS4018TC  
Vehicle Category: HEAVY GOODS VEHICLE  
Date of Registration: 09/Dec/2011  
Emission Norms: BHARAT STAGE III  
Fuel: DIESEL  
Date of Testing: 28/Aug/2020



DIESEL DRIVEN VEHICLES  
Certified that the vehicle conforms to the standards  
prescribed under rule 115(2) of CMV Rules 1989

FUEL	Light Absorption Coefficient (Permissible Limit)	Measured Value
DIESEL	2.45	0.59667

Time of Testing: 14:51:41  
Fee Charged: Rs.110.0  
Fee Charged: (one hundred ten rupees only)

Auto Emission Testing Centre Code: MH0340009  
Testing Centre Name: SHRI  
GURUDATTA PUC CENTRE  
Centre Address: KESHARINANDAN  
NAGAR TADoba RD DURGAPUR  
CHANDRAPUR, KESHARINANDAN  
NAGAR TADoba RD DURGAPUR  
CHANDRAPUR, 440404  
Test Conducted By: ATUL W MAWALE



## TEST RESULT FOR DIESEL VEHICLE

	IDLE RPM	MAX RPM	K VALUE	OIL TEMP
TEST 1	795.0	2202.0	0.08	255.0
TEST 2	804.0	2233.0	0.77	255.0
TEST 3	804.0	2221.0	0.94	255.0
AVG	801.33334	2218.66667	0.59667	255.0

This is a computer generated certificate and does not require signature  
Fuel Norms entered by PUC center MH0340009 manually. Please visit RTO and correct norms

Shri Gurudatta PVC Center  
Tadoba Road, Mejer Gate  
Chandrapur Mob.7507713163



# POLLUTION UNDER CONTROL CERTIFICATE

Issued By: CHANDRAPUR  
Authorised by Motor Vehicles Department, Maharashtra



TEST RESULT : PASS  
VALID TILL: 27/Feb/2021

Certificate No.: MH03400090001515  
Registration No.: MH34AB3724  
Chassis No.: MAT447212B3GZ0976  
Engine No.: B591803111G63158963  
Class of Vehicle: Articulated Vehicle  
Make: TATA MOTORS LTD  
Model: LPS401B TC  
Vehicle Category: HEAVY GOODS VEHICLE  
Date of Registration: 09/Dec/2011  
Emission Norms: BHARAT STAGE III  
Fuel: DIESEL  
Date of Testing: 28/Aug/2020



DIESEL DRIVEN VEHICLES  
Certified that the vehicle conforms to the standards  
prescribed under rule 115(2) of CMV Rules 1989

FUEL	Light Absorption Coefficient (Permissible Limit)	Measured Value
DIESEL	2.45	0.88

Time of Testing: 13:48:16  
Fee Charged: Rs.110.0  
Fee Charged: (one hundred ten rupees only)

Auto Emission Testing Centre Code: MH0340009  
Testing Centre Name: SHRI  
GURUDATTA PUC CENTRE  
Centre Address: KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, 440404  
Test Conducted By: ATUL W MAWALE



## TEST RESULT FOR DIESEL VEHICLE

	IDLE RPM	MAX RPM	K VALUE	OIL TEMP
TEST 1	840.0	2151.0	0.17	255.0
TEST 2	836.0	2089.0	0.99	255.0
TEST 3	831.0	2129.0	1.48	255.0
AVG	835.66667	2123.0	0.88	255.0

This is a computer generated certificate and does not require signature  
Fuel Norms entered by PUC center MH0340009 manually, Please visit RTO and correct norms



# POLLUTION UNDER CONTROL CERTIFICATE

Issued By: CHANDRAPUR

Authorised by Motor Vehicles Department, Maharashtra



TEST RESULT : PASS  
VALID TILL: 12/Aug/2021

Certificate SI No.: MH03400090001399  
Registration No.: MH34BG2321  
Chassis No.: MAT54106113C08392  
Engine No.: ISBE5.91804081C63676728  
Class of Vehicle: Goods Carrier  
Make: TATA MOTORS LTD  
Model: 50395668000RBT01  
Vehicle Category: HEAVY GOODS VEHICLE  
Date of Registration: 29/May/2018  
Emission Norms: BHARAT STAGE IV  
Fuel: DIESEL  
Date of Testing: 13/Aug/2020



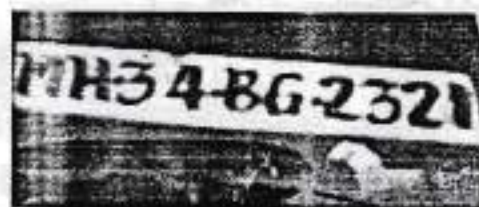
DIESEL DRIVEN VEHICLES  
Certified that the vehicle conforms to the standards  
prescribed under rule 115(2) of CMV Rules 1989

FUEL	Light Absorption Coefficient (Permissible Limit)	Measured Value
DIESEL	1.62	1.36

Time of Testing: 10:21:25  
Fee Charged: Rs.110.0  
Fee Charged: (one hundred ten rupees only)

Auto Emission Testing Centre Code:  
MH0340009

Testing Centre Name: SHRI  
GURUDATTA PVC CENTRE  
Centre Address: KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, 440404  
Test Conducted By: ATUL W MAWALE



## TEST RESULT FOR DIESEL VEHICLE

	IDLE RPM	MAX RPM	K VALUE	OIL TEMP
TEST 1	826.0	2536.0	0.78	255.0
TEST 2	813.0	2506.0	1.56	255.0
TEST 3	813.0	2491.0	1.74	255.0
AVG	817.33334	2511.0	1.36	255.0

This is a computer generated certificate and does not require signature

Shri Gurudatta PVC Center  
Tadoba Road, Mejer Gate  
Chandrapur Mob.7507713166



**POLLUTION UNDER CONTROL CERTIFICATE**  
Issued By: CHANDRAPUR  
Authorised by Motor Vehicles Department, Maharashtra



**TEST RESULT : PASS**  
**VALID TILL: 27/Feb/2021**

Certificate No.: MH03400090001520  
Registration No.: MH34AB3728  
Chassis No.: MAT447212B3H24743  
Engine No.: B591803111H63176423  
Class of Vehicle: Articulated Vehicle  
Make: TATA MOTORS LTD  
Model: LP54018TC  
Vehicle Category: HEAVY GOODS VEHICLE  
Date of Registration: 09/Dec/2011  
Emission Norms: BHARAT STAGE III  
Fuel: DIESEL  
Date of Testing: 28/Aug/2020



**DIESEL DRIVEN VEHICLES**  
Certified that the vehicle conforms to the standards  
prescribed under rule 115(2) of CMV Rules 1989

FUEL	Light Absorption Coefficient (Permissible Limit)	Measured Value
DIESEL	2.45	0.73

Time of Testing: 14:57:37  
Fee Charged: Rs.110.0  
Fee Charged: (one hundred ten  
rupees only)

Auto Emission Testing Centre Code:  
MH0340009  
Testing Centre Name: SHRI  
GURUDATTA PUC CENTRE  
Centre Address: KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, KESHARINANDAN  
NAGAR TADODA RD DURGAPUR  
CHANDRAPUR, 440404  
Test Conducted By: ATUL W MAWALE



**TEST RESULT FOR DIESEL VEHICLE**

	IDLE RPM	MAX RPM	K VALUE	OIL TEMP
TEST 1	795.0	2512.0	0.31	255.0
TEST 2	800.0	2609.0	0.92	255.0
TEST 3	800.0	2441.0	0.96	255.0
AVG	798.33334	2520.66667	0.73	255.0

This is a computer generated certificate and does not require signature  
Fuel Norms entered by PUC center MH0340009 manually, Please visit RTO and correct norms

**Shri Gurudatta PVC Center**  
**Tadoba Road, Mejer Gate**  
**Chandrapur Mob.7507713165**

Email

Area Nodal Officer

**Surface Water Monitoring & Drinking Water Monitoring Reports for Q.E. September-2023 w.r.t. WCL-Chandrapur area.**

**From :** Area Nodal Officer <anoenv.cha@coalindia.in> Sun, Oct 29, 2023 03:55 PM  
**Subject :** Surface Water Monitoring & Drinking Water Monitoring Reports for Q.E. September-2023 w.r.t. WCL-Chandrapur area. 3 attachments  
**To :** ms <ms@mpcb.gov.in>, Dr. V. M. Motghare <jdair@mpcb.gov.in>, rochandrapur <rochandrapur@mpcb.gov.in>, SRO Chandrapur <srochandrapur@mpcb.gov.in>, EC Compliance Maharashtra <ecompliance-mh@gov.in>  
**Cc :** GM ENVIRONMENT and FOREST, HOD <gmenvironment.wcl@coalindia.in>

Dear Sir,

Please find attached herewith, Surface Water Monitoring & Drinking Water Monitoring Reports for Q.E. September-2023 w.r.t. WCL-Chandrapur area.

This is for your kind information.

**Regards,**

Area Nodal Officer (Environment)  
WCL, Chandrapur Area



**G20 Logo.jpg**  
29 KB

 **Surface Water Monitoring Report Q.E. Sept. 2023 (WCL-CHA).pdf**  
526 KB

 **Drinking Water Monitoring Report Q.E. Sept. 2023 (WCL-CHA).pdf**  
608 KB

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to any person not holding an official position in the CIL /  
Government

## **SURFACE WATER MONITORING REPORT**

# **CHANDRAPUR AREA**

**WESTERN COALFIELDS LTD.**


JOB NO.4634420034



**QE-SEPTEMBER 2023**

**Environment Laboratory**  
**NABL Accredited vide Cert. No. TC-7102**  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY


<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Surface water quality monitoring data</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/SEPT-23/SW15	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	CHANDRAPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	BHATADI OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	1		


NAME OF LOCATION: UP STREAM OF ERAI RIVER W.R.T. MINE DISCHARGE				SAMPLING DATE:	17-07-2023
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	
1	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.28	
2	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	
3	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	250	
4	Oil & Grease - mg/l	IS 3025 (Part 39): 1991 (RA 2003) Partition gravimetric Method	2	BDL	
5	Dissolved Oxygen - mg/l	IS 3025 (Part-38):1989 (RA 2003) Winkler Azide Method	0.1	4.9	
6	B.O.D. (3 days at 27°C) - mg/l	IS 3025 Part 44 : 1993 (RA 2014)	2	5.4	
7	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	
8	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	
9	Hexavalent Chromium -mg/l	APHA, 23rd Edition 3500-Cr B Colorimetric Method: 2017	0.01	BDL	
10	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	
11	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	
12	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	
13	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	
14	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.13	
15	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	
16	Nitrate Nitrogen - mg/l	APHA, 23rd Edition 4500-NO <sup>3</sup> B UV Spectrophotometric Method: 2017	0.5	0.51	
17	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	41.6	
18	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	20	

