

WESTERN COALFIELDS LIMITED
OFFICE OF THE SUB AREA MANAGER
BALLARPUR SUB AREA

Ref.No. WCL/BA/SAM/BSA/Civil/625

Date:- 30.11.2023

To

**Addl. Principal Chief Conservator of Forests,
Ministry of Environment, Forests & Climate Change,
Regional Office (WCZ),
Ground Floor, East Wing,
New Secretariat Building,
Civil Lines, Nagpur – 440001 (M.S.)**

Subject :- Submission of Six monthly Environment Compliance report in respect of **BALLARPUR OC MINE**, Ballarpur Area, WCL.

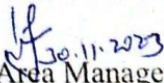
Dear Sir,

Enclosed herewith please find, Six Monthly Environment Compliance report in respect of **BALLARPUR OC Mine** for period from **01.04.2023 to 30.09.2023**.

EC NO: J-11015/71/2013-IA.II(M) DATED:- 30.01.2015

Thanking you.

Yours Faithfully,


Sub Area Manager,
Ballarpur Sub Area

Copy to:-

- 1.Regional Officer, MPCB, Chandrapur**
- 2.AGM, Ballarpur Area, WCL**
- 3.GM(Environment), WCL HQ, Civil Lines, Nagpur**
- 4.GM(Environment), CMPDIL RI –IV, Nagpur**
- 5.ANO(Environment), Ballarpur Area, WCL**



No. J-11015/71/2013-IA-II(M)

Government of India

Ministry of Environment, Forest and Climate Change

Impact Assessment Division

Indira Paryavaran Bhawan,
Jorbagh Road, N Delhi – 3

Email: lk.bokolia@nic.in Tel: 01124695301

Dated: 15th October, 2020

To,

The General Manager (Environment),

M/s Western Coalfields Ltd.,

Coal Estate, 9th Floor, Civil Lines,

Nagpur - 1 (Maharashtra)

Email: gmenvironment.wcl@nic.in; wclenv@yahoo.in

Sub: Validity extension of Environmental Clearance(EC) titled "Expansion of Ballarpur OCP (from 0.50 MTPA to 0.625 MTPA) in an ML area of 242.64 ha of M/s Western Coalfields Limited, Village Ballarpur, District Chandrapur (Maharashtra)" – reg.

Sir,

This is with reference to your online application No. IA/MH/CMIN/152112/2020 dated 27th May, 2020, on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has granted environmental clearance (EC) to the project on 30th January 2015 to Expansion of Ballarpur OCP (from 0.50 MTPA to 0.625 MTPA) in an ML area of 242.64 ha of M/s Western Coalfields Limited, Village Ballarpur, District Chandrapur (Maharashtra). The life of the mine was 5 Years as per EC.

3. Now the proposal has been submitted for extension of validity of EC as there is additional coal reserves left in the old underground working which would get released after demolition of surface structures (required for implementation of mine closure activities). Earlier this coal could not be taken because of very high stripping ratio at that time and proximity of underground working. This additional coal reserve quantity is 2.496 MT which can be extracted by excavation of additional quarry area of 5.222 ha. This mining plan has been approved by the WCL board in its 321st meeting held on 24-04-2020 and communicated through resolution no. WCL/Office of CS/BM-321/2020-21/50 dated 25-04-2020. Life of mine is 5 years at the capacity of 0.625 MTPA for extraction of additional reserves of 2.496 MT coal available along fault line. Certified compliance report of existing EC dated 30-01-2015 has been secured from RO, MoEF & CC, Nagpur vide letter no. 3-45/2008(ENV) dated 07-05-2020 & ATR submitted vide letter dated 11-05-2020.

AS

4. The proposal was considered by the sectoral Expert Appraisal Committee in its 56th meeting held on 30th June, 2020 through video conferencing wherein the Committee recommended to condon the delay of application and the amendments/extension for additional 5 years (life of the mine) as proposed by the project proponent. Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby **accords approval for the extension of validity of Environmental Clearance (EC) titled "Expansion of Ballarpur OCP (from 0.50 MTPA to 0.625 MTPA)" dated 30th January, 2015 for a period of five years (i.e. upto 30th January 2025)** in an ML area of 242.64 ha of M/s Western Coalfields Limited, Village Ballarpur, District Chandrapur (Maharashtra), under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions and environmental safeguards mentioned below:

- (i) Clarification from District Forest Officer that mining area and its ancillary activities does not fall under Corridor of Tadoba Andhari Tiger Reserve, Kawal Wildlife Sanctuary (Telangana), Chaprala Wildlife Sanctuary, Painganga Wildlife Sanctuary, and Tipeswar Wildlife Sanctuary.
- (ii) Validity of the existing EC along with capacity expansion is upto the life of the mine or 5 years, whichever is earlier from the date of issue of such letter.
- (iii) The project proponent shall obtain Consent to Establish/Operate from the State Pollution Control Board for the proposed peak capacity of 0.625 MTPA (Peak) prior to commencement of the production.
- (iv) All the non-compliance/partly complied condition as per certified compliance report of RO, Nagpur vide its report dated 7th May, 2020 shall be complied within 2 years.
- (v) Third party monitoring (by NEERI/CIMFR/IIT) for air quality shall be carried out at identified locations, both ambient and the process area, to arrive at impact of the proposed expansion. The results along with the recommendation shall be presented before the EAC to assess the efficacy and adequacy of pollution control measures.
- (vi) Transportation of coal from Coal Handling Plant(CHP) shall be through mechanized covered trucks. The State Pollution Control Board, while considering consent to operate for the project, shall ensure that with the proposed coal transportation by road, air quality would remain within the national ambient air quality standards
- (vii) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient fixed type 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.



- (viii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (ix) Persons of nearby villages shall be given training on livelihood and skill development to make them employable
- (x) Mechanism for treating stored mine water shall be developed to avoid any ground and surface water contamination
- (xi) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xii) Project proponent to plant 150,000 nos. of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- (xiii) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC.
- (xiv) 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.
- (xv) 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 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xvi) 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.
- (xvii) 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.

- (xviii) 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".
- (xix) 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.
- (xx) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th 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 MoEFCC.

Specific condition with respect area being in CPAs

- (i) 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 24th October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii) 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.
- (iii) In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.
- (iv) Monitoring of compliance of EC conditions may be submitted with third party audit every year.

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- (v) Fund allocation for Corporate Environment Responsibility (CER) shall be atleast 2 times the amount given as per Ministry's O.M. No. 22-65/2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office..
- (vi) Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.
- (vii) Transportation of materials by rail/ conveyor belt, wherever feasible.
- (viii) A detailed water harvesting plan may be submitted by the project proponent
- (ix) In case, domestic waste water generation is more than 10 KLD, the industry may install STP.
- (x) Monitoring of compliance of EC conditions may be submitted with third party audit every year
5. All other conditions stipulated in the environmental clearance letter dated 30th January, 2015 shall also apply.


(Lalit Bokolia)
Director

Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Principal Secretary, Department of Environment, Government of Maharashtra, 15th 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 Chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
6. The Chairman, Maharashtra State Pollution Control Board, Kalapataru Point, 3rd & 4th Floors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 2
7. The District Collector, Chandrapur, Government of Maharashtra
8. Monitoring File /Guard file/PARIVESH Portal


(Lalit Bokolia)
Director

**EC COMPLIANCE REPORT OF BALLARPUR OCP (0.625 MTPA),
EC REF No. J-11015/71/2013-IA-II(M) dated 15.10.2020**

Sr no.	Conditions	Status of Compliance
1	Clarification from District Forest Officer that mining area and its ancillary activities does not fall under Corridor of Tadoba and life Sanctuary (Telangana). Chaprala Wildlife Sanctuary. Painganga Wild life Sanctuary. and Tipeswar Wildlife Sanctuary.	Mining area and its ancillary activities does not fall under Corridor of Tadoba and life Sanctuary (Telangana). Chaprala Wildlife Sanctuary. Painganga Wild life Sanctuary. and Tipeswar Wildlife Sanctuary. Clarification from DFO shall be sought.
2	Validity of the existing EC along with capacity expansion is upto the life of the mine or 5 years, whichever is earlier from the date of issue of such letter.	Agreed.
3	The project proponent shall obtain Consent to Establish/Operate from the State Pollution Control Board for the proposed peak capacity of 0.625 MTPA (Peak) prior to commencement of the production.	CTO has been obtained for a production capacity of 0.625 MTPA and is valid upto 30.06.2023. Further application for extension has been made vide application no. MPCB-CONSENT-0000174564 dated 23.06.2023 and is under consideration in CAC MPCB, Mumbai.
4	All the non-compliance/partly complied condition as per certified compliance report of RO, Nagpur vide its report dated 7 May, 2020 shall be complied within 2 years	Agreed and will be complied. Copy of ATR against non-compliance/partly complied condition as per certified compliance report of RO, Nagpur vide its report dated 7 May, 2020. Same has been attached as Annexure 2.
5	Third party monitoring (by NEERI/CIMFR/IIT) for air quality shall be carried out at identified locations, both ambient and the process area, to arrive at impact of the proposed expansion. The results along with the recommendation shall be presented before the EAC to assess the efficacy and adequacy of pollution control measures.	Four ambient air quality monitoring stations are - (i) Manager Office – Ballarpur UG (ii) Premises of SAM office (iii) Substation – Ballarpur OC (iv) Filter Plant/ Colony The stations have been fixed considering the meteorological data, topographical features etc. and it is in consultation with MPCB, Chandrapur.
6	Transportation of coal from Coal Handling Plant (CHP) shall be through mechanized covered trucks. The State Pollution Control Board, while considering consent to operate for the project, shall ensure that with the proposed coal transportation by road. Air quality would remain within the national ambient air quality standards	Transportation of coal is carried through tarpaulin covered trucks from mobile crusher. 3.00 km of internal roads are black topped. Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed.
7	Mitigating measures shall be	Transportation of coal is carried through tarpaulin covered trucks

