भारत कोकिंग कोल लिमिटेड
'एक मिनी रत्न कंपनी'
(कोल इंडिया का एक अंग)
महाप्रबंधक का कार्यालय
लोदना क्षेत्र ,पो.-भागा
धनबाद -828301,(झारखंड)
वेबसाइट :www.bccl.gov.in, mail.gov.in
ईमेल :cgmlodna@bccl.gov.in,
gmlodna.bccl@coalindia.in
सी.आई.एन.:U10101JH1972GO1000918

बीसीसीएल
BCCL

Bharat Coking Coal Limited
A Mini Ratan Company
(A Subsidiary of Coal India Limited)
Office of the General Manager
Lodna Area , PO-Bhaga
Dhanbad-828301 (Jharkhand).
Website: www.bccl.gov.in, mail.gov.in
Email: cgmlodna@bccl.gov.in,
gmlodna.bccl@coalindia.in
CIN:U10101JH1972GO1000918

Through- Email Mode

Ref. No: - BCCL/LA/GM/26-27/74

Dated:- 29/5/26

To,
The Director,
Ministry of Environment, Forest & Climate Change, Govt. Of India.
2nd Floor, Headquarter- Jharkhand State Housing Board,
Harmu Chowk, Ranchi, Jharkhand – 834002

Sub: -Six monthly compliance report on implementation of Environmental Measures for the period from 1st October 2025 to 31st March 2026 in respect of 5 MTPA Patherdih Nlw Coal Washery under Lodna Area

Ref. No. 1: EC No. J-11015/240/2010-IA.II(M), DATED: 25.01.2012

Dear Sir,

Please find enclosed herewith the Six Monthly Compliance report on implementation of Environmental Measures for the period from 1st October 2025 to 31st March 2026 in respect of 5 MTPA Patherdih Nlw Coal Washery under Lodna Area.

Enclosure: as above.

Yours faithfully,

29/5/26

General Manager
Lodna Area

Cc to (Through E-mail):-

1. Scientist & In-charge, Zonal Office, Central Pollution Control Board, 5th Floor 502, House & Conclave 1582, Rajdanga main Road, Kolkata-700107
2. Member Secretary, Jharkhand State Pollution Control Board, TA Division Building, H.E.C, Dhurwa, Ranchi-834004
3. Regional Office , Jharkhand State Pollution Control Board, Sardar Patel nagar, Dhanbad
4. HoD (Env) BCCL, Koyla Bhawan, Dhanbad.
5. File

ENVIRONMENTAL CLEARANCE COMPLIANCE OF 5 MTPA PATHERDIH NLW COAL WASHERY

GRANTED VIDE EC No. J-11015/240/2010-IA.II(M), DATED: 25.01.2012

(OCTOBER'25 – MARCH'26)

Sl. No.	***Compliance Conditions***	***Compliance Status***
(A)	**Specific Conditions:**	
(i)	The capacity of the washery shall not exceed 6.5 MTPA without prior environment clearance from this Ministry.	**Being Complied.** Patherdih NLW coal washery will not exceed 6.5 MTPA capacity without prior EC from MoEF&CC. *(Production data of the washery since the beginning of its operation, i.e., April'2020 is enclosed in* **ANNEXURE-I**).
(ii)	Transport of raw coal from the identified mines of the company, washed coal from the washery to the steel plants in Durgapur, Bhilai and Bokaro and middling to TPPS and coal rejects to FBC based TPP shall be by rail mode only from the railway siding located within the premises.	**Being Complied.** Patherdih Railway Siding, located within the premises is being used for transportation of washery products.
(iii)	The entire rejects from the washery shall be fully utilized in an FBC based TPP for which open tender for operation of the FBC based TPP has been called by the proponent. The FBC based TPP shall be preferably located in or near Jharia Coalfields. The company shall enter into a long-term MOU for utilization of the coal rejects from the washery within 3 months and also for utilization of fly ash generated from the FBC based TPP with a suitable company.	**Being Complied.** The rejects produced are being stacked separately and its disposal is carried out as per the ***Policy for Handling & Disposal of Washery Rejects*** prescribed by the Ministry of Coal, Govt. of India.
(iv)	As the washery is located in Jharia Coalfields, which forms a part of the Critically Polluted Area of Dhanbad, the company shall implement the mitigative measures outlined in the Environmental Action Plan for CPA-Dhanbad applicable to the project, which would be in conformity with the Environmental Action Plan prepared for Dhanbad Area to keep the levels of air quality parameters well within limits. The proponent shall implement mitigative measures such as providing water sprinkling arrangements at various transfer points and loading/unloading points, regular maintenance of vehicles used for coal transportation, periodic and regular checking of vehicles for source emission, main approach roads used for transportation of raw coal to be black topped, monitoring for particulate matter (PM_{10} and $PM_{2.5}$) and maintenance of records thereof, bag filter at	**Being Complied.** This unit is operating as per the guidelines of Environmental Action Plan for CPA- Dhanbad & takes all the mitigative measures to keep air quality parameters well within limit. The unit also arranges for dust suppression through 100 nos. of fixed sprinklers and 1 no. mobile sprinkler operated along internal roads transportation routes and all coal transfer points of conveyor belt. *(Photographs of fixed water sprinklers and mobile water sprinkler are enclosed in* **ANNEXURE-II**). Regular maintenance of vehicles is being done to keep minimum source emissions. Wind breakers have been installed along the boundary of the stockyard. *(Photographs of wind barrier installed at Rejects Stockyard are enclosed in* **ANNEXURE-II**) Green-belt with native species is being