BDL: BELOW DETECTION LIMIT

  
 SCIENTIFIC ASSISTANT

  
 DEEPANSHU SAHU  
 AUTHORIZED SIGNATORY

- |   |  |
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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report Surface water quality monitoring data</b>	 TC-7182
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TEST REPORT NO.	RIN/TR/SEPT-23/SW16	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	CHANDRAPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	BHATADI OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	1		

NAME OF LOCATION: DOWN STREAM OF ERAI RIVER W.R.T. MINE DISCHARGE				SAMPLING DATE:	17-07-2023
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	
1	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.21	
2	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	3	
3	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	260	
4	Oil & Grease - mg/l	IS 3025 (Part 39): 1991 (RA 2003) Partition gravimetric Method	2	BDL	
5	Dissolved Oxygen - mg/l	IS 3025 (Part-38):1989 (RA 2003) Winkler Azide Method	0.1	4.7	
6	B.O.D. (3 days at 27°C) - mg/l	IS 3025 Part 44 : 1993 (RA 2014)	2	8.4	
7	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	
8	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	
9	Hexavalent Chromium -mg/l	APHA, 23rd Edition 3500-Cr B Colorimetric Method: 2017	0.01	BDL	
10	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	
11	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	
12	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	
13	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	
14	Fluoride (as F <sup>-</sup> ) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.44	
15	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	
16	Nitrate Nitrogen - mg/l	APHA, 23rd Edition 4500-NO <sup>3</sup> B UV Spectrophotometric Method: 2017	0.5	0.63	
17	Sulphate (as SO <sub>4</sub> <sup>-2</sup> ) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	47.9	
18	Chlorides (as Cl <sup>-</sup> ) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	22	

BDL: BELOW DETECTION LIMIT

  
 SCIENTIFIC ASSISTANT

  
 DEEPANSHU SAHU  
 AUTHORIZED SIGNATORY

- |   |  |
|---|--|
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**Land Restoration / Reclamation Monitoring of less than 5 million  
Cu. M. (Coal+OB) Capacity Opencast Coal Mines of Western  
Coalfields Limited based on Satellite Data for the Year 2020**



*Submitted to*  
**WESTERN COALFIELDS LIMITED**



*cmpdi*  
*A Mini Ratna Company*

**Land Restoration / Reclamation Monitoring of less than 5 million  
Cu. M. (Coal+OB) Capacity Opencast Coal Mines of Western  
Coalfields Limited based on Satellite Data for the Year 2020**

***March-2021***



**Remote Sensing Cell  
Geomatics Division  
CMPDI, Ranchi**

**Table-1**  
**Projectwise Land Reclamation Status in Opencast Projects of WCL**  
 (<5 Million cu. M coal+OB) based on Satellite Data of the year 2020-21)

(Area in Ha)

Sl.No	Project	Total Leasehold Area		Technical Reclamation		Plantation						Area under Active Mining		Total Excavated Area		Total Area under Plantation (% Green Cover Generated in Leasehold)		Total Area under Reclamation	
						Biological Reclamation		Other Plantations											
				Area under Backfilling		Plantation on Excavated / Backfilled Area		Plantation on External Over Burden Dumps		Social Forestry, Avaneue Plantation Etc.									
1	2	3		4		5		6		7		8		9 (=4+5+8)		10 (=5+6+7)		11(=4+5)	
		2017	2020	2017	2020	2017	2020	2017	2020	2017	2020	2017	2020	2017	2020	2017	2020	2017	2020
1	Kolegaon	349.00	397.52	0.00	0.00	0.00	0.00	37.41	72.83	22.23	25.63	39.26	48.03	39.26	48.03	59.64	98.46	0.00	0.00
				0.00%	0.00%	0.00%	0.00%					100.00%	100.00%			17.09%	24.77%	0.00%	0.00%
2	Bellora-Naigaon	398.66	664.80	8.81	53.02	9.81	12.75	21.87	35.62	28.94	28.94	122.24	91.53	140.86	157.30	60.62	77.31	18.62	65.77
				6.25%	33.71%	6.96%	8.11%					86.78%	58.19%			15.21%	11.63%	13.22%	41.81%
3	Ghonsa	278.68	278.68	0.00	7.28	0.00	0.00	2.10	2.55	4.65	4.65	46.87	60.29	46.87	67.57	6.75	7.20	0.00	7.28
				0.00%	10.77%	0.00%	0.00%					100.00%	89.23%			2.42%	2.58%	0.00%	10.77%
4	Ballarpur	549.64	242.64	67.87	80.79	12.99	15.00	67.73	69.49	14.03	9.74	30.12	17.47	110.98	113.26	94.75	94.23	80.86	95.79
				61.16%	71.33%	11.70%	13.24%					27.14%	15.42%			17.24%	38.84%	72.86%	84.58%
5	Junad EXTN	420.97	449.63	34.51	34.51	2.45	2.46	36.14	65.57	26.86	28.81	56.54	61.54	93.50	98.51	65.45	96.84	36.96	36.97
				36.91%	35.03%	2.62%	2.50%					60.47%	62.47%			15.55%	21.54%	39.53%	37.53%
6	Urdhan	315.00	315.00	0.00	2.36	0.00	0.00	3.34	5.79	0.00	6.87	21.46	19.45	21.46	21.81	3.34	12.66	0.00	2.36
				0.00%	10.82%	0.00%	0.00%					100.00%	89.18%			1.06%	4.02%	0.00%	10.82%
7	Telwasa	271.91	271.91	44.61	101.67	4.68	4.68	34.20	50.71	23.62	23.62	69.64	12.58	118.93	118.93	62.50	79.01	49.29	106.35
				37.51%	85.49%	3.94%	3.94%					58.56%	10.58%			22.99%	29.06%	41.44%	89.42%
8	Gouri Expn(A)	676.53	676.53	106.57	106.53	28.56	29.20	118.61	150.98	96.11	96.21	86.60	95.57	221.73	231.30	243.28	276.39	135.13	135.73
				48.06%	46.06%	12.88%	12.62%					39.06%	41.32%			35.96%	40.85%	60.94%	58.68%
9	Bhatadi	838.14	847.37	21.27	21.94	0.00	0.00	13.28	30.86	45.63	46.12	56.52	71.92	77.79	93.86	58.91	76.98	21.27	21.94
				27.34%	23.38%	0.00%	0.00%					72.66%	76.62%			7.03%	9.08%	27.34%	23.38%
10	Gondegaon	917.00	791.40	32.88	42.29	0.00	0.00	52.00	73.47	84.03	62.15	101.71	157.19	134.59	199.48	136.03	135.62	32.88	42.29
				24.43%	21.20%	0.00%	0.00%					75.57%	78.80%			14.83%	17.14%	24.43%	21.20%
11	Kolarpimpri	1484.97	1488.42	7.54	10.71	1.86	4.02	83.36	115.55	7.74	8.21	137.70	140.37	147.10	155.10	92.96	127.78	9.40	14.73
				5.13%	6.91%	1.26%	2.59%					93.61%	90.50%			6.26%	8.58%	6.39%	9.50%
12	Chhinda	106.68	106.68	0.00	0.00	0.00	0.00	20.44	20.44	2.80	2.87	22.78	23.29	22.78	23.29	23.24	23.31	0.00	0.00
				0.00%	0.00%	0.00%	0.00%					100.00%	100.00%			21.78%	21.85%	0.00%	0.00%
13	Gouri deep	356.11	339.10	0.00	0.00	0.00	0.00	0.00	0.00	6.19	8.00	44.29	51.04	44.29	51.04	6.19	8.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%					100.00%	100.00%			1.74%	2.36%	0.00%	0.00%
14	Juna-Kunada	325.87	325.87	13.25	23.92	0.00	0.00	35.98	66.18	43.71	42.20	41.90	62.84	55.15	86.76	79.69	108.38	13.25	23.92
				24.03%	27.57%	0.00%	0.00%					75.97%	72.43%			24.45%	33.26%	24.03%	27.57%
15	*Adasa UG to OC	564.40	564.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.00	0.00	0.00	0.00	0.00	8.48	0.00	0.00
				0.00%	0.00%	0.00%	0.00%					0.00%	0.00%			0.00%	1.50%	0.00%	0.00%
	TOTAL	7289.16	7759.95	337.31	485.02	60.35	68.11	526.46	760.04	406.54	402.50	877.63	913.11	1275.29	1466.24	993.35	1230.65	397.66	553.13
				26.45%	33.08%	4.73%	4.65%					68.82%	62.27%	17.50%	18.89%	13.63%	15.86%	31.18%	37.72%

(% is calculated with respected to Excavated Area as applicable)

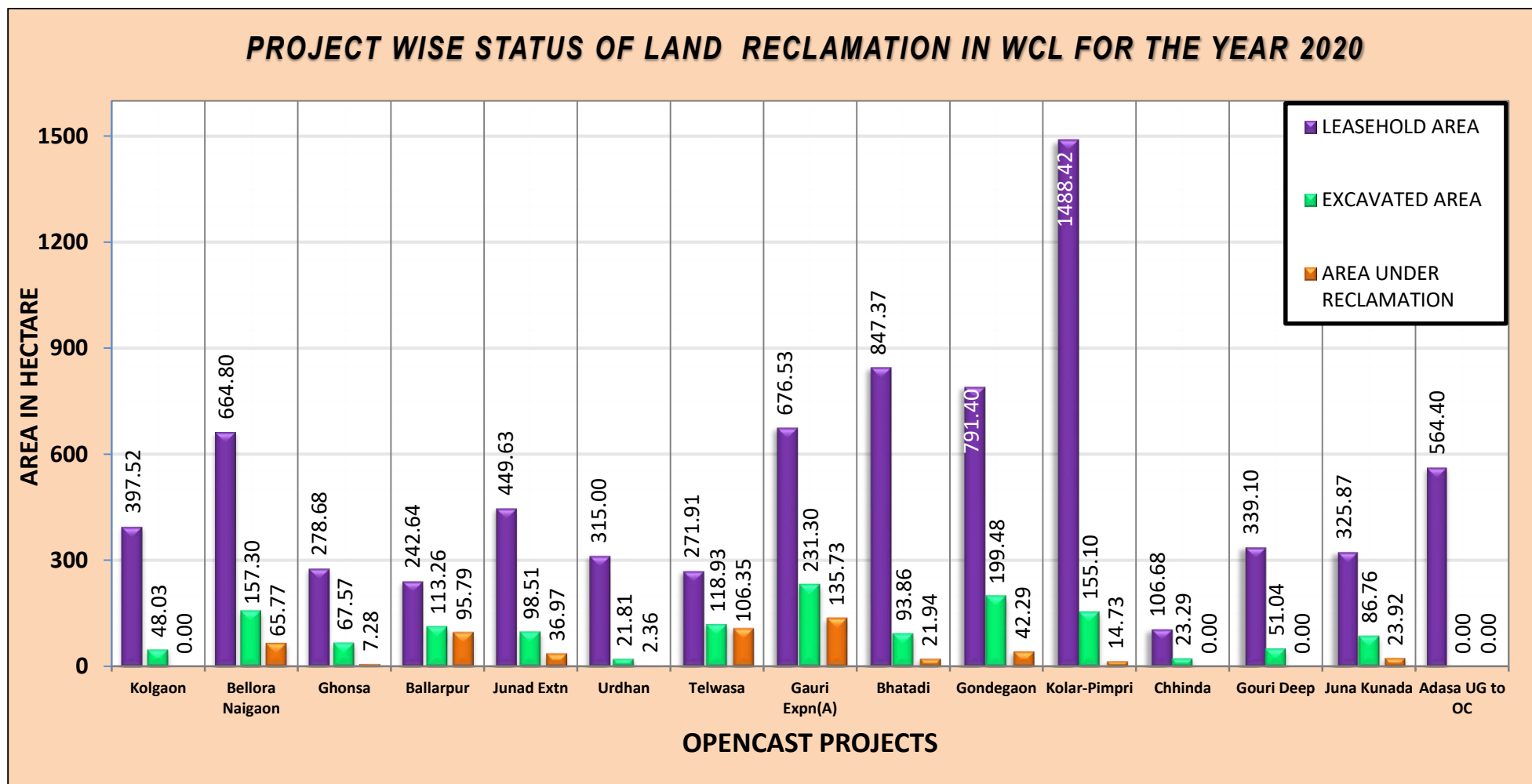
\* Land Reclamation of Adasa UG to OC has been included for Land reclamation monitoring in the year 2020-21 on request of WCL.