	undertaken to control dust and other fugitive emissions all along the roads by providing sufficient fixed type water sprinklers. Adequate correctie 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/logging arrangement. wind barrier vertical greenery system. green belt. dust suppression arrangement at loading and unloading points, etc	from mobile crusher. 3.00 km of internal roads are black topped. Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed.																			
8	Continuous monitoring of occupational safety and other health hazards and the corrective actions need to be ensured.	Periodic health check up of mine workers are carried out once in 5 years with the purpose of detecting occupational diseases and hearing impairments. Every worker in the mine is examined in 5 years- up to the age of 45; the workers who are above 50 years are subjected to periodic medical examination at two and a half years interval. Details of IME and PME done at Ballarpur Area is given below: <table><tr><th>Year</th><th>IME (in nos.)</th><th colspan="2">PME (in nos.)</th></tr><tr><td></td><td>Acheived</td><td>Target</td><td>Acheived</td></tr><tr><td>2021</td><td>953</td><td>1220</td><td>1425</td></tr><tr><td>2022</td><td>857</td><td>1220</td><td>1216</td></tr></table>				Year	IME (in nos.)	PME (in nos.)			Acheived	Target	Acheived	2021	953	1220	1425	2022	857	1220	1216
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9	Persons of nearby villages shall be given training on livelihood and skill development to make them employable	Mobile repairing training programme from/ 19/02/2019 to 19/03/2019(25 nos. participants) Beautician course from 03/03/2019 to 31/03/2019(25 nos. participants), was organized for local communities in 2018-19 with an expenditure of 2.82 lakhs. Tailoring Programme for 25 nos. participants has been completed.																			
10	Mechanism for treating stored mine water shall be developed to avoid any ground and surface water contamination	Untreated Mine water is not stored, hence there is no scope for ground and surface water contamination.																			
11	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles	There is no further external OB dumping envisaged in the project.																			
12	Project proponent to plant 1,50,000 nos. of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	Plantation could not be carried out in the past 2 years due to constraints in availability in land. It is proposed to plant 35000 nos. In FY 23-24 and further in the FY 24-25 target of 150000 shall be completed as land will be available due to backfilled land. Total plantation on existing OB Dump and embankment is 1,14,500 Nos. Further plantation of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution will be carried out. <table><tr><th>Sr no.</th><th>Year</th><th>No. of plantation</th><th>Area (Ha)</th></tr><tr><td>1</td><td>1993-94</td><td>48000</td><td>19.2</td></tr></table>				Sr no.	Year	No. of plantation	Area (Ha)	1	1993-94	48000	19.2								
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		<table><tr><td>2</td><td>1994-95</td><td>35250</td><td>14.1</td></tr><tr><td>3</td><td>2000-01</td><td>10000</td><td>4</td></tr><tr><td>4</td><td>2002-03</td><td>5000</td><td>2</td></tr><tr><td>5</td><td>2004-05</td><td>8750</td><td>3.5</td></tr><tr><td>6</td><td>2009-10</td><td>5000</td><td>2</td></tr><tr><td>7</td><td>2014-15</td><td>2500</td><td>1</td></tr><tr><td></td><td>TOTAL</td><td>1,14,500</td><td>45.8</td></tr></table>	2	1994-95	35250	14.1	3	2000-01	10000	4	4	2002-03	5000	2	5	2004-05	8750	3.5	6	2009-10	5000	2	7	2014-15	2500	1		TOTAL	1,14,500	45.8
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13	Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017- IA. I I I dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC.	The Coal India Limited Corporate Environment Policy 2019 duly followed WCL.																												
14	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 being practiced as per DGMS permission. There is no damages caused to habitation/structures due to blasting activity.																												
15	The Project Proponent shall comply 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 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors	<p>Balance life of mine is 5 yrs. The progress of mining activities are being carried out as per approved mining plan.</p> <p>Yearwise production details are as follows:</p> <table><tr><td>Sr no</td><td>Year</td><td>Production (MT)</td></tr><tr><td>1</td><td>2019-20</td><td>0.625</td></tr><tr><td>2</td><td>2020-21</td><td>0.23</td></tr><tr><td>3</td><td>2021-22</td><td>0.27</td></tr><tr><td>4</td><td>2022-23</td><td>0.1</td></tr><tr><td>5</td><td>2023-24 (upto september)</td><td>0</td></tr></table> <p>As per the above details, there is no violation in the coal production done from the commencement of the mine.</p>		Sr no	Year	Production (MT)	1	2019-20	0.625	2	2020-21	0.23	3	2021-22	0.27	4	2022-23	0.1	5	2023-24 (upto september)	0									
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3	2021-22	0.27																												
4	2022-23	0.1																												
5	2023-24 (upto september)	0																												
16	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	NOC for ground water abstraction has been obtained from CGWA vide CGWA/NOC/MIN/ORIG/2021/12464 valid from 03/08/2021 to 02/08/2023. Application for renewal of CGWA NOC has been made and EAC meeting awaited. Requisite fees for abstraction against quantum to be extracted for renewal period has been made to CGWA.																												

	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, CG WA and State Pollution Control Board	
17	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 B P, 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	Periodic health check up of mine workers are carried out by Occupational Health Specialist once in 5 years with the purpose of detecting occupational diseases and hearing impairments. Every worker in the mine is examined in 5 years- up to the age of 45; the workers who are above 50 years are subjected to periodic medical examination at two and a half years interval.
18	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	The project proponent is adhering to the mitigation measures as per the guideline specific under the title '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' OM No.Z11013/5712014- IA.II (M) dated 29th October, 2014.
19	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 to 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	The illumination and sound at night at project sites does not disturb the villages in respect of both human and animal population. The observations are found well within the threshold limit.

	keeping the noise levels wet 1 within the prescribed limits for day light/night hours	
20	Hon'ble Supreme Court in an Writ Petition(s) C i vi 1 No. 11 4/20 14. Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Un ion 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 tit 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 MoEFCC	Agreed and will be complied.

Specific condition with respect area being in CPAs

Sr no.	Conditions	Status of Compliance			
1	CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act. 198 1 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-1 60 17/38/20 1 8-CPA dated 24" October. 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area	CTO has been obtained for a production capacity of 0.625 MTPA valid upto 30.06.2023. Further application for extension has been made vide application no. MPCB-CONSENT-0000174564 dated 23.06.2023 and is under consideration in CAC MPCB, Mumbai.			
2	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.	Total plantation on existing OB Dump and embankment is 114500 Nos. Further plantation of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution will be carried out.			
		Sr no.	Year	No. of plantation	Area (Ha)
		1	1993-94	48000	19.2
		2	1994-95	35250	14.1

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3	In addition, the project proponent shall develop green belt outside the plant premises such as avenue plantation, plantation in vacant areas social forestry etc.	Total plantation on existing OB Dump and embankment is 114500 Nos. Further plantation of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution will be carried out. <table><tr><td>Sr no.</td><td>Year</td><td>No. of plantation</td><td>Area (Ha)</td></tr><tr><td>1</td><td>1993-94</td><td>48000</td><td>19.2</td></tr><tr><td>2</td><td>1994-95</td><td>35250</td><td>14.1</td></tr><tr><td>3</td><td>2000-01</td><td>10000</td><td>4</td></tr><tr><td>4</td><td>2002-03</td><td>5000</td><td>2</td></tr><tr><td>5</td><td>2004-05</td><td>8750</td><td>3.5</td></tr><tr><td>6</td><td>2009-10</td><td>5000</td><td>2</td></tr><tr><td>7</td><td>2014-15</td><td>2500</td><td>1</td></tr><tr><td></td><td>TOTAL</td><td>1,14,500</td><td>45.8</td></tr></table>		Sr no.	Year	No. of plantation	Area (Ha)	1	1993-94	48000	19.2	2	1994-95	35250	14.1	3	2000-01	10000	4	4	2002-03	5000	2	5	2004-05	8750	3.5	6	2009-10	5000	2	7	2014-15	2500	1		TOTAL	1,14,500	45.8
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4	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	NEERI has conducted third party EC compliance assessment in FY2022-23 and the report of NEERI on EC compliance is awaited.After receiving the same it shall be submitted to MOEFCC.																																					
5	Fund allocation for Corporate Environment Responsibility (CER) shall be atleast 2 times the amount given as per Ministry's O.M. No. 22-65/2017-IA.11 I dated 30 th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry’s Regional Office.	The Coal India Limited Corporate Environment Policy 2019 duly followed WCL.																																					
6	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	Transportation of coal is carried through tarpaulin covered trucks from mobile crusher. 3.00 km of internal roads are black topped. Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed.																																					
7	Transportation of materials by conveyor belt, wherever feasible.	Transportation of coal is carried through tarpaulin covered trucks from mobile crusher. 3.00 km of internal roads are black topped.																																					

		Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed.
8	A detailed water harvesting plan may be submitted by the project proponent	Roof top rain water harvesting structure has been constructed at Manager Officer of Ballarpur OCM having rooftop area of 290.52 sqm.
9	In case, domestic waste water generation is more than 10 KLD, the industry may install STP.	At present, Septic tank and soak pit systems provided and working effectively and satisfactorily.
10	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	NEERI has conducted third party EC compliance assessment in FY2022-23. Report of the same is awaited.
11	All other conditions stipulated in the environmental clearance letter dated 30 January, 2015 shall also apply.	Agreed and will be complied.