	suitable locations of the washery, wind shelters/wind breaks in coal stockyards (raw coal, clean coal and coal rejects), providing 3-tier green belt with native species.	developed, 1500 saplings have been planted already and plantation drives are also carried out at regular intervals. Also, Black topped roads have been constructed. *(Photographs of plantation & black topped roads are enclosed in* **ANNEXURE-III).**
(v)	The proponent shall implement a plan to regularly dredge River Damodar 0.5 km upstream and 1 km length downstream of the washery free of sludge, coal fines and silt which has accumulated in the river over a period of time and dispose the wastes in an environmentally friendly manner, in consultation with the Jharkhand State Pollution Control Board.	**Not Applicable.** As the Patherdih NLW Coal Washery is a Zero-Liquid Discharge Unit and is nearly 3.5 KM away from Damodar River. Therefore, no sludge or coal fines deposit and siltation is being caused by the Washery in the Damodar River.
(vi)	The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored raw coal, washed coal and coal wastes don not catch fire.	**Being Complied.** Raw Coal, Washed Coal and Coal Rejects are being stacked within stockyards fitted with wind breakers/ shields and adequate measures have been taken to ensure that stored Raw Coal, Washed Coal and Coal Rejects don't catch fire. *(Photographs of wind barrier installed at Rejects Stockyard are enclosed in* **ANNEXURE-II).**
(vii)	Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.	**Being Complied.** The unit has installed high efficiency Bag Filters & Water Sprinkling system at all crushing & coal transfer points to control fugitive emissions. *(Photographs of bag filter and water sprinkling are enclosed in* **ANNEXURE-IV).**
(viii)	All approach roads should be black topped and all internal roads shall be black topped or concreted. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using local species shall be developed along the main roads and approach roads to the washery.	**Being Complied.** Black topped roads have been constructed. Presently cleaning of roads is being done manually. Avenue plantation using local species is being developed along the roads and other adequate locations within the washery premises. *(Photographs of plantation & black topped roads are enclosed in* **ANNEXURE-III**).
(ix)	The proponent shall maintain proper records of the ash of the ash content of raw (ROM) coal, clean coal and coal rejects of every consignment received and washed and the same shall be uploaded along with quantum of raw coal obtained and washed and dispatched every month on the company's website every month.	**Being Complied.** Proper records of Ash content of Raw Coal, Clean Coal and Coal Rejects are being maintained every month and hereby enclosed in **ANNEXURE-V.**
(x)	Water for the coal washery shall be met from mine water from BCCL mines. No groundwater shall be used for the washery plant operations. Any additional water	**Being Complied.** Water requirement for washery is being met from the nearest mines of BCCL. Additional water requirement has been obtained by

	requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rain water harvesting measures. Pressure Filter and Thickener shall be installed in the washery for water recovery and reuse.	recycle/ reuse and from Rain Water Harvesting measures. Rain Water Harvesting structure has been constructed in the washery. *(Photograph of Rain Water Harvesting structure enclosed in* **ANNEXURE-III**). Also, Thickeners have been installed at the washery for water recovery and reuse in washing operations.
(xi)	The Washery unit shall be a zero- discharge facility and no wastewater shall be discharged from the washery into the drains/ natural water courses. The Washery shall be provided with a garland drain to carry/ recycle the effluent generated from the washery operations and coal fines collected- shall be recovered from the slurry and concentrated and also sold for users. The wastewater from the washery shall be free of coal dust and particles and recycled from development and maintenance of green belt and in the plant operations.	**Being Complied.** As per plan, Washery is operating on Zero-Liquid Discharge concept and no waste water is being discharged from this unit. The washery has been provided with drains (installed with baffles) along the boundary and also, a kutchha catch drain has been constructed along the unloading section of the siding and Tender for the construction of RCC drain with settling tank at same place has been awarded. *(Photographs of drain along the unloading siding and along the boundary and Letter of Acceptance – LOA issued are enclosed in* **ANNEXURE-VI).**
(xii)	A separate storm water drain to carry water from the washery for discharge outside the premises to nallas/ streams shall be established. The storm water drains shall be regularly desilted.	**Complied.** A separate storm water drain installed with baffles has been constructed for discharge of storm water outside the washery premises. Also, a RCC drain with settling tank is being constructed along the unloading section of the siding in the washery.
(xiii)	Industrial wastewater (workshop and wastewater from the washery) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed for treatment of workshop effluents.	**Being Complied.** No effluents are discharged outside from the washery, as the washery operates on Zero-Liquid Discharge principle. Storage tank of Oil and Grease Trap has been constructed; and soon commissioning will be done after completion of ramp construction. *(Photographs of* Storage tank of *Oil and Grease Trap are enclosed in* **ANNEXURE-VII).**
(xiv)	Green belt shall be developed using local species all along the periphery of the site, along the areas such as the crushing unit and stockyard, transfer and loading points.	**Being Complied.** Development of Green-belt using local species in the periphery of site along the area of crushing unit, transfer and loading point, Stockyard, etc is being taken up.
(xv)	Socio-economic and welfare measures for the local communities shall be implemented under CSR with an outlay of Rs. 2 crores and Rs. 5/T of coal as recurring expenditure. The village- wise activities undertaken and proposed and the expenditure thereon shall be displayed on the company website every year. A monitoring Cell shall be established for monitoring activities undertaken under CSR.	**Being Complied.** As per Company's policy, a monitoring Cell of the Company already exists for monitoring activities under taken under CSR. The Action Plan of CSR activities by the company for FY 2025-26 is being enclosed as **ANNEXURE-VIII**.
(xvi)	Levels of heavy metals such as mercury in	**Being Complied.**