Leasehold boundary of Kolegaon ,Ballarpur ,Junad Extn ,Bhatadi ,Gondegaon and,Kolarpimpri OC mine have been modified as per latest EC Boundary.

Leasehold boundary of Project like bellora-Naigaon and Gauri Deep OC is as per keyplan provided by area .

**Note : In reference of the above Table-1, different parameters are classified as follows**

- Area under Biological Reclamation includes area under plantation done on backfilled area only.
- Area under Technical Reclamation includes areas under barren backfill only.
- Area under Active Mining includes coal quarry, advance quarry & quarry filled with water etc.
- Social forestry and plantation on external OB dump are not included in biological reclamation and are put under other plantation.
- % claculated in respect to total excavated area except for "Total area under plantation" where % has been calculated in terms of leasehold area.



**Fig.1: Land Reclamation Status in OC projects producing less than 5mcm (Coal +OB) of WCL in the Year 2020**

TABLE 2: STATUS OF LAND USE/RECLAMATION IN OC MINES (&lt;5MCU.M) OF WESTERNCOALFIELD LTD BASED ON SATELLITE DATA OF THE YEAR 2020

Area in Ha

		Kolgaon		Bellora-Naigaon		Ghonsa		Ballarpur		Junad Extn		Urdhan		Telwasa		Gouri Expn(A)		Bhatadi		Gondegaon		Kolar-Pimpri		Chhinda		Gouri Deep		Juna Kunada		Adasa UG to OC		Total	
FORESTS		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
	Dense Forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Open Forest	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Forest		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SCRUBS	Scrubs	54.23	13.64	63.16	9.50	61.00	21.89	2.47	1.02	27.48	6.11	29.02	9.21	2.32	0.85	18.64	2.76	87.40	10.31	46.43	5.87	242.03	16.26	9.98	9.36	39.90	11.77	11.25	3.45	129.60	22.96	824.91	10.63
	Total Scrubs	54.23	13.64	63.16	9.50	61.00	21.89	2.47	1.02	27.48	6.11	29.02	9.21	2.32	0.85	18.64	2.76	87.40	10.31	46.43	5.87	242.03	16.26	9.98	9.36	39.90	11.77	11.25	3.45	129.60	22.96	824.91	10.63
PLANTATION	Social Forestry	25.63	6.45	28.94	4.35	4.65	1.67	9.74	4.01	28.81	6.41	6.87	2.18	23.62	8.69	96.21	14.22	46.12	5.44	62.15	7.85	8.21	0.55	2.87	2.69	8.00	2.36	42.20	12.95	8.48	1.50	402.50	5.19
	Total Social Forest	25.63	6.45	28.94	4.35	4.65	1.67	9.74	4.01	28.81	6.41	6.87	2.18	23.62	8.69	96.21	14.22	46.12	5.44	62.15	7.85	8.21	0.55	2.87	2.69	8.00	2.36	42.20	12.95	8.48	1.50	402.50	5.19
	Plantation on OB Dump	72.83	18.32	35.62	5.36	2.55	0.92	69.49	28.64	65.57	14.58	5.79	1.84	50.71	18.65	150.98	22.32	30.86	3.64	73.47	9.28	115.55	7.76	20.44	19.16	0.00	0.00	66.18	20.31	0.00	0.00	760.04	9.79
	Total Plantation on OB Dump	72.83	18.32	35.62	5.36	2.55	0.92	69.49	28.64	65.57	14.58	5.79	1.84	50.71	18.65	150.98	22.32	30.86	3.64	73.47	9.28	115.55	7.76	20.44	19.16	0.00	0.00	66.18	20.31	0.00	0.00	760.04	9.79
	Plantation on Backfill	0.00	0.00	12.75	1.92	0.00	0.00	15.00	6.18	2.46	0.55	0.00	0.00	4.68	1.72	29.20	4.32	0.00	0.00	0.00	0.00	4.02	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.11	0.88
	Total Plantation on backfill (Biological Reclamation)	0.00	0.00	12.75	1.92	0.00	0.00	15.00	6.18	2.46	0.55	0.00	0.00	4.68	1.72	29.20	4.32	0.00	0.00	0.00	0.00	4.02	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.11	0.88
	Total Green Cover generated	98.46	24.77	77.31	11.63	7.20	2.59	94.23	38.83	96.84	21.54	12.66	4.02	79.01	29.06	276.39	40.86	76.98	9.08	135.62	17.13	127.78	8.58	23.31	21.85	8.00	2.36	108.38	33.26	8.48	1.50	1230.65	15.86
Total Vegetation		152.69	38.41	140.47	21.13	68.20	24.48	96.70	39.85	124.32	27.65	41.68	13.23	81.33	29.91	295.03	43.62	164.38	19.39	182.05	23.00	369.81	24.84	33.29	31.21	47.90	14.13	119.63	36.71	138.08	24.46	2055.56	26.49
ACTIVE MINING	Coal Quarry	40.87	10.28	72.28	10.87	50.89	18.26	16.73	6.89	60.22	13.39	12.12	3.85	1.84	0.68	75.01	11.09	71.40	8.43	150.76	19.05	100.35	6.74	16.28	15.26	43.62	12.86	51.12	15.69	0.00	0.00	763.49	9.84
	Advance Quarry Site	5.64	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.02	1.78	0.00	0.00	0.00	0.00	11.66	0.15
	Quarry Filled With Water	1.52	0.38	19.25	2.89	9.40	3.37	0.74	0.30	1.32	0.29	7.33	2.33	10.74	3.95	20.56	3.04	0.52	0.06	6.43	0.81	40.02	2.69	7.01	6.57	1.40	0.41	11.72	3.60	0.00	0.00	137.96	1.78
	Coal Dump	3.66	0.92	5.96	0.90	3.17	1.14	5.40	2.23	2.26	0.50	5.10	1.62	2.57	0.95	1.33	0.20	6.87	0.81	5.14	0.65	3.68	0.25	0.31	0.29	3.90	1.15	2.70	0.83	0.00	0.00	52.05	0.67
	Total Area under Active Mining	51.69	13.00	97.49	14.66	63.46	22.77	22.87	9.42	63.80	14.18	24.55	7.80	15.15	5.58	96.90	14.33	78.79	9.30	162.33	20.51	144.05	9.68	23.60	22.12	54.94	16.20	65.54	20.12	0.00	0.00	965.16	12.44
	Barren OB Dump	77.74	19.56	90.35	13.59	23.50	8.43	22.24	9.17	124.27	27.64	64.91	20.61	51.09	18.79	98.71	14.59	159.34	18.80	179.07	22.63	263.42	17.70	22.50	21.09	96.76	28.53	77.51	23.79	0.00	0.00	1351.41	17.42
	Barren Backfilled Area	0.00	0.00	53.02	7.98	7.28	2.61	80.79	33.30	34.51	7.68	2.36	0.75	101.67	37.39	106.53	15.75	21.94	2.59	42.29	5.34	10.71	0.72	0.00	0.00	0.00	0.00	23.92	7.34	0.00	0.00	485.02	6.25
	Total Area under backfill(Technical Reclamation)	0.00	0.00	53.02	7.98	7.28	2.61	80.79	33.30	34.51	7.68	2.36	0.75	101.67	37.39	106.53	15.75	21.94	2.59	42.29	5.34	10.71	0.72	0.00	0.00	0.00	0.00	23.92	7.34	0.00	0.00	485.02	6.25
Total Area Under Mine Operation		129.43	32.56	240.86	36.23	94.24	33.81	125.90	51.89	222.58	49.50	91.82	29.16	167.91	61.76	302.14	44.67	260.07	30.69	383.69	48.48	418.18	28.10	46.10	43.21	151.70	44.73	166.97	51.25	0.00	0.00	2801.59	36.11
WATERBODIES/WASTELANDS	Waste Lands	61.95	15.58	17.33	2.61	49.53	17.77	9.89	4.08	31.52	7.01	47.96	15.23	9.00	3.31	30.44	4.50	74.75	8.82	49.50	6.25	59.85	4.02	0.75	0.70	10.98	3.24	28.16	8.64	18.45	3.27	500.06	6.44
	Fly Ash Pond / Sand Body	3.85	0.97	5.19	0.78	0.00	0.00	2.81	1.15	3.53	0.79	0.00	0.00	1.55	0.57	12.54	1.85	5.09	0.60	1.39	0.18	3.07	0.21	0.24	0.22	0.24	0.07	1.24	0.38	3.76	0.67	44.50	0.57
Total Wasteland		65.80	16.55	22.52	3.39	49.53	17.77	12.70	5.23	35.05	7.80	47.96	15.23	10.55	3.88	42.98	6.35	79.84	9.42	50.89	6.43	62.92	4.23	0.99	0.92	11.22	3.31	29.40	9.02	22.21	3.94	544.56	7.01
WATERBODIES	Reservoir, nallah, ponds	2.31	0.58	2.16	0.32	0.31	0.10	2.41	1.00	7.55	1.69	0.00	0.00	6.97	2.55	5.01	0.73	15.21	1.80	0.00	0.00	2.26	0.14	0.19	0.18	2.91	0.86	8.50	2.61	7.80	1.38	63.59	0.82
	Total Waterbodies	2.31	0.58	2.16	0.32	0.31	0.10	2.41	1.00	7.55	1.69	0.00	0.00	6.97	2.55	5.01	0.73	15.21	1.80	0.00	0.00	2.26	0.14	0.19	0.18	2.91	0.86	8.50	2.61	7.80	1.38	63.59	0.82
AGRICULTURE	Crop Lands	0.00	0.00	55.51	8.35	0.00	0.00	0.00	0.00	0.00	0.00	28.47	9.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.47	4.20	11.54	10.82	8.41	2.48	0.00	0.00	99.68	17.67	266.08	3.43
	Fallow Lands	44.60	11.22	202.95	30.53	65.62	23.55	2.96	1.22	57.73	12.84	101.93	32.36	3.61	1.33	28.81	4.26	321.09	37.89	168.87	21.34	557.02	37.42	13.54	12.70	115.77	34.14	0.00	0.00	289.45	51.28	1973.95	25.44
	Total Agriculture	44.60	11.22	258.46	38.88	65.62	23.55	2.96	1.22	57.73	12.84	130.40	41.40	3.61	1.33	28.81	4.26	321.09	37.89	168.87	21.34	619.49	41.62	25.08	23.52	124.18	36.62	0.00	0.00	389.13	68.95	2240.03	28.87
SETTLEMENTS	Urban Settlement	0.96	0.24	0.33	0.05	0.08	0.03	1.02	0.42	0.77	0.17	0.92	0.28	0.76	0.28	0.62	0.09	1.56	0.19	4.32	0.55	0.27	0.03	1.03	0.96	0.53	0.16	1.23	0.37	3.86	0.68	18.26	0.23
	Rural Settlement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.13	1.67	0.53	0.00	0.00	0.00	0.00	3.71	0.44	0.00	0.00	6.01	0.40	0.00	0.00	0.00	0.00	0.00	0.00	2.81	0.50	14.78	0.19
	Industrial Settlement	1.73	0.44	0.00	0.00	0.70	0.26	0.95																									