EC COMPLIANCE REPORT OF BALLARPUR OCP (0.625 MTPA), EC REF NO.J11015/71/2013-IA.II (M) Dated, 30TH JANUARY 2015

A. Specific Conditions

S.N o.	Condition	Status of Compliance																		
i)	The maximum production from mine at any given time shall not exceed the limit as prescribed in EC	Complied and the production doesn't exceed 0.625 MTPA. The coal production for last 5 years is : <table border="1"> <thead> <tr> <th>Sr no</th><th>Year</th><th>Production (MT)</th></tr> </thead> <tbody> <tr> <td>1</td><td>2019-20</td><td>0.625</td></tr> <tr> <td>2</td><td>2020-21</td><td>0.23</td></tr> <tr> <td>3</td><td>2021-22</td><td>0.27</td></tr> <tr> <td>4</td><td>2022-23</td><td>0.1</td></tr> <tr> <td>5</td><td>2023-24 (upto september)</td><td>0</td></tr> </tbody> </table>	Sr no	Year	Production (MT)	1	2019-20	0.625	2	2020-21	0.23	3	2021-22	0.27	4	2022-23	0.1	5	2023-24 (upto september)	0
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3	2021-22	0.27																		
4	2022-23	0.1																		
5	2023-24 (upto september)	0																		
ii)	The validity of the EC is for the life of the mine or as specified in EIA notification, 2006, whichever is earlier	Noted.																		
iii)	Mining shall be carried out as per Statute at a safe distance from the seasonal nallah flowing within /	Mining operation is being carried out as per statute by keeping a safe distance i.e 160 m from seasonal nallah with due permission from DGMS.																		

	close to the lease boundary.				
iv)	Top soil should be stacked properly with proper slope at earmarked site and should not be kept active and shall be used for reclamation and development of green belt.	Top soil is being stacked at separate dump No 8 Quantity: 12.528 Mm3 (as on September 2023). During the initial years it was carpeted over embankment and plantation developed over it. At present there is no excavation of fresh top soil. The top soil excavated in the recent past has been placed at Dump No 8 which is proposed to be carpeted over the backfilled area in a progressive manner. Top soil removed in last 2 years is:			
		Sr no	Year	Top soil removed (Mm³)	
		1	Upto 2021-22	12.30	
		2	2022-23	0.10	
		3	2023-24 (upto sept 2023)	0.13	
v)	The existing OB dumps which have been biologically reclaimed shall be monitored and if required stabilized with plantation using native species.	It will be complied. Total plantation on existing OB Dump and embankment is 114500 Nos.			
		Sr no.	Year	No. of plantation	Area (Ha)
		1	1993-94	48000	19.2
		2	1994-95	35250	14.1
		3	2000-01	10000	4
		4	2002-03	5000	2
		5	2004-05	8750	3.5
		6	2009-10	5000	2
		7	2014-15	2500	1
			TOTAL	1,14,500	45.8
vi)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off of 2015	Now all the existing old OB dumps have been biologically reclaimed and stabilized with native species, as such there is no siltation & flow of sediments from these dumps. Hence, no toe wall is required to check run off. However, a Gabion wall(Length – 300 m Height – 3.00 m) has been constructed along the Wardha river as per the directions of Maharashtra Pollution Control Board.			
vii)	Drills should be wet operated	Drills are being wet operated.			
viii)	Roads shall be metal topped and mechanical sweepers shall be regularly deployed to minimize clear the dust off the main approach and mineral transportation roads. Water sprinkling (fixed and mist type, mobile) shall be done regularly	Approx. 3.00 km of internal roads are black topped. Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed.			
ix)	The company shall obtain approval of CGWA/ CGWB	NOC for ground water abstraction has been obtained from CGWA vide CGWA/NOC/MIN/ORIG/2021/12464 valid from 03/08/2021			

	Regional office for use of ground water if any for mining operations.	to 02/08/2023. Application for renewal of CGWA NOC has been made and EAC meeting awaited. Requisite fees for abstraction against quantum to be extracted for renewal period has been made to CGWA.																																		
x)	Coal Transportation in pit by Dumpers, surface to siding by Dumpers and loading to siding by Pay Loaders	Coal Transportation in pit is done by Dumpers, surface to siding is done by Dumpers and loading to siding is being done by Pay Loaders.																																		
xi)	The production shall be within the same Mining Lease area	The production is contained within the same mining lease area of 242.64 Ha.																																		
xii)	The depth of the void shall be 35 m from the ground level and should be adequate for fishery purpose.	Noted and will be complied. The post mining land use will be as per approved reports. The final mine void dept depth which will be reached after the end of mine will be appropriately addressed.																																		
xiii)	The OB shall be completely re-handled at the end of the mining. The rest of the area will be backfilled upto the ground level and covered with about a meter thick top soil and put to use.	<div>Noted and will be complied. The backfilling is in progress. Out of 69.019 Mm3. The details of OB excavated ,backfilled and area physically reclaimed is as follows:</div> <table><tr><th>Sr n o.</th><th>Year</th><th>OB removed (Mm³)</th><th>OB Backfilled (Mm³)</th><th>Physical reclamation (Ha)</th></tr><tr><td>1</td><td>2019-20</td><td>0.112</td><td>0.112</td><td>2.7</td></tr><tr><td>2</td><td>2020-21</td><td>0.14</td><td>0.14</td><td>0</td></tr><tr><td>3</td><td>2021-22</td><td>0.993</td><td>0.993</td><td>0</td></tr><tr><td>4</td><td>2022-23</td><td>0.18</td><td>0.18</td><td>0</td></tr><tr><td>5</td><td>2023-24 (upto Sept 2023)</td><td>0.9</td><td>0.78</td><td>0</td></tr></table>					Sr n o.	Year	OB removed (Mm³)	OB Backfilled (Mm³)	Physical reclamation (Ha)	1	2019-20	0.112	0.112	2.7	2	2020-21	0.14	0.14	0	3	2021-22	0.993	0.993	0	4	2022-23	0.18	0.18	0	5	2023-24 (upto Sept 2023)	0.9	0.78	0
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xiv)	Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.	The embankment of Length – 5.5 km and Height – 10 m have been constructed along the river boundary is of suitable dimensions and stabilized with plantation so as to withstand the peak flow and prevent mine inundation. A Gabion wall(Length – 300 m Height – 3.00 m) has been constructed along the Wardha river as per the directions of Maharashtra Pollution Control Board.																																		
xv)	The CSR cost should be Rs 5/tonnes of coal produced which should be adjusted as per the annual inflation.	<div>Agreed, will be complied as per the CIL’s CSR policy under Companies Act, 2013, The fund for the CSR will be allocated based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs 2.00 per Tonne of Coal Production of the previous year whichever is higher.</div> <div>CSR works performed are as follows:</div> <div><div>1. Construction of Vyamshala at Rajendra Prasad Ward Ballarpur</div><div>2. Construction of Vyamshalaa Zakir Husain Ward Ballarpur</div><div>3. WBM road to Bamboo Cluster at Bamni village</div><div>4. Construction of Sanskrit Bhavan at Ballarpur under CSR</div><div>5. Construction of concrete road at ShivajiNagar Ballarpur</div></div>																																		

		<p>under CSR</p> <p>6. Providing and fixing 12.5 mtr high mas Tower at Ballarpur Nagar Praishad</p> <p>7. Construction of compound wall at Mount Fort school at Bamni under CSR</p> <p>8. Construction of drain at Visapur</p> <p>Expenditure in last 5 years is as follows:</p> <table><tr><th>Sr no</th><th>Year</th><th>Expenditure (Lakhs)</th></tr><tr><td>1</td><td>2019-20</td><td>237.35</td></tr><tr><td>2</td><td>2020-21</td><td>47.05</td></tr><tr><td>3</td><td>2021-22</td><td>2.17</td></tr><tr><td>4</td><td>2022-23</td><td>25.52</td></tr></table>	Sr no	Year	Expenditure (Lakhs)	1	2019-20	237.35	2	2020-21	47.05	3	2021-22	2.17	4	2022-23	25.52													
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xvi)	Everybody in the core area should be provided with mask for protection against fugitive dust emissions	Dust masks are provided to the workers operating in mine and in the core area for protection against fugitive dust emissions.																												
xvii)	Dust mask to be provided to everyone working in the mine area	Workers engaged in mine area are provided with appropriate personal protective equipments.																												
xviii i)	The supervisory staff should be periodically responsible for ensuring compulsory regarding wearing of dust mask in the core area.	Workers engaged in mine area are provided with appropriate personal protective equipments. Regular awareness programs for training and retraining of workers are also conducted in the vocational training center of Area.																												
xix)	People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.	Periodic health check up of mine workers are carried out once in 5 years with the purpose of detecting occupational diseases and hearing impairments. Every worker in the mine is examined in 5 years- up to the age of 45; the workers who are above 50 years are subjected to periodic medical examination at two and a half years interval.																												
xx)	The mining area should be surrounded by green belt having thick canopy of the tree cover.	<p>Will be complied. Total plantation on existing OB Dump and embankment is 114500 Nos</p> <table><tr><th>Sr no.</th><th>Year</th><th>No. of plantation</th><th>Area (Ha)</th></tr><tr><td>1</td><td>1993-94</td><td>48000</td><td>19.2</td></tr><tr><td>2</td><td>1994-95</td><td>35250</td><td>14.1</td></tr><tr><td>3</td><td>2000-01</td><td>10000</td><td>4</td></tr><tr><td>4</td><td>2002-03</td><td>5000</td><td>2</td></tr><tr><td>5</td><td>2004-05</td><td>8750</td><td>3.5</td></tr><tr><td>6</td><td>2009-10</td><td>5000</td><td>2</td></tr></table>	Sr no.	Year	No. of plantation	Area (Ha)	1	1993-94	48000	19.2	2	1994-95	35250	14.1	3	2000-01	10000	4	4	2002-03	5000	2	5	2004-05	8750	3.5	6	2009-10	5000	2
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xxi)	The embankment constructed along the boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.	The embankment for protection of mine working has only been constructed with OB as per Statute, the embankment has been stabilized with plantation. The backfilling is in progress. Out of 70.1 Mm3 of OB excavated upto September 2023, 67.02 Mm3 has been accommodated in void. The embankment of Length – 5.5 km and Height – 10 m have been Biologically reclaimed and there after stabilized by plantation of native species i.e Shisham, Karanji, Neem, etc. A Gabion wall (Length – 300 m Height – 3.00 m) has been constructed along the Wardha river as per the directions of Maharashtra Pollution Control Board.																																						
xxii)	There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.	Complied. A Gabion wall (Length – 300 m Height – 3.00 m) has been constructed along the Wardha river as per the directions of Maharashtra Pollution Control Board. Embankment has been stabilized with plantation.																																						
xxii i)	There shall be no external OB dumps.	Complied. All the OB generated is backfilled. 69.019 Mm3. The details of OB excavated ,backfilled and area physically reclaimed is as follows: <table><tr><td>Sr no .</td><td>Year</td><td>OB removed (Mm³)</td><td>OB Backfilled (Mm³)</td><td>Physical reclamation (Ha)</td></tr><tr><td>1</td><td>2018-19</td><td>2.74</td><td>2.74</td><td>7.5</td></tr><tr><td>2</td><td>2019-20</td><td>0.112</td><td>0.112</td><td>2.7</td></tr><tr><td>3</td><td>2020-21</td><td>0.14</td><td>0.14</td><td>0</td></tr><tr><td>4</td><td>2021-22</td><td>0.99</td><td>0.99</td><td>0</td></tr><tr><td>5</td><td>2022-23</td><td>0.18</td><td>0.18</td><td>0</td></tr><tr><td>6</td><td>2023-24 (upto Sept 2023)</td><td>0.9</td><td>0.78</td><td>0</td></tr></table>				Sr no .	Year	OB removed (Mm³)	OB Backfilled (Mm³)	Physical reclamation (Ha)	1	2018-19	2.74	2.74	7.5	2	2019-20	0.112	0.112	2.7	3	2020-21	0.14	0.14	0	4	2021-22	0.99	0.99	0	5	2022-23	0.18	0.18	0	6	2023-24 (upto Sept 2023)	0.9	0.78	0
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xxi v)	Catch drains and siltation ponds of appropriate size shall be constructed to arrest the silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety	Catch drain /garland drain of appropriate size have been constructed all around the quarry and OB dump to arrest slit and sediments into natural water source. Garland drain : Length - 2916 m Width - varying in size from 1.5 m to 3.5 m Depth - varying from 1.2 m to 2.0 m Catch drain : Length - 2400 m Width - varying in size from 1.0 m to 1.5 m Depth - varying from 1.2 m to 1.5 m These catch drain /garland drain are cleaned before onset of every																																						

	margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.	monsoon. The sump made at the quarry floor is of size 77 Million Gallon which collects all the silts & sediments form OB benches through cross drainage . The sump capacity is adequate keeping the sudden rainfall. The water thus collected in the sump gets adequate retention time to allow proper setting of suspended materials. The supernatant water is pumped out on surface & fed into surface sedimentation tank of for secondary treatment. The treated water from surface sedimentation tank is used for suppression of the mine area & green belt development The drains are desilted every year before the onset of monsoon. The quantity of desilting done in Year 23-24 is 2021 m ³																														
xxv)	Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.	Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. 02 Nos. Of Mobile Water Tankers (Departmental -1 no. Of 28 KL and 01 no hired of 20 KL) are used for sprinkling on roads., 8 nos of rainsguns at railway siding and 2 nos at weighbridge are installed. Water spraying arrangement is provided for mobile crusher.																														
xxv i)	The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3 tier green belt comprising of a mix of native species shall be developed all along the major approach roads.	3.00 km of internal roads are black topped. Concrete pavement covering a length of 150 m at weighbridge. Brooming is done regularly on internal roads. Regular repairing and retarring of these rods is done to reduce dust emmissions.																														
xxv ii)	Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigtaiive measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	Controlled blasting is being practiced to reduce ground vibration and arrest flyrocks as per DGMS permisssion and scientific study.																														
xxv iii)	A progressive afforestation plan shall be implemented covering an area of 126.24 ha at the end of mining, which includes reclaimed External OB dump area (32.53 ha), internal OB dump area (90.21 ha), along roads and green belt (0.50 ha) in township located outside the lease by planting native species in consultation with local DFO. The density of the trees shall be around 2500 plants/ha. Massive plantation shall be carried out in	Tree plantation done till date: Total plantation on existing OB Dump and embankment is 114500 Nos <table><tr><th>Sr no.</th><th>Year</th><th>No. of plantation</th><th>Area (Ha)</th></tr><tr><td>1</td><td>1993-94</td><td>48000</td><td>19.2</td></tr><tr><td>2</td><td>1994-95</td><td>35250</td><td>14.1</td></tr><tr><td>3</td><td>2000-01</td><td>10000</td><td>4</td></tr><tr><td>4</td><td>2002-03</td><td>5000</td><td>2</td></tr><tr><td>5</td><td>2004-05</td><td>8750</td><td>3.5</td></tr><tr><td>6</td><td>2009-10</td><td>5000</td><td>2</td></tr></table>			Sr no.	Year	No. of plantation	Area (Ha)	1	1993-94	48000	19.2	2	1994-95	35250	14.1	3	2000-01	10000	4	4	2002-03	5000	2	5	2004-05	8750	3.5	6	2009-10	5000	2
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	open spaces in and around the mine and a 3 tier avenue plantation along the main approach roads to mine.	<table><tr><td>7</td><td>2014-15</td><td>2500</td><td>1</td></tr><tr><td></td><td>TOTAL</td><td>1,14,500</td><td>45.8</td></tr></table>	7	2014-15	2500	1		TOTAL	1,14,500	45.8																												
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xxi x)	An estimated total of 13.780 Mm ³ of OB generated during the entire life of the mine. Out of which 13.780 Mm ³ of OB will be dumped into one internal dump covering an area 142.69 ha of land with height upto ground level. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self sustaining and compliance status shall be submitted to MOEF and its regional Office on yearly basis.	<p>All the OB generated is being backfilled. Out of 70.1 Mm3 of OB excavated upto June 2022, 67.02 Mm3 has been accommodated in void.</p> <p>Compliance reports are being sent to Maharashtra Pollution Control Board on Six monthly basis.</p>																																				
xxx)	The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.	The restoration & reclamation plan for degraded area will be in line with the approved EMP.																																				
xxx i)	Compensatory ecological & restoration of waste land, other degraded land and OB dumps in lieu of breasking open the land be carried out.	<p>It will be followed and complied.</p> <p>Tree plantation done till date: Total plantation on existing OB Dump and embankment is 114500 Nos</p> <table><tr><th>Sr no.</th><th>Year</th><th>No. of plantation</th><th>Area (Ha)</th></tr><tr><td>1</td><td>1993-94</td><td>48000</td><td>19.2</td></tr><tr><td>2</td><td>1994-95</td><td>35250</td><td>14.1</td></tr><tr><td>3</td><td>2000-01</td><td>10000</td><td>4</td></tr><tr><td>4</td><td>2002-03</td><td>5000</td><td>2</td></tr><tr><td>5</td><td>2004-05</td><td>8750</td><td>3.5</td></tr><tr><td>6</td><td>2009-10</td><td>5000</td><td>2</td></tr><tr><td>7</td><td>2014-15</td><td>2500</td><td>1</td></tr><tr><td></td><td>TOTAL</td><td>1,14,500</td><td>45.8</td></tr></table>	Sr no.	Year	No. of plantation	Area (Ha)	1	1993-94	48000	19.2	2	1994-95	35250	14.1	3	2000-01	10000	4	4	2002-03	5000	2	5	2004-05	8750	3.5	6	2009-10	5000	2	7	2014-15	2500	1		TOTAL	1,14,500	45.8
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xxx ii)	The mining should be phased out in sustainable manner. No extra OB dumps are permitted.	There is no extra external dump. All OB excavated is being accommodated in decoaled void. The entire OB excavated is being used for backfilling of the decoaled Area progressively.																																				
xxx iii)	No groundwater shall be used for mining operations.	No ground water is used for mining operations. NOC for ground water abstraction has been obtained from CGWA vide CGWA/NOC/MIN/ORIG/2021/12464 valid from 03/08/2021 to 02/08/2023. Application for renewal of CGWA NOC has been																																				