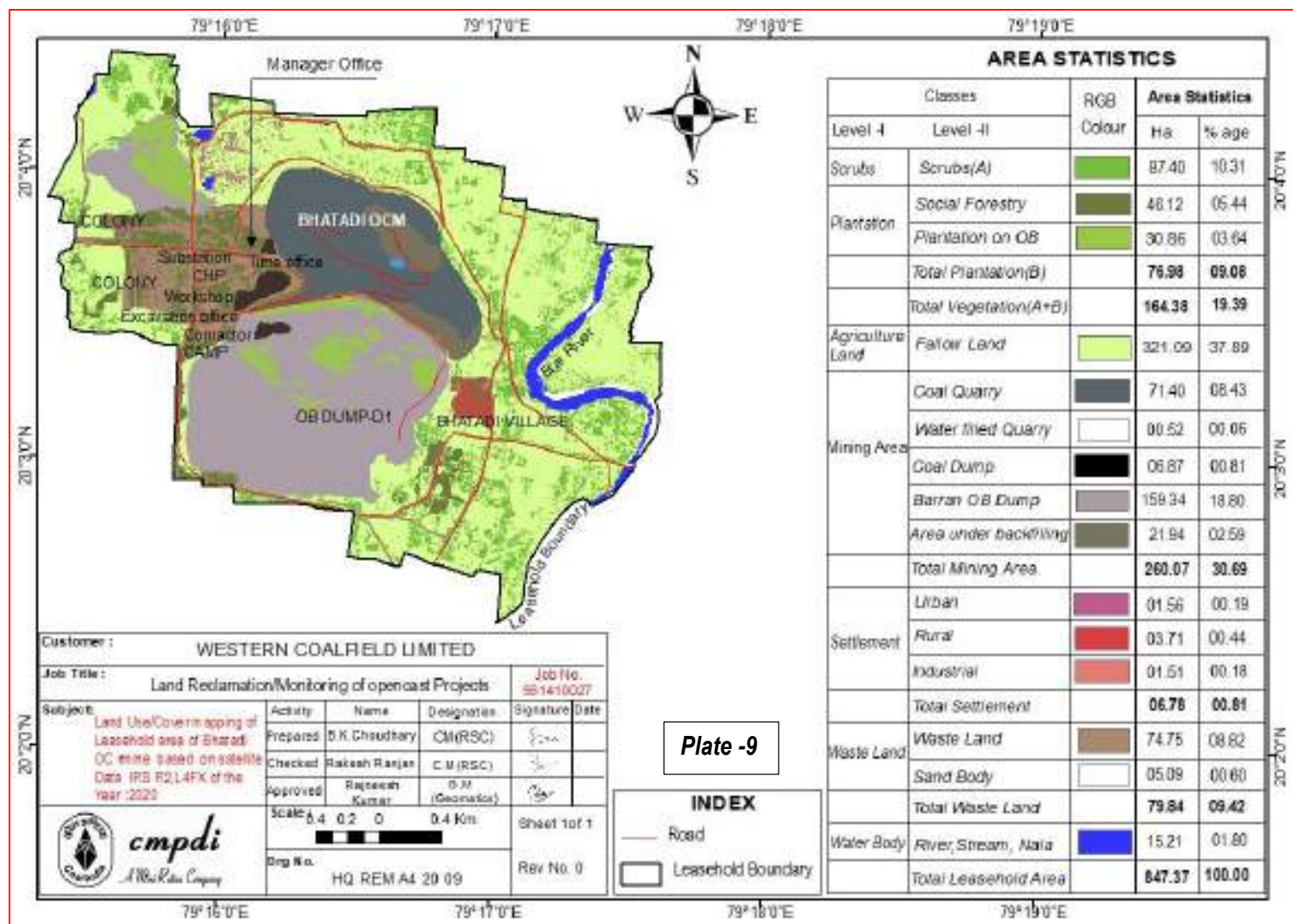


Plate -9

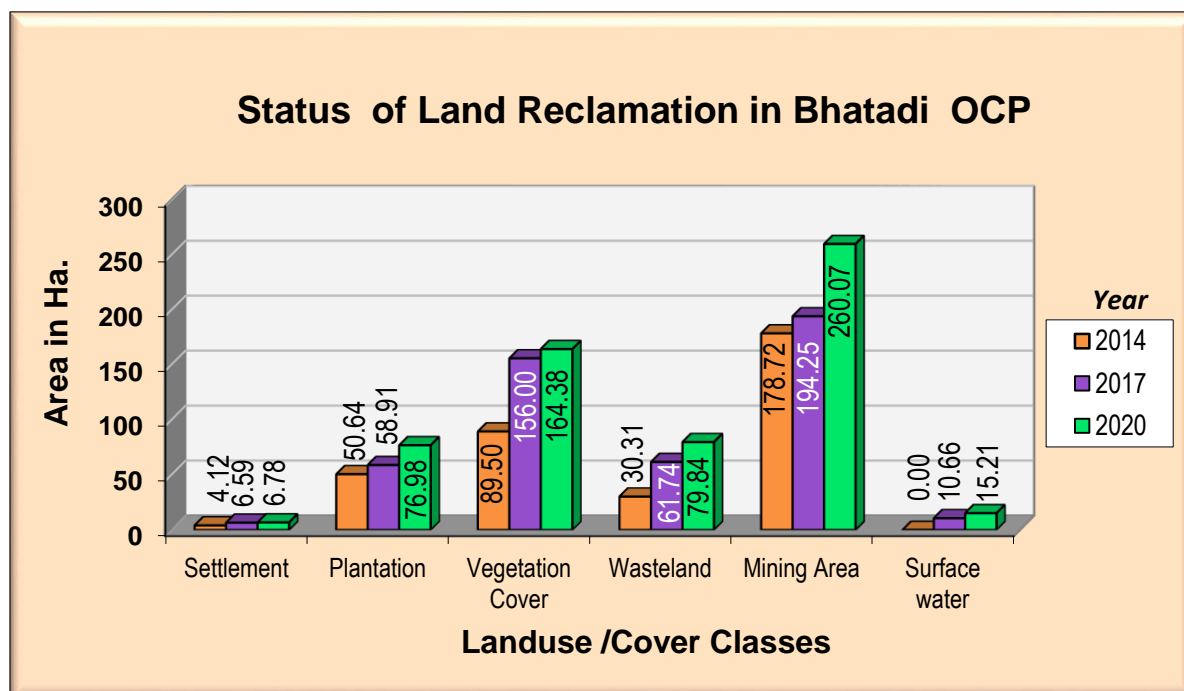


Figure -11

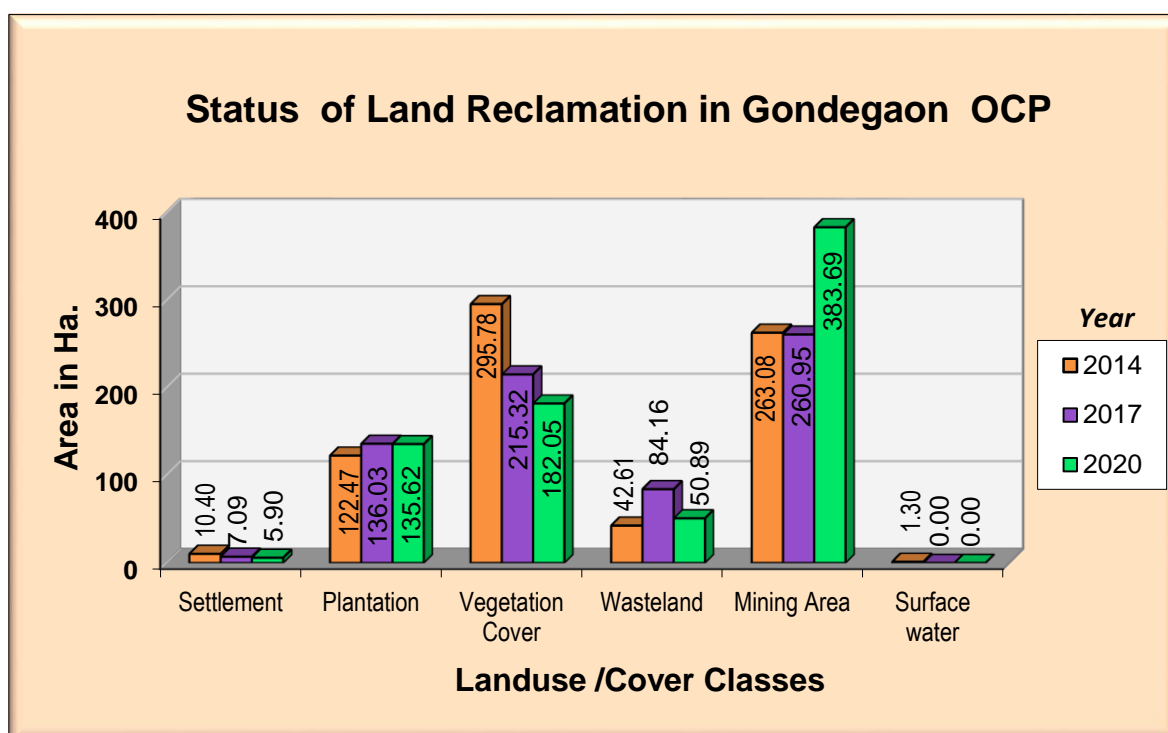


Figure-12



*Photograph 13: Plantation under social forestry in Gauri Deep OCP*



*Photograph 14: Plantation on Barren OB dump in Bhatadi OCP*

**WESTERN COALFIELDS LIMITED  
CHANDRAPUR AREA  
BHATADI OPENCAST MINE**

ILLUMINATION SURVEY FOR THE MONTH OF:

DATE: 22.07.2021

SR. NO.	PLACE/ AREA TO BE ILLUMINATED		MINIMUM STANDARD (LUX)	ACTUAL (LUX)	REMARKS (SPECIFY LOCATION)
1	Work place of HEMM	Coal face	5.0 (15) (Horizontal) H	4.7.	
			10.0 (25) (Vertical) V	10.6	
2		OB face	5.0 15 (Horizontal) H	5.8	
			10.0 (25) (Vertical) V	8.4	
3	Operator's cabin		30.0 (50) H	28.9	
4	Area of drill operation		10 25 (Vertical) V.	8.3	
5	Area of dozer operation		10.0 (At the level of crawler tracks)	8.7	
6	Coal stock yard		3.0 15H (Horizontal) H	3.4	
7	CHP unloading point		3.0 15H (Horizontal) V	3.6	
8	Haul road		0.5 to 3.0 10H (Horizontal)	2.3 to 29.1	
9	OB dump yard		3.0 15H (Horizontal) V	3.6	
10	Coal dispatch road		0.5 (Horizontal)	0.9	

SIGNATURE OF THE PERSON  
INSPECTING

SIGNATURE OF SAFETY OFFICER

100

DATE: 23 | 12 | 2020

SIGNATURE OF THE PERSON INSPECTING

SIGNATURE OF SAFETY OFFICER

SIGNATURE OF THE PERSON INSPECTING

**WESTERN COALFIELDS LIMITED  
CHANDRAPUR AREA  
BHATADI OPENCAST MINE**

**ILLUMINATION SURVEY FOR THE MONTH OF:**

**DATE :** 25/11/20

SR. NO.	PLACE/ AREA TO BE ILLUMNATED		MINIMUM STANDARD (LUX)	ACTUAL (LUX)	REMARKS (SPECIFY LOCATION)
1	Work place of HEMM	Coal face	5.0 (15) (Horizontal) H	4.5	
			10.0 (25) (Vertical) V	10.5	
2		OB face	5.0 (15) (Horizontal) H	5.6	
			10.0 (25) (Vertical) V	8.8	
3	Operator's cabin		30.0 (50) H.	28.7	
4	Area of drill operation 815		10 (25) (Vertical) V	8.8	
5	Area of dozer operation		10.0 (At the level of crawler tracks)	9.2	
6	Coal stock yard		3.0 (15) (Horizontal) H/V	3.1	
7	CHP unloading point		3.0 (15) (Horizontal) H/V	3.2	
8	Haul road		0.5 to 3.0 (10) (Horizontal) H	2.2 to 28.5	
9	OB dump yard		3.0 (15) (Horizontal) H/V	3.7	
10	Coal dispatch road		0.5 (Horizontal)	1.2	

SIGNATURE OF THE PERSON  
INSPECTING

*D. S. Dahake*  
C. D. S. Dahake

SIGNATURE OF SAFETY OFFICER

*[Signature]*

**WESTERN COALFIELDS LIMITED  
CHANDRAPUR AREA  
BHATADI OPENCAST MINE**

**ILLUMINATION SURVEY FOR THE MONTH OF:**

**DATE:** 29/10/20

SR. NO.	PLACE/ AREA TO BE ILLUMINATED		MINIMUM STANDARD (LUX)	ACTUAL (LUX)	REMARKS (SPECIFY LOCATION)
1	Work place of HEMM	Coal face	5.0 (15) (Horizontal) H	4.8	
			10.0 (25) (Vertical) V	9.8	
2		OB face	5.0 (15) (Horizontal) H	5.7	
			10.0 (25) (Vertical) V	9.3	
3	Operator's cabin		30.0 50 H	28.9	
4	Area of drill operation 705		10 25 (Vertical) V	9.9	
5	Area of dozer operation		10.0 (At the level of crawler tracks)	8.9	
6	Coal stock yard		3.0 15H (Horizontal) 15V	3.6	
7	CHP unloading point		3.0 15H (Horizontal) 15V	5.1	
8	Haul road		0.5 to 3.0 10 (Horizontal) H	2.9 to 28.3	
9	OB dump yard		3.0 15H (Horizontal) 15V	4.1	
10	Coal dispatch road		0.5 (Horizontal)	0.8	

SIGNATURE OF THE PERSON  
INSPECTING

*D. S. Dahake*  
D. S. Dahake

SIGNATURE OF SAFETY OFFICER

*[Signature]*

**WESTERN COALFIELDS LIMITED  
CHANDRAPUR AREA  
BHATADI OPENCAST MINE**

ILLUMINATION SURVEY FOR THE MONTH OF:

DATE: 28/09/20

SR. NO.	PLACE/ AREA TO BE ILLUMINATED		MINIMUM STANDARD (LUX)	ACTUAL (LUX)	REMARKS (SPECIFY LOCATION)
1	Work place of HEMM	Coal face	5.0 (15) (Horizontal) H	5.1	
10.0 (25) (Vertical) V			8.9		
2		OB face	5.0 (15) (Horizontal) H	6.1	
			10.0 25 (Vertical) V	9.2	
3	Operator's cabin 693		30.0 50 H.	28.6	
4	Area of drill operation 815		10 25 (Vertical) V	9.2	
5	Area of dozer operation		10.0 (At the level of crawler tracks)	9.4	
6	Coal stock yard		3.0 15H (Horizontal) 15V	3.5	
7	CHP unloading point		3.0 15H (Horizontal) 15V	4.8	
8	Haul road		0.5 to 3.0 10 (Horizontal) H	3.1 to 28.1	
9	OB dump yard		3.0 15H (Horizontal) 15V	4.1	
10	Coal dispatch road		0.5 (Horizontal)	0.9	

SIGNATURE OF THE PERSON  
INSPECTING

*(D.S. Dahake)*

SIGNATURE OF SAFETY OFFICER

*(Signature)*



**WESTERN COALFIELDS LIMITED  
CHANDRAPUR AREA  
BHATADI OPENCAST MINE**

**ILLUMINATION SURVEY FOR THE MONTH OF:**

**DATE:** 23/08/20

SR. NO.	PLACE/ AREA TO BE ILLUMINATED		MINIMUM STANDARD (LUX)	ACTUAL (LUX)	REMARKS (SPECIFY LOCATION)
1	Work place of HEMM	Coal face	5.0 (15) (Horizontal) H	4.9	
			10.0 (25) (Vertical) V	9.9	
2		OB face	5.0 (15) (Horizontal) H	5.8	
			10.0 (25) (Vertical) V	9.1	
3	Operator's cabin		30.0 50 H	28.7	
4	Area of drill operation 806		10 25 (Vertical) V	9.1	
5	Area of dozer operation		10.0 (At the level of crawler tracks)	9.2	
6	Coal stock yard		3.0 15 ft (Horizontal) H	3.4	
7	CHP unloading point		3.0 15 ft (Horizontal) H	4.2	
8	Haul road		0.5 to 3.0 10 (Horizontal) H	5.1 to 27.9	
9	OB dump yard		3.0 15 ft (Horizontal) H	3.9	
10	Coal dispatch road		0.5 (Horizontal)	1.0	

SIGNATURE OF THE PERSON INSPECTING

*D. S. Dahake*  
D. S. Dahake

SIGNATURE OF SAFETY OFFICER

*[Signature]*



# **COAL INDIA LIMITED**



## **CORPORATE ENVIRONMENT POLICY**

**2018**

## **Environmental Policy Statement:**

*Coal India Limited(CIL) is committed to promote sustainable development by protecting the environment through integrated project planning & design, prevention / mitigation of pollution, conservation of natural resources, restoration of ecology & biodiversity, recycling/ proper disposal of wastes, addressing climate change and inclusive growth. It also aims to bringing awareness amongst its stakeholders for continual improvement in environmental performances following best practices.*

## **OBJECTIVES:**

### **Coal India Limited shall endeavor to:**

- 1. Plan & design projects with due consideration to environmental concerns for Sustainable Development.*
- 2. Conduct mining and associated operation in an environmentally responsible manner to comply with applicable laws and other requirements related to environmental aspects.*
- 3. Prevent pollution of surrounding habitation by continuous monitoring and adopting suitable measures for environment protection.*
- 4. Implement Environment Management Plans in all our mines /projects effectively to mitigate pollution, conservation of natural resources and restoration of ecology & biodiversity.*
- 5. Ensure compliance of all applicable Environmental Clearance& Forestry Clearance conditions and other statutory conditions issued by regulatory agencies.*
- 6. Recycling of wastes on the principle of REDUCE, REUSE and RECYCLE.*
- 7. Put special thrusts on efficient energy utilization / renewable energy as a measure to reduce carbon foot-print.*
- 8. Strive for continual improvement in our environmental performances by setting targets, measuring progress and taking corrective action.*
- 9. Taking measures to render productive post mining land use.*
- 10. Implementation of activities applicable to CIL arising out of International Conventions.*
- 11. Create environmental awareness among the employees and the local communities through pro-active communication and training.*

## **STRATEGIES FOR IMPLEMENTATION OF ENVIRONMENTAL POLICY:**

### **Back Ground:**

Coal India Limited subscribes to the view of Sustainable Development. Unless the environment can sustain all the developmental activities, any pursuit of development in isolation can cause irreparable damage to the ecosystem and associated environmental attributes. Keeping this view in mind, Coal India Limited attaches top priority towards sustainable development and approved its 'Corporate Environmental Policy' in December 1995, which was subsequently revised in 2012. However the present policy is the amendment of the 2012 Policy and is complimentary to the National Environmental Policy, 2006.

This modification in the present policy is the outcome of the experience gained since 2012 keeping in view the modifications / amendments made time to time in environmental policies and additional stipulation notified by MoEF&CC (Ministry of Environment, Forest& Climate Change) and other organisations concerning mine closure, reclamation of degraded land, environmental clearance etc. and also with the objective of revisiting the corporate policy.

This Policy has a vision of Green Mining and mission of 100% compliance of environmental statutes applicable to coal mining industry.