		made and EAC meeting awaited. Requisite fees for abstraction against quantum to be extracted for renewal period has been made to CGWA.
xxx iv)	Of the total quarry area of 172.31 ha the backfilled quarry area of 90.21 ha shall be reclaimed with plantation and a void of 29.62 ha at a depth of 40 m which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilised with plantation/afforestation by planting native plant species in consultation with the local DFO. Density shall be 2500 plants per ha.	There is no external dump. All OB excavated is being accommodated in decoaled void. The entire OB excavated is being used for backfilling of the decoaled Area progressively. All the OB generated is being backfilled. Out of 70.1 Mm3 of OB excavated upto September 2023, 67.02 Mm3 has been accommodated in void. The post mining land use will be as per approved reports. The final mine void dept depth which will be reached after the end of mine will be appropriately addressed. The embankment of Length – 5.5 km and Height – 10 m have been biologically reclaimed and there after stabilized by plantation of native species i.e Shisham, Karanji, Neem, etc.
xxx v)	Regular monitoring of GW level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers Monitoring shall be done 4 times a year. Data is submitted to MOEF and CPCB quarterly with in one month of monitoring.	The groundwater level monitoring is being carried out by CMPDIL, 4 times a year in pre-monsoon (May), Monsoon (August), Post-monsoon (November) and Winter (January) seasons and for quality once in a year. The monitoring report is regularly sent to Regional Office, CGWB Nagpur with a copy to MOEF&CC and CPCB.
xxx vi)	The company shall put up artificial GW recharge measures for augmentation of Gw resource in case monitoring indicates a decline in water table.	The nearby villages have no shortage of water, however regular supply of water is ensured in case of scarcity.
xxx vii)	STP shall be installed in existing colony. ETP shall also be provided for workshop and CHP wastewater.	Existing colony is in the lease hold area of Ballarpur UG mine where septic tank and soak system is provided. For treatment of workshop effluent, 75 KLD ETP is under construction. 01 no of Sedimentation tank provided.
xxx viii)	Besides carrying out PME of workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment.	Periodic health check up of mine workers are carried out once in 5 years with the purpose of detecting occupational diseases and hearing impairments. Every worker in the mine is examined in 5 years- up to the age of 45; the workers who are above 50 years are subjected to periodic medical examination at two and a half years interval.
Xx xix	Land oustees shall be compensated as per the norms laid out R & R policy of CIL or National R&R policy whichever is higher	Entire land has been acquired and R & R has been already settled No house oustees involved. Total land compensation paid = Rs 37769432
xi)	For monitoring land use pattern and for post mining land use, a	Digital survey of entire lease hold area using satellite remote sensing survey is carried out in three years. The same is

	time series of land use maps, based on satellite imagery(on a scale of 1: 5000) of core zone and buffer zone, from start of project until end shall be prepared once in 3 years and report should be submitted to MoEFCC and its concerned Regional authority.	submitted to RO, MOEF&CC along with six monthly report.												
xli)	A detailed final mine closure plan along with details of Corpus fund shall be submitted to MoEFCC within 6 months of Environmental clearance	<p>The progress of mining activities are being carried out as per approve mining plan. The Mine Closure Plan is an integral part of approve Mining Plan. The post mining land use will be as per approved reports.</p> <p>The land after completion of all closure activities and reimbursement of corpus deposited appropriate action for handing over the land will be taken. A mine closure plan was approved by the WCL Board along with opening of a corpus fund / account having account no. 0897107600002257 was opened at the Oriental Bank of Commerce, Jaripataka Branch, Nagpur. The total corpus amounts available in the account as on date 31.03.2023 is INR 11,13,05,453/- .</p>												
xlii)	The project authorities shall in consultation with the panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.	<p>Agreed, will be complied as per the CIL's CSR policy under Companies Act, 2013, The fund for the CSR will be allocated based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs 2.00 per Tonne of Coal Production of the previous year whichever is higher.</p> <p>CSR works performed are as follows:</p> <ol style="list-style-type: none"> 1. Construction of Vyamshala at Rajendra Prasad Ward Ballarpur 2. Construction of Vyamshalaa Zakir Husain Ward Ballarpur 3. WBM road to Bamboo Cluster at Bamni village 4. Construction of Sanskrit Bhavan at Ballarpur under CSR 5. Construction of concrete road at ShivajiNagar Ballarpur under CSR 6. Providing and fixing 12.5 mtr high mas Tower at Ballarpur Nagar Praishad 7. Construction of compound wall at Mount Fort school at Bamni under CSR 8. Construction of drain at Visapur 9. <p>Expenditure in last 5 years is as follows:</p> <table border="1"> <thead> <tr> <th>Sr no</th><th>Year</th><th>Expenditure (Lakhs)</th></tr> </thead> <tbody> <tr> <td>1</td><td>2019-20</td><td>237.35</td></tr> <tr> <td>2</td><td>2020-21</td><td>47.05</td></tr> <tr> <td>3</td><td>2021-22</td><td>2.17</td></tr> </tbody> </table>	Sr no	Year	Expenditure (Lakhs)	1	2019-20	237.35	2	2020-21	47.05	3	2021-22	2.17
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3	2021-22	2.17												

		4	2022-23	25.52
xlii i)	<p>Corporate Environment responsibility:</p> <p>a) The company shall have a well laid down Environment policy approved by the Board of Directors</p> <p>b) The Environment policy shall prescribe for standard operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or Forest norms/conditions.</p> <p>c) The hierarchial system or administrative order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.</p> <p>d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stake holders at large.</p>	<p>Complied.</p> <p>The Coal India Limited Corporate Environment Responsibility Policy 2019 duly followed by WCL is attached.</p> <p>Self internal environmental audit system has been setup in the company recently. At Area level, a multi disciplinary committee has been constituted by order of competent authority to review the compliance status every month through a formatted checklist. Inter-area inspection to review compliance status is being done on quarterly basis. The report of the inspection is put up to the subsidiary level apex committee which has been constituted under the chairmanship of Director (Technical), WCL.</p> <p>At HQ, WCL- The cell is headed by GM (Env) reporting to Director (Technical). The team comprises of multi-disciplinary trained executive.</p> <p>At Area level – Area General Manager heads the Environment Department & assisted by GM (oprn), ANO(Env) and 1 Assistant Managers(Env) of Environment discipline.</p> <p>At Unit Level- Environment Management Cell is headed by Sub-Area Manager and is assisted by Mine Manager and Project Nodal Officer (Env) at unit level.</p> <p>The hierarchical system of the company for dealing with environmental issues exist at corporate level & area level. It has been uploaded on WCL website, linked as http://www.westerncoal.in/?q=node/431</p>		

B. General Conditions

S. NO.	Condition	Status of Compliance
i)	No change in Mining technology and scope of working shall be made without prior approval of	Noted and will be complied. No change in Mining technology envisaged.

	the MOEF & CC	
ii)	No change in calendar plan of production for quantum of mineral coal shall be made	Noted and will be complied.
iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM 10, PM 2.5, SO2 and NOX.	<p>Four ambient air quality monitoring stations are -</p> <p>(i) Manager Office – Ballarpur UG</p> <p>(ii) Premises of SAM office</p> <p>(iii) Substation – Ballarpur OC</p> <p>(iv) Filter Plant/ Colony</p> <p>The stations have been fixed considering the meteorological data, topographical features etc. and it is in consultation with MPCB, Chandrapur. It is being monitored by CMPDIL regularly. Monitoring reports for the period 01.04.2023 to 30.09.2023 enclosed.</p>
iv)	Data on ambient air quality monitoring and heavy metals such as Hg, As, Ni, Cd, Cr etc shall be regularly submitted to Ministry including its concerned Regional office and to SPCB and CPCB once in 6 months.	<p>Ambient Air quality monitoring is being carried out as per GSR 742(E).</p> <p>It is being monitored by CMPDIL regularly, attached as Annexure 8.</p> <p>Monitoring reports for the period 01.04.2023 to 30.09.2023 enclosed along with Heavy metal analysis report.</p> <p>Data on ambient air quality monitoring and heavy metals such as Hg, As, Ni, Cd, Cr etc is being regularly submitted to Ministry including its concerned Regional office and to SPCB and CPCB through six monthly reports.</p>
v)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged with blasting and drilling operations, operation of HEMM etc shall be provided with ear plugs/muffs	Adequate measures are taken for control of Noise pollution. Workers engaged in blasting and drilling operations, operation of HEMM, etc are provided with ear plugs/muffs.
vi)	Industrial wastewater (workshop and WW from mine) shall be properly collected, treated so as to conform the prescribed standards	<p>For proper treatment of Industrial wastewater-One ETP of capacity 75 cum/day is under construction and 01 no of Sedimentation tank has been constructed near the mine for treatment of mine pumped out water. The quality of discharge is being monitored so as to ensure compliance of prescribed norms before discharging.</p> <p>Monitoring reports for the period 01.04.2023 to 31.09.2023 enclosed.</p>
vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	<p>Coal transportation vehicles are covered with tarpaulins and are optimally loaded.</p> <p>Vehicular emissions are kept under control PUC certificate for all light & passenger vehicles are taken.</p>
viii)	Monitoring of environmental quality parameters shall be carried out through establishment	Monitoring of environmental quality parameters is done by CMPDIL, Nagpur. There is a full fledged NABL accredited Env. Laboratory of CMPDIL. The Monitoring is done through this

	of adequate number and type of pollution monitoring and analysis equipment in consultation with the SPCB abd data analysed through a lab recognised under EPA rules, 1986.	laboratory at fortnightly interval.																											
ix)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	<p>Protective respiratory devices are provided to workmen exposed to dust area. Workers are also regularly given training on safety and health aspects at VTC (this is the statutory requirement under mines safety act). Periodical medical examnation of every worker is being done every five years in our area hospital to detect any disease so that the appropriate action can be taken up at project level.</p> <p>Details of IME and PME done at Ballarpur Area is given below:</p> <table><tr><th>Year</th><th>IME (in nos.)</th><th colspan="2">PME (in nos.)</th></tr><tr><td></td><td>Acheived</td><td>Target</td><td>Acheived</td></tr><tr><td>2021</td><td>953</td><td>1220</td><td>1425</td></tr><tr><td>2022</td><td>857</td><td>1220</td><td>1216</td></tr></table> <p>Details of VTC trainings carried out at Ballarpur Area is given below:</p> <table><tr><th rowspan="2">Year</th><th colspan="2">VTC Training</th></tr><tr><th>Target</th><th>Acheived</th></tr><tr><td>2021-22</td><td>680</td><td>592</td></tr><tr><td>2022-23</td><td>680</td><td>440</td></tr></table>	Year	IME (in nos.)	PME (in nos.)			Acheived	Target	Acheived	2021	953	1220	1425	2022	857	1220	1216	Year	VTC Training		Target	Acheived	2021-22	680	592	2022-23	680	440
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x)	Occupational health surveillance programme of the workers shall be taken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof.	<p>It was submitted that every worker in mine was examined once in 5 years upto the age of 45 years; the workers who are above 50 years are subjected top periodical medical examination at two and a half years as per law.</p> <p>Details of IMPE and PME done at Ballarpur Area is given below:</p> <table><tr><th>Year</th><th>IME (in nos.)</th><th colspan="2">PME (in nos.)</th></tr><tr><td></td><td>Acheived</td><td>Target</td><td>Acheived</td></tr><tr><td>2021</td><td>953</td><td>1220</td><td>1425</td></tr><tr><td>2022</td><td>857</td><td>1220</td><td>1216</td></tr></table> <p>As per the records available, no notifiable (as specified in the Mine's Rules, 1985) disease has been identified till date.</p>	Year	IME (in nos.)	PME (in nos.)			Acheived	Target	Acheived	2021	953	1220	1425	2022	857	1220	1216											
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xi)	A seperate environmental management cell with suitable qualified personnel shall be setup under the control of Senior Executive, who will report directly to the Head of the company.	<p>At HQ, WCL- The cell is headed by GM (Env) reporting to Director (Technical). The team comprises of multi-disciplinary trained executive.</p> <p>At Area level – Area General Manager heads the Environment Department assisted by GM (opr), ANO(Envt) & 1 Assistant Managers of Environment discipline.</p> <p>At Unit Level- Environment Management Cell is headed by Sub-Area Manager and assisted by Mine Manager, Project Nodal Officer (Env) at unit level.</p>																											
xii)	The funds earmarked for environmental protection	The funds earmarked for environment protection measures are kept in seperate account and it is not used for any other purpose.																											

	measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its concerned RO	Expenditure statement is shown in every six monthly compliance report sent to MoEF&CC. Capital Expenditure upto 31/03/2023 – 28.88 lakhs Revenue Expenditure upto 31/03/2023 – 360.01 Lakhs (Approx.)
xiii)	The project authorities shall advertise at least in 2 local newspapers widely circulated around the project, one of which shall be in the vernacular language of locality concerned within 7 days of the clearance letter informing that the project has been accorded environmental clearance and a copy of EC is available at SPCB and may also be seen at website of MoEFCC.	Advertised in two news papers Mahavidarbha Hindi – 20.10.2020 Chandrapur Smamachar – 20.10.2020.
xiv)	A copy of EC letter shall be marked to concern Panchayat/zila parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion./representation has been recieved while processing the proposal.	The environment clearance copy has been sent to Nagar parishad but no suggestion has been received.
xv)	A copy pf EC letter shall also be displayed on website of the concerned SPCB. The EC letter shall also be displayed at Regional Office, district industry sector and Collector's Office/Tehsildar's Office for 30 days.	Agreed, a copy of EC has been uploaded on company website. A copy of six monthly has also been uploaded.
xvi)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on	The clearance letter has been uploaded on website of Western Coalfields Limited. The compliance report is being uploaded. Website link to access EC is http://westerncoal.nic.in/?q=node/271

	company's website.	
xvii)	The project proponent shall be submit six monthly compliance reports on status of Complainece of the stipulated EC conditions (both in hard copy and email) to the respective Regional Office of Ministry, respective Zonal offices of CPCB and SPCB.	Agreed, six monthly compliance reports on status of Complainece of the stipulated EC conditions (both in hard copy and email) are being sent to the respective Regional Office of Ministry, respective Zonal offices of CPCB and SPCB.
xvii i)	The regional office of this ministry located in the region shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the office(s) of the Regional Office by furnishing the requisite data/information/ monitoring reports	Agreed. Full cooperation shall be provided to the officers of Regional Office.
xix)	The environment statement for each financial year ending 31 st March in Form-V is mandated to be submitted by the project proponent for the concerned SPCB as prescribed under the EP Rules, 1986, as asmended subsequently, shall also be uploaded on the company's website along with status of compliance of EC conditions and shall be sent to the respective Regional offices of the MoEF&CC by e-mail.	The audit statement is uploaded on company website. The environment statement for each financial year is filled in Form – V before 30 th september of each year. Evironmental statement for 2022-23 is timely submitted and same has been attached.
5	The proponent shall abide by the commitments and recommendations made in EIA/EMP report so also during their presentation to EAC.	Noted and will be complied
6	The commitment made by the proponent to the issue raised during the Public Hearing shall be implemented by the proponent.	This project has been covered u/s 7 (ii) with exemption from Public Hearing
7	The proponent is required to obtain all necessary clearances that may be required before the start of project.	Noted and will be followed.

8	The Ministry or any other competent authority may stipulate any further condition for environmental protection	Noted.
9	The proponent shall setup an Environment Audit Cell with responsibility and accountability to ensure implementation of all EC conditions.	Self internal environmental audit system has been setup in the company recently. At Area level, a multi disciplinary committee has been constituted by order of competent authority to review the compliance status every month through a formatted checklist. Inter-area inspection to review compliance status is being done on quarterly basis. The report of the inspection is put up to the subsidiary level apex committee which has been constituted under the chairmanship of Director (Technical), WCL. Final assessment report is under compilation for appraisal of the apex committee. Mechanism for internal monitoring of EC compliance is enclosed.
10	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and may attract action under the provisions of EPA, 1986.	Noted.
11	The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and coccupational and other diseases due to the mining operations	Noted and will be followed.
12	Any appeal against this EC shall lie with the NGT, if preferred, with in a period of 30 days as prescribed under section 16 of NGT Act, 2010	Noted.
13	This EC supersedes the earlier EC, vide letter no. Letter J-11015/145/2007-1A.II(M) dated	Noted.

	18.06.2008 for 0.50MTPA	
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भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Ballarpur Oc Expn.		
Project Address:	Near Ballarpur Town, Wardha Valley Coalfield		
Town:	Ballarpur	Block:	Ballarpur
District:	Chandrapur	State:	Maharashtra
Pin Code:			
Communication Address:	General Manager (env), Wcl (hq), Coal Estate, Civil Line, Nagpur, 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/2021/12464												
2. Application No.:		21-4/686/MH/MIN/2017					3. Category: (GWRE 2017)		Safe					
4. Project Status:		Existing Project					5. NOC Type:		New					
6. Valid from:		03/08/2021					7. Valid up to:		02/08/2023					
8. Ground Water Abstraction Permitted:														
Fresh Water			Saline Water				Dewatering			Total				
m³/day		m³/year		m³/day		m³/year		m³/day		m³/year				
0.00		0.00				1092.00		398580.00						
9. Details of ground water abstraction /Dewatering structures														
Total Existing No.:0							Total Proposed No.:0							
			DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Dewatering Structure*			0	0	0	0	0	2	0	0	0	0	0	0
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps														
10. Ground Water Abstraction/Restoration Charges paid (Rs.):									1992900.00					
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)

This is an auto generated document & need not to be signed.

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 conditions:

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) 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.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) 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.
- 10) 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.

General conditions:

- 11) 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).
- 12) 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).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) 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.
- 15) 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.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) 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.
- 18) 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.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) 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.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) 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.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCE list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)



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ENVIRONMENTAL MONITORING REPORT

BALLARPUR OC

BALLARPUR 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		 TC-7102	
TEST REPORT NO.		RIN/TR/MAY-23/41		DATE OF ISSUE	
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 :	
SAMPLING METHOD : LSOP 4		PERIOD OF PERFORMANCE OF LAB ACTIVITIES:			LQR 47
					16-05-23 TO 15-06-23

MANAGER OFFICE-BALLARPUR UG BBUA1							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
12-05-2023	13-05-2023	248	144	43	12	BDL	Clear/Calm
23-05-2023	24-05-2023	234	136	38	13	BDL	Clear/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

SUBSTATION BBOA2							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
09-05-2023	10-05-2023	236	132	40	11	BDL	Clear/Calm
23-05-2023	24-05-2023	230	134	36	12	BDL	Clear/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

PREMISES OF SUB AREA OFFICE BBOA3							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
09-05-2023	10-05-2023	224	128	34	10	BDL	Clear/Calm
23-05-2023	24-05-2023	220	126	32	11	BDL	Clear/Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

FILTER PLANT COLONY BBUA4							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
12-05-2023	13-05-2023	130	34	24	7	BDL	Clear/Calm
23-05-2023	24-05-2023	134	32	22	6	BDL	Clear/Calm
NAAQS, 2009		-	100	60	80	80	

J. Shrivastava
Analysed by

Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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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 : 16-05-23 TO 15-06-23

MINE WATER DISCHARGE: BBOW1				
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
09-05-2023	7.65	26	36	BDL
23-05-2023	7.56	22	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10


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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: BBUN1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAY'23	05-05-2023	63.7	62.5
MAY'23	19-05-2023	62.7	61.8
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY BALLARPUR UG: BBUN2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
MAY'23	05-05-2023	42.9	41.6
MAY'23	19-05-2023	43.6	42.7
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



Ashwin B Wasnik
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ENVIRONMENTAL MONITORING REPORT

BALLARPUR OC

BALLARPUR AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423068



JUNE 2023

Environment Laboratory
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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-23/41		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:		16-06-23 TO 15-07-23	


MANAGER OFFICE-BALLARPUR UG BBUA1							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
10-06-23	11-06-23	248	138	44	12	BDL	Cloudy/Light Breeze
25-06-23	26-06-23	234	142	46	11	BDL	Cloudy/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

SUBSTATION BBOA2							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
10-06-23	11-06-23	254	132	32	11	BDL	Cloudy/Light Breeze
25-06-23	26-06-23	238	128	34	10	BDL	Cloudy/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

PREMISES OF SUB AREA OFFICE BBOA3							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
09-06-23	10-06-23	224	127	32	10	BDL	Cloudy/Light Breeze
24-06-23	25-06-23	232	122	34	9	BDL	Cloudy/Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