**Strategies:** Coal India adopts the strategies appended below for effective implementation:

### **1. MINE/ PROJECT PLANNING & DESIGN FOR SUSTAINABLE DEVELOPMENT:**

- a) Coal being a non-renewal energy source, extraction shall be planned prudently to meet national requirement in a planned way. The projects shall be designed on the principle of Sustainable Development with due consideration to environment, mine closure ,safety and aspirations of the stakeholders at the planning& design stage itself with due regard to mine closer plan.
- b) While preparing the Mining plan/project reports, the effort shall be to incorporate latest mining technologies and equipment's with optimal capacity, which are more environment friendly.

- c) All Mining Plan/ project reports will be provided with detailed provisions for ensuring environmental compliances.

## **2. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) & ENVIRONMENT MANAGEMENT PLAN (EMP)**

- a. All mine planning and design shall be environmentally acceptable and operation shall be carried out in such a way as to facilitate the compliance of stipulated environmental standards.
- b. EIA& EMP for all projects shall be formulated as per the approved ToR (Terms of Reference) and public consultations for obtaining Environmental Clearance (EC) from MoEF&CC. Similarly, in the existing projects needing enhancement of production capacities with or without increase in land, change of technology, renewal of lease and change in land use etc. fresh EC is required to be sought as per norms. The projects shall be operated after obtaining Consent to Establish (CTE)/Consent to Operate (CTO) from State Pollution Control Boards (SPCB).
- c. Detailed Mine Closure Plans shall be prepared for all existing and new mines as per the MoC (Ministry of Coal) guidelines.

## **3. COMPLIANCE OF THE STATUTORY REQUIREMENTS:**

The implementation of EMP and fulfillment of all other statutory requirements like conditions of EC, FC and consents to establish & operate, including timely submission of returns to statutory bodies and various agencies, are to be ensured at all levels.

## **4. MEASURES TO MITIGATE POLLUTION:**

### **a) Air Pollution:**

- i) Generation of dust is to be controlled at the source to the possible extent with necessary control measures during drilling, blasting, loading, unloading, CHP transfer points etc.
- ii) Deployment of eco-friendly mining technologies.
- iii) Dust generation is to be minimized along coal / waste transportation routes.
- iv) Mechanized transportation of coal to be encouraged.
- v) Green belt is to be created around the source of dust.

**b) Water pollution:**

- i) The mine water and other effluent shall be treated to ensure the discharge norms as per statute. The treated effluent shall be utilized to the extent possible with a view to achieve maximum water conservation.
- ii) Oil & grease from the effluent shall be removed by Oil & Grease Traps for proper disposal.

**c) Noise / ground vibration:**

- i) All measures to minimize noise pollution will be taken including maintenance of HEMM, equipment and provision of PPE where required.
- ii) Suitable controlled blasting techniques shall be followed to reduce ground vibration as well as noise pollution.

**d) Land reclamation:**

- i) Progressive and concurrent reclamation of mined out areas will be carried out as per approved EIA/EMP and Mine Closure Plan (MCP).
- ii) Slopes of external dumps are the important area to be suitably graded / terraced for effective reclamation and plantation.
- iii) Preservation of top soil is required for future use. Old as well as existing non-active dumps are to be technically and biologically reclaimed.
- iv) Monitoring of reclamation work of all opencast mines will be done through Satellite Surveillance. The outcome shall be put in the websites.

**e) Mine closure plans:**

Mine Closure Plan (MCP) shall be prepared for each mine. MCP are being delineated in two phases viz. progressive and final mine closure. Appropriate funds are set aside and deposited under a special Escrow fund every year as per MoC guidelines, to be utilized for proper and final mine closure.

For mines closed prior to issuance of MoC guidelines (i.e. 27<sup>th</sup> August, 2009) suitable action to be taken as per provisions of Mines Act 1952.

**f) Mine fire**

CIL shall endeavour to reduce occurrence of mine fire and subsidence due to mining activity. Monthly report shall be submitted to top management of the subsidiary and CIL and Quarterly to company board. Action Plan for mine fire control shall be implemented. Monitoring will be done through Satellite Surveillance/other suitable technology.

**g) Monitoring:**

- I. All receptors in and around the mining projects shall be monitored regularly to assess the efficacy of the pollution control / mitigation measures within stipulated standards.
- II. Effect of mining on the hydrology of the area will be monitored through measurement of water level and its quality of nearby wells and bore holes provided for this purpose. Conservation of water through rainwater harvesting shall be taken up.
- III. Area and Unit environmental cells shall have regular interaction with the people in and around the coal mines and other allied units on matters related to environment to take necessary and timely corrective actions.
- V. Environmental initiatives and monitoring through self and third party environment audit shall be conducted for generating useful data for taking corrective actions and mitigation measures as per guidelines.

**h) Other measures:**

- I. Special emphasis shall be given to undertake R&D related to various facets of coal mine environmental management in collaboration with Central Mine Planning and Design Institute (CMPDI) and other competent institutions.
- II. Besides ensuring statutory compliance, the CIL desires to set high standards and continual improvement.
- III. A number of mines and establishments of CIL are ISO 14001 certified and balance mines & establishments shall be ISO 14001 certified in phased manner.
- IV. CSR and R&R policies of CIL are to be incorporated for better planning and implementation of the socio-economic issues of coal mining areas.
- V. The coal mining environmental issues are complex and require multi-disciplinary approach to address the same. CIL will endeavor to enter into MoUs with expert agencies of repute to assist in environment issues and also help in capacity building of CIL executives.
- VI. CIL conduct periodical medical examination (PME) of its work force on routine basis in compliance of the requirement mining rules and regulation, additional test will be done as and when require.

**5. PRESERVATION OF BIO-DIVERSITY:**

- a) This will start from mine planning including technically and biologically reclamation of mined out areas in collaboration with State Forest Departments, Wild Life Divisions, NGOs etc. working in the fields of bio-diversity conservation.

- b) The selection of species for plantation shall be done in consultation with the local community to include the local species and their preferences, if any.

## **6. COAL BENEFICIATION / COAL WASHERIES:**

- a) For beneficiation of Runoff Mines (ROM) coal, washeries are being set up in a phased manner as per requirement and statutes.
- b) Slurry Management System (SMS) in all washeries shall be organized to ensure collection of fines, gainful utilization of rejects viz. power generation in Fluidized Bed Combustion (FBC) plants, selling to brick manufacturers or adopting other environmental friendly disposal options as feasible.
- c) The reject dumps and tailings shall be suitably handled to avoid any contamination.
- d) The effluent from washeries including tailings pond shall be suitably treated and reused to minimize water consumption with zero discharge concept.

## **7. CONSERVATION AND CLEAN TECHNOLOGY:**

- a) R&D projects shall be taken up to promote clean coal technology and improve the existing technologies.
- b) Energy saved is energy produced. Voluntary energy audit to be done for corrective action to reduce carbon footprint.
- c) Clean Development Mechanisms will be explored for reducing emission of Green House Gases by exploration, identification, preparation of projects reports for extraction of methane from Coal Bed, Coal Mine, Abandoned Mine, Ventilation Air, UG Coal Gasification, generation and utilization of renewable energy etc.

## **8. AWARENESS PROGRAMME:**

- a) Publicity to generate awareness through exchange & communication of information, newsletters and periodicals on environment, seminars, workshops, celebration of World Environment Day etc. at CIL / Subsidiary HQs, Areas & units to be undertaken. Regular training programs to be organized at various levels to inculcate awareness among employees.
- b) Courses on environmental and forestry laws and Environmental Protection Measures and the Corporate Policy to be organized for project executives for improving knowledge.
- c) CIL to give annual awards for achieving excellence in environment related

issues and activities. These awards will be in recognition for implementation of EMP, land reclamation and compliance of statutes, proper maintenance of air & water quality and noise level.

## **9. WASTE MANAGEMENT:**

CIL will undertake appropriate action for safe handling, storage and disposal of solid waste and hazardous waste generated from its industrial set up and colonies as per relevant rules. The biomedical waste generated from hospitals and dispensaries will be collected and disposed in appropriate facilities created as per statutes. E-waste management and handling of various types of e-waste generated in its operations will be done as per rule.

## **10. CORPORATE ENVIRONMENT RESPONSIBILITY:**

Corporate Environment Responsibility (CER) is mandatory for issuing environmental clearance for all the Greenfield and Brownfield projects as per directives of MoEFCC with effect from 1st May, 2018 (O.M.No.22-65/2017-IAIII dt. 19.06.2018). Budgetary provisions should be kept for implementation of provisions of CER for all the projects which will be submitted to MoEFCC for grant of environmental clearance.

## **11. INCORPORATION OF VIEWS OF STAKEHOLDERS:**

CIL will critically examine and incorporate the viewpoints of various stakeholders like PAPs/PAFs, Parliamentary Committees, Standing Sub-Committees, NGOs etc. CIL being a listed entity with stock exchange, it will also take into consideration the observations/viewpoints of international investors.

## **12.IMPLEMENTATION OF POLICY:**

- i) **Manpower:** CIL shall have environmental divisions at decision making & operational levels in its structure. The environment department shall be set up and strengthened at:
  - i) CIL Corporate HQ at Kolkata
  - ii) Subsidiary HQs
  - iii) Areas / Units / Collieries / Workshops /Washeries
  - iv) CMPDI (HQ) & CMPDI Regional Institutes
- ii) **Roles and Responsibilities:** The environmental department, set up at company HQs, Areas and Unit levels with appropriate manpower and resources, shall be responsible for implementation of policy, obtaining EC, FC, consent to establish

& operate, statutes requirements and undertaking mitigation measures besides preparation of action plan every year and also to intimate the status of implementation to the management regularly.

**iii) Annual Environment Budget (Revenue & Capital):** The Annual Environment Budget (revenue & capital) shall be prepared based on the action plan including monitoring of various bench marks and the budget utilization. The year wise funds earmarked for environmental protection measures shall be kept in separate accounts with Environmental cost code.

### **13. FLEXIBILITY TO THE SUBSIDIARY COMPANIES:**

CEP 2018 will be applicable for all subsidiaries of CIL. The subsidiary company Boards have been authorized to approve necessary modifications in CEP 2018 with reference to unique conditions prevailing at the concerned subsidiary.

### **REVIEW OF ENVIRONMENTAL POLICY:**

In view of the present fast changing social, economic and environmental scenario, this Policy shall be reviewed every 5 years to incorporate the changes in the legal, technical, environmental, economic and social inputs prevailing at that time. Whenever, there is change in National Environmental Policy or other National / State relevant policies, Acts etc, this Corporate Environmental Policy would be reviewed and suitably revised.