FILTER PLANT COLONY BBUA4							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
10-06-23	11-06-23	122	32	22	7	BDL	Cloudy/Light Breeze
25-06-23	26-06-23	134	38	28	6	BDL	Cloudy/Light Breeze
NAAQS, 2009		-	100	60	80	80	

J. Shan
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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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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 :	16-06-23 TO 15-07-23

MINE WATER DISCHARGE: BBOW1				
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
10-06-23	8.52	18	28	BDL
24-06-23	8.15	14	24	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10

J. Shrivastava

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: BBUN1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'23	10-06-23	62.6	61.5
JUNE'23	24-06-23	64.5	63.5
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY BALLARPUR UG: BBUN2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'23	10-06-23	43.7	42.6
JUNE'23	24-06-23	43.6	42.6
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



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ENVIRONMENTAL MONITORING REPORT

BALLARPUR OC

BALLARPUR AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423068




JULY 2023



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

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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report		 TC-7102	
TEST REPORT NO.		RIN/TR/JULY-23/41		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

MANAGER OFFICE-BALLARPUR UG BBUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM ₁₀	PM _{2.5}	No ₂	So ₂	
FROM	TO	5	5	2	6	10	
14-07-2023	15-07-2023	240	152	46	12	BDL	Cloudy /Light Breeze
25-07-2023	26-07-2023	210	129	34	10	BDL	Cloudy /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

SUBSTATION BBOA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM ₁₀	PM _{2.5}	No ₂	So ₂	
FROM	TO	5	5	2	6	10	
14-07-2023	15-07-2023	210	126	35	10	BDL	Cloudy /Light Breeze
23-07-2023	24-07-2023	210	132	39	12	BDL	Cloudy /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

PREMISES OF SUB AREA OFFICE BBOA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM ₁₀	PM _{2.5}	No ₂	So ₂	
FROM	TO	5	5	2	6	10	
13-07-2023	14-07-2023	239	162	46	14	BDL	Cloudy /Light Breeze
24-07-2023	25-07-2023	216	116	45	10	BDL	Cloudy /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

FILTER PLANT COLONY BBUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM ₁₀	PM _{2.5}	No ₂	So ₂		
FROM	TO	5	2	6	10		
14-07-2023	15-07-2023	52	26	8	BDL	Cloudy /Light Breeze	
23-07-2023	24-07-2023	56	29	10	BDL	Cloudy /Light Breeze	
NAAQS, 2009		100	60	80	80		




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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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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 :	16-07-23 TO 14-08-23

MINE WATER DISCHARGE: BBOW1				
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
14-07-2023	7.59	32	44	BDL
29-07-2023	7.65	36	52	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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 PROCTOCOL FOR AMBIENT NOISE MEASUREMENT, JULY-2015
SAMPLING METHOD	LSOP 6

CHP:BBUN1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
JULY'23	14-07-2023	58.9	57.5
JULY'23	28-07-2023	59.5	58.8
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY BALLARPUR UG:BBUN2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
JULY'23	14-07-2023	43.5	42.6
JULY'23	28-07-2023	42.9	41.7
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



Amol Kamble
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ENVIRONMENTAL MONITORING REPORT

BALLARPUR OC

BALLARPUR AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423068



AUGUST 2023

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JARIPATKA, NAGPUR, PIN – 440 014

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Environment Laboratory CMPDI RI-IV, NAGPUR		Test Report		 TC-7102	
TEST REPORT NO.		RIN/TR/AUG-23/41		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	

MANAGER OFFICE-BALLARPUR UG BBUA1							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-08-2023	06-08-2023	264	147	40	12	BDL	Clear Sky /Light Breeze
20-08-2023	21-08-2023	269	154	41	14	10	Clear Sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

SUBSTATION BBOA2							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-08-2023	06-08-2023	230	130	49	10	BDL	Clear Sky /Light Breeze
20-08-2023	21-08-2023	210	124	36	12	BDL	Clear Sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

PREMISES OF SUB AREA OFFICE BBOA3							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-08-2023	06-08-2023	242	123	32	12	BDL	Clear Sky /Light Breeze
20-08-2023	21-08-2023	234	139	34	14	BDL	Clear Sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

FILTER PLANT COLONY BBUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM ₁₀	PM _{2.5}	No ₂	So ₂		
05-08-2023	06-08-2023	65	26	10	BDL	Clear Sky /Light Breeze	
20-08-2023	21-08-2023	52	30	12	BDL	Clear Sky /Light Breeze	
NAAQS, 2009		100	60	80	80		


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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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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 :	15-08-23 TO 15-09-23

MINE WATER DISCHARGE: BBOW1				
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
05-08-2023	7.65	20	56	BDL
20-08-2023	7.75	48	48	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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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, AUG-2015
SAMPLING METHOD	LSOP 6

CHP: BBUN1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUG'23	05-08-2023	58.7	57.6
AUG'23	21-08-2023	57.9	56.5
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY BALLARPUR UG: BBUN2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
AUG'23	05-08-2023	43.8	42.7
AUG'23	21-08-2023	42.8	41.9
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



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ENVIRONMENTAL MONITORING REPORT

BALLARPUR OC

BALLARPUR 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-23/41		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	

MANAGER OFFICE-BALLARPUR UG BBOA1							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-09-23	06-09-23	320	198	46	16	BDL	Cloudy sky /Light Breeze
21-09-23	22-09-23	296	176	42	15	BDL	Rainy sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

SUBSTATION BBOA2							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-09-23	06-09-23	260	154	46	17	BDL	Cloudy sky /Light Breeze
21-09-23	22-09-23	276	165	38	17	BDL	Rainy sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

PREMISES OF SUB AREA OFFICE BBOA3							
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 ₁₀	PM _{2.5}	No ₂	So ₂	
05-09-23	06-09-23	298	162	39	19	11	Cloudy sky /Light Breeze
20-09-23	21-09-23	310	182	49	18	10	Cloudy sky /Light Breeze
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTOBER 2000		600	300	-	120	120	

FILTER PLANT COLONY BBOA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$)				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM ₁₀	PM _{2.5}	No ₂	So ₂		
05-09-23	06-09-23	75	45	14	BDL	Cloudy sky /Light Breeze	
21-09-23	22-09-23	69	42	13	BDL	Rainy sky /Light Breeze	
NAAQS, 2009		100	60	80	80		


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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report	
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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 :	15-09-23 TO 15-10-23

MINE WATER DISCHARGE: BBOW1				
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
05-09-23	7.95	48	44	BDL
21-09-23	7.42	36	32	BDL
STANDARDS FOR COAL MINE, GSR 742E, dt. 25/09/2000	5.5 - 9.0	100	250	10



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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, SEPT-2015
SAMPLING METHOD	LSOP 6

CHP: BBUN1			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'23	05-09-23	58.5	57.9
SEPT'23	21-09-23	58.9	57.8
NOISE POLLUTION (REGULATION AND CONTROL) RULES		75	70

COLONY BALLARPUR UG: BBUN2			
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
		DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
SEPT'23	05-09-23	43.9	42.8
SEPT'23	21-09-23	43.8	42.7
NOISE POLLUTION (REGULATION AND CONTROL) RULES		55	45



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DRINKING WATER MONITORING REPORT

BALLARPUR AREA

WESTERN COALFIELDS LTD.

JOB NO.4094423068




QE-SEPTEMBER 2023



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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report Drinking water quality monitoring data	
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TEST REPORT NO.	RIN/TR/SEPT-23/DW16	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	GOURI I & II OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT			SAMPLING DATE:		12-07-2023
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Agreeable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	1	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.25	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Metod: 2014	4	236	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	42	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	BDL	0.2	1	
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.66	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	454	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	43	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	31	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	83	200	400	
16	Nitrates (as NO3) - mg/l	APHA (23rd Edition) 4500-NO3-B UV Spectrophotometric method:2017	0.5	12	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation	
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15	
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation	
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	0.002	BDL	0.5	1	
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	168	200	600	
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation	
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2	

BDL: BELOW DETECTION LIMIT




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TEST REPORT NO.	RIN/TR/SEPT-23/DW17	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	SASTI OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT		SAMPLING DATE:		12-07-2023
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE)	PERMISSIBLE LIMIT IN THE ABSENCE OF
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Agreeable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	1	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.85	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	56	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	24	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorimetric method: 2017	0.02	BDL	0.2	1
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.92	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	190	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	27.2	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	6.4	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	18	200	400
16	Nitrates (as NO ₃) - mg/l	APHA (23rd Edition) 4500-NO ₃ -B UV Spectrophotometric method:2017	0.5	4	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	< 0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	< 0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	220	24	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	BDL	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	BDL	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT




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TEST REPORT NO.	RIN/TR/SEPT-23/DW18	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NEW DHOPTALA OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		MANAGER OFFICE		SAMPLING DATE:		13-07-2023
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE)	PERMISSIBLE LIMIT IN THE ABSENCE OF
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	1	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.95	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	560	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	412	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorimetric method: 2017	0.02	0.02	0.2	1
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.36	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	1520	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	140	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	52	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	0.027	0.1	0.3
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	157	200	400
16	Nitrates (as NO ₃) - mg/l	APHA (23rd Edition) 4500-NO ₃ -B UV Spectrophotometric method:2017	0.5	4	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.021	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	392	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT




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TEST REPORT NO.	RIN/TR/SEPT-23/DW19	DATE OF ISSUE	27-10-2023
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	BALLARPUR UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT				SAMPLING DATE: 14-07-2023		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Agreeable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	2	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.60	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	256	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	78	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorimetric method: 2017	0.02	BDL	0.2	1
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.88	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	660	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	68.2	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	30	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	74	200	400
16	Nitrates (as NO ₃) - mg/l	APHA (23rd Edition) 4500-NO ₃ -B UV Spectrophotometric method:2017	0.5	12	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) -mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.014	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	236	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT



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DRINKING WATER MONITORING REPORT

BALLARPUR AREA

WESTERN COALFIELDS LTD.