\*\*\*\*\*

वेस्टर्न कोलफील्ड्स लिमिटेड  
Western Coalfields Limited

बोर्ड सचिवालय  
BOARD SECRETARIAT

पंजी. कार्यालय : कोल ईस्टेट, सिविल लाईन्स, नागपुर - 440 001  
Regd. Office : Coal Estate, Civil Lines, Nagpur - 440 001

☎ का/0 0712 - 2511216  
e-Mail ramehar@westerncoal.gov.in

BOARD MATTER  
CONFIDENTIAL

REF: WCL/BD/SECTT/BM-309/2019/267

DATE: 15.03.2019

Reproduced below is the relevant excerpt from the minutes of 309<sup>th</sup> meeting of the Board of Directors of WCL held on 04th March, 2019:

\*ITEM NO.309/ C-5

SUB Adoption of Corporate Environment Policy (CEP), 2018 of Coal India Limited for Western Coalfields Limited.

- i) While deliberating on the subject brought out in the agenda note, Shri Ajit Kumar Chowdhary, Director (Technical) P&P apprised salient features of the Corporate Environment Policy 2018 approved by CIL's Board in its 377<sup>th</sup> meeting for implementation at CIL and its subsidiaries. It was further apprised that Director General, Commercial Audit and Ex-officio member, Audit Board – II, Kolkata, while submitting its report on "Assessment of Environmental Impact due to mining activities and its mitigation in CIL and its subsidiaries" to COIA, CIL emphasized the consideration of this policy by the Board of Directors of the respective subsidiaries prior to its implementation in the subsidiaries. To comply the suggestions, it is proposed to adopt the environment policy by the Board for implementation in WCL.
- ii) In view of above, the Board, after deliberation adopted the policy in principle for implementation in WCL.
- iii) The Board while advising Director (Tech) P&P to assess the impact of cost to the company for sustainability and desired to give inputs by members of the Board for value addition in the policy.
- iv) GM (Environment) to take necessary action in the matter.

  
COMPANY SECRETARY

GENERAL MANAGER (ENVIRONMENT)

CC: DIRECTOR (PERSONNEL)  
DIRECTOR (FINANCE)  
DIRECTOR (TECHNICAL) OP  
DIRECTOR (TECHNICAL) P&P



Coal India Limited  
A MAHARATNA COMPANY  
Coal Bhawan, 3<sup>rd</sup> Floor, Core - 2  
New Town, Rajarhat, Kolkata- 700 156.  
PHONE: 033-2324-6526, FAX:033-2324-6510  
Email – mviswanathan2.cil@coalindia.in  
WEBSITE:www.coalindia.in  
CIN – L23109WB1973GOI028844

Ref No.CIL:XI(D):04112:2019: 22442

Dated 15<sup>th</sup> Jan.'2019

To  
GM(Environment),  
Coal India Limited,  
3<sup>rd</sup> Floor, New Town,  
Rajarhat, Kolkata – 700 156.

Sub: Minutes of 377<sup>th</sup> CIL Board Meeting held on 20<sup>th</sup> December 2018.

Reproduced below is the relevant extracts from the minutes of 377<sup>th</sup> meeting of Board of Directors of Coal India Limited held on 20<sup>th</sup> Dec.'2018 at CIL (H/Q), New Town, Kolkata with regard to the following item:

**"ITEM No.377:4(G)**

**Sub:- Corporate Environment Policy (CEP) 2018 of Coal India Limited**

- 4.7 Director(Technical) apprised the Board that Coal India Limited had prepared last Corporate Environment Policy(CEP) in 2012, which is to be reviewed after every five years to incorporate the changes in legal, technical, environmental, economic and social inputs prevailing at that time. Hence Company had prepared Corporate Environment Policy 2018 in consultation with its subsidiaries incorporating various changes in extant rules & regulations.

Thereafter GM(Env.) made presentation. After detailed deliberations Board approved Corporate Environment Policy, 2018 for implementation at CIL and its subsidiaries as brought out in the agenda note and advised that the same be reviewed after 5 years to incorporate various changes in legal, technical, environmental, economic and social inputs prevailing at that time."

This is for your information and taking necessary action please.

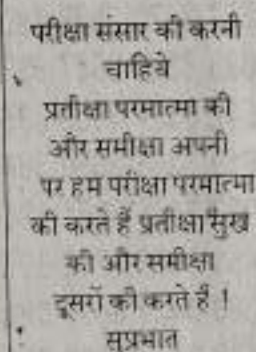
Yours faithfully,

*MK*  
15/1/19  
(M.Viswanathan)  
Company Secretary

चीनमध्ये पसरणाऱा हा जीवधेणा विषाणू हा-हा म्हणता जगभर पसरू लागला आहे. भारतात देखील आतापर्यंत ३० जणांना या विषाणूची लागण झाल्याचे स्पष्ट झाले आहे. या सगळ्यात सिनेस्टाही कोरोना व्हायरसमुळे सजग झाल्याचे दिसतात. अनेकांनी सिनेमाचे चित्रीकरण पुढे बळकते तर कार्हीनी सार्वजनिक ठिकाणी जाणे रद्द केले. नुकतेच एका मुपसरटाने कोरोनाच्या भीतीने पत्नीचा वाढदिवस मोठ्या प्रमाणात साजरा केला नाही. लखनवात पत्नीच्या सगळ्यात पत्नी राखिका पॅट्रियन

# चंद्रपूर महाराष्ट्र

५४ : ३४



दिनांक १६ मार्च रोजी बंदूप  
जिल्हा परिषदेत आ. सुधीर मुनशीवर  
शानी कोरना व्हायरस च्या वाढत्या  
प्रादुर्भावानंदर्भात आहवा बैठक  
पोवली. या बैठकीला जिल्हा  
परिषदेच्या अध्यक्षा सध्या गुन्ले,  
व्यविकास महामंडलाने माजी  
अध्यक्ष नंदनसिंह वंदेल, माजी  
आमदार संजय धोरे, जिल्हा परिषदेचे



केल्यार एक संघाधी मूळ किमल पंथ  
हजार रुपये आहे. एक संघ खरेदी  
केल्यास पाच पाच हजार रुपये,  
नोणतेही दोन संघ खरेदी केल्यास नव  
हजार रुपये. तीन संघ खरेदी केल्यास

हा गाडी, महाविद्यालय व सावजनिक वाचनालय यांना कराकलागणार नाही. महाराष्ट्रातील कोणत्याही जिल्ह्यात पुस्तकाचे पार्श्व स्वखर्चाने पाठविण्याची सुविधा उपलब्ध आहे अशी माहिती सोरु हांगे यांनी दिली.



Environmental Clearance has been accorded for Expansion of Bhatadi Opencast Coal Mine (From 0.975 MTPA to 1.465 MTPA(peak) in a mine lease area of 847.37 ha) located in Village Bhatadi, District Chandrapur (Maharashtra) under Chandrapur Area of M/s. Western Coalfields Limited, by Ministry of Environment & Forests vide letter No. J-11015/151/2014-IA-II (M) dated 13.03.2020 and may also be seen at website of the Ministry of Environment, Forests & Climate Change (MoEF&CC) at:

<http://environmentclearance.nic.in>

(HANDRAPE) 17-03-2020 5(H) X 8(W) = 40 Sq. cm.

[illegible]



## वेस्टर्न कोलफिल्ड्स लिमिटेड Western Coalfields Limited

(मिनीरत्ना कंपनी) (A Miniratna Company)

(कोल इंडिया लि. की अनुषंगी कंपनी) (A Subsidiary of Coal India Limited)

महाप्रबंधक कार्यालय चंद्रपुर क्षेत्र /Office of Area General Manager Chandrapur,

विभाग-पर्यावरण

Department of Environment

CIN-U10100MH1975GOI018626

FAX:- 07172-256124

Website:- westerncoal.nic.in

पंजी. कार्या: कोयला विहार, सिविल लाइन्स नागपुर, (महा) -440001 / Regd.off: Coal Estate, Civil Lines, Nagpur(MS)-440001

संख्या/Ref NO: वेकोलि/पको/महाप्र/पर्यावरण/1229

दिनांक/Date: 15.03.2020

प्रति,

1. मा. जिल्हाधिकारी, जिल्हाधिकारी कार्यालय, चंद्रपुर, त. जि. चंद्रपुर
2. प्रादेशिक अधिकारी, म.प्र.नि.मं., पहिला माला, उदयोग भवन, चंद्रपुर
3. महाप्रबंधक, जिल्हा उदयोग केंद्र, उदयोग भवन, चंद्रपुर
4. मुख्य कार्यकारी अधिकारी, जिल्हा परिषद, चंद्रपुर
5. उप विभागीय अधिकारी, उप-विभागीय कार्यालय, चंद्रपुर
6. तहसिलदार, तहसिल कार्यालय, चंद्रपुर, त. जि. चंद्रपुर
7. तहसिलदार, तहसिल कार्यालय, भद्रावती, त. भद्रावती जि. चंद्रपुर
8. सभापती, पंचायत समिती कार्यालय, चंद्रपुर, त. जि. चंद्रपुर
9. सभापती, पंचायत समिती कार्यालय, भद्रावती, त. भद्रावती जि. चंद्रपुर
10. सरपंच, गट ग्रामपंचायत कार्यालय, पायली-भटाळी, त. जि. चंद्रपुर
11. सरपंच, गट ग्रामपंचायत कार्यालय, विचोडा (चांदसूली), त. जि. चंद्रपुर
12. सरपंच, ग्रामपंचायत कार्यालय, चेक तिरवंगा(क.), त. भद्रावती जि. चंद्रपुर
13. सरपंच, गट ग्रामपंचायत कार्यालय, पदमापुर (किटाळी), त. जि. चंद्रपुर
14. सरपंच, गट ग्रामपंचायत कार्यालय, तिरवंगा(मोकासा), त. भद्रावती जि. चंद्रपुर

विषय:- Expansion of Bhatadi Opencast Coal Mine from 0.975 MTPA to 1.465 MTPA (Peak) of M/s Western Coalfield Limited in mine lease area of 847.37 ha. located in village Bhatadi District Chandrapur (Maharashtra) - Environment Clearance (EC)-reg.

संदर्भ : LETTER NO. J-11015/151/2014-1A-II(M) date: 13.03.2020.

महोदय,

With reference to the above subject and referred letter and in compliance of General Condition under (J) Miscellaneous Condition No. 2 we are hereby submitting a copy of the above mentioned EC document.

Kindly arrange for display of the EC document on your Notice board/ uploading on your website for information of general public for a period of thirty days.

भयदीय

हे. शिन्डे

15.03.2020

क्षेत्रीय केंद्रस्थ अधिकारी (पर्यावरण)  
वेकोलि, चंद्रपुर क्षेत्र

प्रतिलिपी,

1. क्षेत्रीय महाप्रबंधक, चंद्रपुर, क्षेत्र
2. उपक्षेत्रीय प्रबंधक, पदमापुर उपक्षेत्र
3. ओसी

EC



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

Annexure-R

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2023

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000060809

### Submitted Date

29-09-2023

## PART A

### Company Information

#### Company Name

M/s. WESTERN COALFIELDS LIMITED, BHATADI  
OPENCAST MINE

#### Application UAN number

MPCB-CONSENT-0000109729

#### Address

POST-BHATADI

#### Plot no

Document Uploaded

#### Taluka

Chandrapur

#### Village

WCL-CHANDRAPUR AREA

#### Capital Investment (In lakhs)

30654.63

#### Scale

L.S.I

#### City

Chandrapur

#### Pincode

442404

#### Person Name

S. K. Sethy

#### Designation

Sub Area Manager

#### Telephone Number

8275967993

#### Fax Number

0

#### Email

wclchaenv@gmail.com

#### Region

SRO-Chandrapur

#### Industry Category

Red

#### Industry Type

R35 Mining and ore beneficiation

#### Last Environmental statement submitted online

yes

#### Consent Number

MPCB-CONSENT-0000109729

#### Consent Issue Date

2022-11-24

#### Consent Valid Upto

2023-03-31

#### Establishment Year

1995

#### Date of last environment statement submitted

Sep 20 2022 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Coal

#### Consent Quantity

1.465

#### Actual Quantity

1.465

#### UOM

MT/A

### By-product Information

#### By Product Name

NA

#### Consent Quantity

0

#### Actual Quantity

0

#### UOM

CMD

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

#### Water Consumption for

#### Consent Quantity in m3/day

#### Actual Quantity in m3/day

<b>Process</b>	500.00	1530.00
<b>Cooling</b>	0.00	0.00
<b>Domestic</b>	65.00	65.00
<b>All others</b>	0.00	0.00
<b>Total</b>	565.00	1595.00

## 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Trade Effluent	13230	14977	CMD

## 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Mining	140276	149488	CMD

## 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Explosives	3883422	2459893	Kg/Annum

## 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Diesel	0	4369050	Ltr/A

## Part-C

### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

#### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
Monitoring Report Enclosed in Step-I	0	0	0	0	0

#### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
NA	0	0	0	0	0

## Part-D

### HAZARDOUS WASTES

#### 1) From Process

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
5.1 Used or spent oil	28.81	31.71	KL/A
5.2 Wastes or residues containing oil	2.65	2.16	Ton/Y
35.3 Chemical sludge from waste water treatment	61.43	40.87	Ton/Y

## 2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	CMD

## Part-E

### SOLID WASTES

#### 1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	12292000	6435600	M3/Anum

#### 2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	CMD

#### 3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	KL/A

## Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

#### 1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
35.3 Chemical sludge from waste water treatment	44.65	Ton/Y	Disposed to authorized TSDF
5.1 Used or spent oil	84	KL/A	Auctioned to CPCB authorized recyclers
5.2 Wastes or residues containing oil	3.76	Ton/Y	Disposed to authorized TSDF

#### 2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	6435600	M3/Anum	OB was stored as external OB Dump

## Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Impact of Pollution Control Measures	0	0.33	1423529	0	9.175	0

## Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.  
[A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Expenditure	Piezometer for groundwater monitoring	9.175

**[B] Investment Proposed for next Year**

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
Capital Investment	Air & Water Pollution Control Measures	138.20

**Part-I**

**Any other particulars for improving the quality of the environment.**

**Particulars**

Attachments as required.

**Name & Designation**

S. K. Sethy, Sub Area Manager, BOCM

**UAN No:**

MPCB-ENVIRONMENT\_STATEMENT-0000060809

**Submitted On:**

29-09-2023



Environment Deptt. WCL-Chandrapur Area &lt;wclchaenv@gmail.com&gt;

---

**Compliance of Condition No. (viii) under Miscellaneous Head of EC granted to Bhatadi Opencast Mine of WCL-Chandrapur Area.**

1 message

**Environment Deptt. WCL-Chandrapur Area** <wclchaenv@gmail.com>

Mon, Feb 15, 2021 at 4:32 PM

To: ecompliance-mh@gov.in, apccfcentral-ngp-mef@gov.in, moefregionalofficenagpur@gmail.com

Cc: "GM GM(ENVIRONMENT)" &lt;gmenvironment.wcl@coalindia.in&gt;, Kaushik Chakraborty &lt;wclenv07@gmail.com&gt;

Bcc: Hemendra Shinde &lt;hbshinde@rediffmail.com&gt;, rajesh ratawa &lt;ratawa.rajesh@gmail.com&gt;

**Ref. EC No.: J-11015/151/2014-IA-II (M) Dtd: 13.03.2020**

Dear Sir,

In relation to "**Compliance of Condition No. (viii) under Miscellaneous Head of EC granted to Bhatadi Opencast Mine of WCL-Chandrapur Area**", your good office is hereby informed that Mining operations have commenced at Bhatadi OC after obtaining due clearance from Maharashtra Pollution Control Board (MPCB).

CTE was approved during 25th Meeting of 2019-20 dtd: 03.03.2020 & 04.03.2020 (copy attached)

In principle approval of CTO received vide email from [ast@MPCB.gov.in](mailto:ast@MPCB.gov.in) dtd: 26.03.2020 for commencement of operation. (copy attached)

Formal CTO issued vide Format1.0/CAC/UAN/No. 0000088190/CO-2005000271 dtd: 08.05.2020

This is for your information & record.

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Regards  
Environment Department  
WCL-Chandrapur Area

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**2 attachments****Approval of CTE.pdf**

235K

**In Principle Approval of CTO.pdf**

176K

Sr. No.	Application Unique Number	Industry name and Address	Decision on grant of consent	Consent granted Upto	Remarks / Discussion
	(C2E-Expansion) & MPCB-CONSENT-0000088073 (C2O Expansion)	Western Coalfields Limited, Wani Area	1st consent to operate for expansion along with amalgamation of existing consent with change in name.		<p>existing consent with change in name from M/s Mungoli Open Cast Mine to M/s Mungoli Nirguda Extension Deep Open Cast Mine.</p> <p>Committee also noted that, PP has obtained Environmental clearance. Also noted that, Renewal of existing consent for coal mining activity (UAN No.72533) capacity 4.0 MTPA was discussed and approved in the CAC meeting held on 07.01.2020.</p> <p>In view of above, it was decided to grant First consent to operate with expansion along with amalgamation of existing consent by forfeiting proportionate BG and imposing fresh BG as per BG regime for the coal mines.</p> <p>Consent shall be issued after receipt additional consent fees if any.</p>
2	MPCB-CONSENT-88185 (C2E-Expansion) MPCB-CONSENT-66844 (C2R-Existing mine)	M/s Bhatadi Open Cast Mine, Western Coalfields Limited, Chandrapur Area, Chandrapu	APPROVED Consent to establish for expansion of coal mine from 0.975 MTPA to 1.465 MTPA (for 0.49 MTPA) & Renewal of consent for Existing mine	Commissioning of the unit or 5 years whichever is earlier. (For C2E-Expansion) 31.03.2021 (for renewal of existing mine)	<p>Committee noted that, PP has applied for Consent to establish for expansion of coal mining activity from 0.975 MTPA to 1.465 MTPA within mine lease area of 847.37 ha.</p> <p>Committee also noted that, Environmental clearance has been recommended for expansion during 52nd meeting of Expert Appraisal Committee (EAC) dated 24.01.2020.</p> <p>Committee also noted that, Renewal of consent of existing coal mining (UAN No.66844) for 0.975 MTPA was discussed and deferred in the CAC meeting held on 07.01.2020 and it was decided to keep the case in abeyance &amp; call the PP for presentation towards JVS exceedance and measures taken towards improvement of pollution control system provided.</p> <p>Committee also noted that, PP has submitted the presentation towards JVS exceedance and measures taken towards improvement of pollution control system provided vide email dated 07.02.2020.</p>

Sr. No.	Application Unique Number	Industry name and Address	Decision on grant of consent	Consent granted Upto	Remarks / Discussion
					<p>Committee further noted that PP had provided ETP, sedimentation tank and STP for the treatment of Trade effluent and sewage. Also provided sprinkler along with coal transportation road and around CHP. Also provided mobile tanker to control dust emission. NOC from CGWA is approved. The JVS results of Air samples are exceeded the consented limits.</p> <p>In view of above, It was decided to grant renewal of consent to operate for existing mine for 0.975 MTPA for the period up to 31.03.2021 by forfeiting proportionate BG and imposing fresh BG as per BG regime for mines. Consent shall be issued after receipt of copy of NOC of CGWA and additional fees if any.</p> <p>Also it was decided to grant consent to establish for expansion of coal mining activity from 0.975 MTPA to 1.465 MTPA within mine lease area of 847.37 ha with the condition to obtain Environment Clearance for expansion and shall not take any effective steps for implementation of the expansion project before obtaining Environmental Clearance as per EIA Notification 2006 and amendments thereto.</p>
<p>After due-deliberation to promote e-Mobility for reduction of Vehicular emission, it has been decided that, the new construction projects having BUA more than 50,000 M<sup>2</sup> and all the common parking projects shall provide Electric Battery charging stations for two-wheeler &amp; four-wheeler vehicles so as to cater at least 20% of the parking capacity.</p> <p>The meeting is ended with vote of thanks.</p>					

**[WARNING: This Mail may be Spoofed] Application for first consent to operate for expansion**

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**From :** ast@mpcb.gov.in

Thu, Mar 26, 2020 01:22 PM

**Subject :** [WARNING: This Mail may be Spoofed] Application for first consent to operate for expansion

**To :** gmwclcha@gmail.com, GM  
GM(MINING),CHANDRAPURAREA  
<agmchandrapur.wcl@coalindia.in>

**Cc :** chairman@mpcb.gov.in, ms@mpcb.gov.in, cac-cell@mpcb.gov.in

To,  
M/s. Bhatadi open Cast Mine Project (Expansion Project) Post-Bhatadi Tal & Dist:  
Chandrapur

**Sub- Application for first consent to operate for expansion i.e additional coal mining activity of 0.49 MTPA ( i.e from 0.975 MTPA to 1.465MTPA) at M/s. Bhatadi open Cast Mine Project (Expansion Project) Post-Bhatadi Tal & Dist: Chandrapur- Regarding**

Sir,

This office is in receipt of **your applications for consent to 1<sup>st</sup> operate for expansion of additional coal mining activity of 0.49 MTPA i.e from 0.975 MTPA to 1.465MTPA at Bhatadi open Cast Mine Project (Expansion Project) Post-Bhatadi Tal & Dist: Chandrapur.** Considering your request and urgency, **your application has been considered through Circulation Agenda of Board's CAC and formal consent may be issued as soon as possible. The Project Proponent is advice to take up the operation subject to EC conditions and standard conditions for coal Mines.**

This is issued with the approval of competent Authority of the Board.  
Thanks and Regards

(P.K.Mirashe)  
Assistant Secretary (Technical)  
MPCB Mumbai.