JOB NO.4094423068



QE-JUNE 2023

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

AN ISO 9001:2015 COMPANY

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

Test Report
Drinking water quality monitoring data



TEST REPORT NO.	RIN/TR/JUNE-23/DW16	DATE OF ISSUE	31-07-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	GOURI I & II OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT			SAMPLING DATE:		06-05-23	
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012			
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE		
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	3	5	15		
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable		
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	4	1	5		
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.58	6.5 to 8.5	No relaxation		
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Metod: 2014	4	240	200	600		
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation		
7	Chlorides (as Cl ⁻)- mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	54	250	1000		
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.03	0.2	1		
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.439	1	1.5		
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	440	500	2000		
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	61	75	200		
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	22	30	100		
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5		
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3		
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	74	200	400		
16	Nitrates (as NO3) - mg/l	APHA (23rd Edition) 4500-NO3-B UV Spectrophotometric method:2017	0.5	22.28	45	No relaxation		
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation		

18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	192	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT



SCIENTIFIC ASSISTANT



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

Test Report
Drinking water quality monitoring data



TEST REPORT NO.	RIN/TR/JUNE-23/DW17	DATE OF ISSUE	31-07-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	SASTI OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: FILTER PLANT				SAMPLING DATE: 08-05-23		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE)	PERMISSIBLE LIMIT IN THE ABSENCE OF
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	3	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	4	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.55	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	680	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	94	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorimetric method: 2017	0.02	0.03	0.2	1
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.521	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	990	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	180	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	57	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	0.032	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	0.028	0.1	0.3
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	208	200	400
16	Nitrates (as NO ₃) - mg/l	APHA (23rd Edition) 4500-NO ₃ -B UV Spectrophotometric method:2017	0.5	5.53	45	No relaxation

17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.021	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	< 0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	< 0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	220	212	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	BDL	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	BDL	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT




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Environment Laboratory CMPDI RI-IV, NAGPUR	Test Report Drinking water quality monitoring data	 TC-7102
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TEST REPORT NO.	RIN/TR/JUNE-23/DW18	DATE OF ISSUE	31-07-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	NEW DHOPTALA OC	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION: MANAGER OFFICE				SAMPLING DATE: 12-05-23		
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012	
					REQUIREMENT (ACCEPTABLE)	PERMISSIBLE LIMIT IN THE ABSENCE OF
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	3	1	5
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.34	6.5 to 8.5	No relaxation
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Method: 2014	4	680	200	600
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	78	250	1000
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorimetric method: 2017	0.02	0.02	0.2	1
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.421	1	1.5
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	1000	500	2000
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	188	75	200
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	52	30	100
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	0.039	0.05	1.5
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	0.031	0.1	0.3
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	197	200	400
16	Nitrates (as NO ₃) - mg/l	APHA (23rd Edition) 4500-NO ₃ -B UV Spectrophotometric method:2017	0.5	6.96	45	No relaxation
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation

19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation
20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	0.027	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B-C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	204	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	0.008	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT




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TEST REPORT NO.	RIN/TR/JUNE-23/DW19	DATE OF ISSUE	31-07-23
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR	SAMPLE DESCRIPTION	WATER SAMPLE
NAME OF AREA	BALLARPUR	SAMPLING METHOD: LSOP 5	
NAME OF PROJECT	BALLARPUR UG	SAMPLING PLAN: LQR 47	
NO. OF PAGES	2		

NAME OF LOCATION:		FILTER PLANT			SAMPLING DATE:		12-05-23
SL. NO.	PARAMETER	TEST METHOD	DETECTION LIMIT	ANALYSIS RESULT	IS 10500:2012		
					REQUIREMENT (ACCEPTABLE LIMIT)	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE	
1	Colour (Hazen)	IS 3025 Part-4 Pt-Co Method: 2017	1	2	5	15	
2	Odour	IS 3025 Part-5:2014	Qualitative	Unobjectionable	Agreeable	Agreeable	
3	Turbidity (NTU)	IS 3025 Part-10 Nephelometric Method: 2012	1	3	1	5	
4	pH Value	IS 3025 Part-11 Electrometric Method: 2017	2	7.85	6.5 to 8.5	No relaxation	
5	Total Hardness (as CaCO ₃) - mg/l	IS 3025 Part-21 EDTA Metod: 2014	4	280	200	600	
6	Iron (as Fe) -mg/l	IS 3025 Part-53 AAS Flame Method:2014	0.06	BDL	0.3	No relaxation	
7	Chlorides (as Cl ⁻) - mg/l	IS 3025 Part-32 1988 Argentometric Method:2014	2	76	250	1000	
8	Residual Chlorine -mg/l	APHA, 23rd Edition 4500-G DPD Colorometric method: 2017	0.02	0.02	0.2	1	
9	Fluoride (as F ⁻) - mg/l	APHA, 23rd Edition 4500-F D SPADNS Method: 2017	0.02	0.392	1	1.5	
10	TDS -mg/l	IS 3025 Part-16 Gravimetric Method: 2017	25	510	500	2000	
11	Calcium (as Ca) -mg/l	IS 3025 Part-40 : 2014	1.6	79	75	200	
12	Magnesium (as Mg) -mg/l	APHA (23rd Ed.) 3500 B, Calculation Method:2017	3	21	30	100	
13	Copper (as Cu) -mg/l	IS 3025 Part-42 AAS Flame Method :2014	0.03	BDL	0.05	1.5	
14	Manganese as (Mn)- mg/l	IS 3025 Part-59, AAS Flame Method: 2006	0.02	BDL	0.1	0.3	
15	Sulphate (as SO ₄ ⁻²) -mg/l	APHA (23rd Edition) 4500E Turbidimetric Method:2017	2	65	200	400	
16	Nitrates (as NO3) - mg/l	APHA (23rd Edition) 4500-NO3-B UV Spectrophotometric method:2017	0.5	6.10	45	No relaxation	
17	Cadmium as (Cd)- mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.0005	BDL	0.003	No relaxation	
18	Lead as (Pb) -mg/l	APHA, 23rd Edition 3113 B AAS GTA Method:2017	0.005	BDL	0.01	No relaxation	
19	Selenium (Se) –mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.01	No relaxation	

20	Arsenic (As)-mg/l	APHA, 23rd Edition 3114 C AAS-VGA Method:2017	0.005	BDL	0.05	No relaxation
21	Zinc as (Zn) -mg/l	IS 3025 Part-49 AAS Flame Method:2014	0.01	BDL	5	15
22	Total Chromium -mg/l	IS 3025 Part-52 Clause 6, AAS Flame Method:2014	0.03	BDL	0.05	No relaxation
23	Boron as (B) -mg/l	APHA, 23rd Edition 4500 B- C Carmine Method:2017	0.002	BDL	0.5	1
24	Alkalinity -mg/l	IS 3025 Part-23:2014	4	220	200	600
25	Nickel-mg/l	APHA, 23rd Edition 3113 B AAS FLAME Method:2017	0.005	BDL	0.02	No relaxation
26	Aluminum (Al)-mg/l	APHA (23rd Edition) 3113B AAS-GTA Method:2017	0.005	BDL	0.1	0.2

BDL: BELOW DETECTION LIMIT



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Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

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

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000060600

Submitted Date

28-09-2023

PART A

Company Information

Company Name

M/s WCL Ballarpur Opencast Mine

Application UAN number

116744

Address

Ballarpur Opencast Mine, Ballarpur Area, WCL

Plot no

284 285 286 287 288 289 290

Taluka

Ballarpur

Village

-

Capital Investment (In lakhs)

5395

Scale

L.S.I

City

Chandrapur

Pincode

442906

Person Name

Shri. Talakal

Designation

Sub AREa Manager

Telephone Number

9511762772

Fax Number

07173230076

Email

envbocm@gmail.com

Region

SRO-Chandrapur

Industry Category

Red

Industry Type

R35 Mining and ore beneficiation

Last Environmental statement submitted online

yes

Consent Number

Format1.0/CC/UAN
No.0000116744/CR/2211000845

Consent Issue Date

2022-11-11

Consent Valid Upto

2023-06-30

Establishment Year

1979

Date of last environment statement submitted

Sep 25 2022 12:00:00:000AM

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

Product Information

Product Name

Coal

Consent Quantity

0.625

Actual Quantity

0.101

UOM

MT/A

By-product Information

By Product Name

-

Consent Quantity

0

Actual Quantity

0

UOM

MT/A

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
	460.00	460.00
Cooling	0.00	0.00
Domestic	180.00	12.00
All others	0.00	0.00
Total	640.00	472.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade effluent	1391	620	CMD

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

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
coal (CUBIC METER/TONNE)	0.633	1.66	CMD

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

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
EXPLOSIVES (KG/Tonne)	1.57	0.95	

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel	0	194	KL/A

Part-C

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

[A] Water

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

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
NO stack monitoring	0	0	-	-	-

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.2 Wastes or residues containing oil	0	0	Ton/Y

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	0	0	Ton/Y

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Overburden	993000	204000	M3/Anum

2) From Pollution Control Facilities

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

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
5.2 Wastes or residues containing oil	0	Ton/Y	-

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Overburden	204000	M3/Anum	-

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 thepollution Control measures	0	21000	321000	346000	0	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

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
ETP	-	10

[B] Investment Proposed for next Year

<i>Detail of measures for Environmental Protection</i>	<i>Environmental Protection Measures</i>	<i>Capital Investment (Lacks)</i>
Trolley mounted fogging machine	-	7

Part-I

Any other particulars for improving the quality of the environment.

Particulars

-

Name & Designation

Shri. Talakal, Sub Area Manager

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000060600

Submitted On:

28-09-2023