	raw coal, washed coal and rejects shall be analyzed twice in a year and records maintained thereof and furnished as part of the Compliance Report to the MoEF RO, Bhubaneswar.	Levels of heavy metals in Coal are analyzed periodically at regular intervals. Work has been awarded to IIT(ISM), Dhanbad; result awaited. *(Copy of Work Order issued is being enclosed as* **ANNEXURE-IX).**
(xvii)	Corporate Environment Responsibility: (a). The Company shall have a well laid down Environment Policy approved by the Board of Directors. (b). The Environment Policy shall prescribe for standard operating process/ procedures to bring onto focus any infringements/ deviation/ violation of the environmental or forest norms/ conditions. (c). The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished. (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 stakeholders at large.	**Being Complied.** A well-defined Corporate Environment Policy has already been laid down and approved by the Board of Directors. This is also posted on BCCL website. (http://www.bcclweb.in/environment/CEP_04.11.2019.pdf) An Environment department at BCCL H.Q. looks after the infringements/ deviation/violation of Environment & Forest norms, environmental issues, and compliances, etc., for all the units running in BCCL. To implement the Corporate Environment Policy, a manual for Environment Personnel is prescribed by CIL having the proper operating procedures is as follows: https://www.coalindia.in/media/documents/Guidelines_for_Environmental_Personnel_in_Mines_20092016_hAukCHt.pdf) In addition, status of Environment Management is reported to the BCCL Board every quarter. Monitoring is being done by CMPDIL. CMPDIL has a laboratory accredited by **NABL.**
(B)	**General Conditions :**	
(i)	No change in technology and scope of working of the washery shall be made without prior approval of the Ministry of Environment and Forests.	**Being Complied.**
(ii)	Four ambient air quality monitoring stations shall be established in the core zone as well as the buffer zone for monitoring PM_{10}, $PM_{2.5}$, SO_2 and NO_x. Locations of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, PM_{10}, and $PM_{2.5}$ etc. shall be carried out at least once in six months.	**Being Complied.** Four ambient air monitoring stations for monitoring of PM_{10}, $PM_{2.5}$, SO_2 and NO_x have been established in the core zone and buffer zone. Also, Routine Environment Monitoring is being carried out fortnightly and monitoring of heavy metals is being carried out every six months by CMPDIL, which has **NABL** accredited laboratory. *(Monitoring Reports are enclosed in* **ANNEXURE-X**).
(iii)	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type	**Being Complied.** Four ambient air monitoring stations for monitoring of PM_{10}, $PM_{2.5}$, SO_2 and NO_x have

	of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analyzed through a laboratory recognized under EP Rules, 1986.	been established in the core zone and buffer zone. Presently, CMPDIL Dhanbad is carrying out regular monitoring of environmental quality work.
(iv)	Data on ambient air quality (PM_{10}, $PM_{2.5}$, SO_2 and NO_x and heavy metals such as Hg, As, Ni, Cr, etc.) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognized under the EP Rules, 1986 shall be furnished as part of the compliance report.	**Being Complied.** Four ambient air monitoring stations for monitoring of PM_{10}, $PM_{2.5}$, SO_2 and NO_x have been established in the core zone and buffer zone. Also, Routine Environment Monitoring is being carried out fortnightly and monitoring of heavy metals is being carried out every six months by CMPDIL having own laboratory recognized under EPA Rules, 1986. The monitoring reports are sent to the Ministry, its Regional Office, CPCB & JSPCB every six months along with the six-monthly EC Compliance report.
(v)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with ear plugs/ muffs.	**Being Complied.** Monitoring is being done by CMPDIL, which has **NABL** accredited laboratory. PPEs are provided to all workmen engaged at 5 MTPA Patherdih NLW Coal Washery on regular interval for safety point of view.
(vi)	Personnel working in dusty area shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	**Being Complied.** As per Safety Policy of the Company, necessary protective respiratory devices are provided to the workmen working in dusty conditions. As per Company's Policy, periodic PME of all the workmen is arranged by the company and corrective measures are taken accordingly.
(vii)	A separate environmental management cell with suitable qualified personnel shall be set up under control of a Senior Executive, who will report directly to the Head of the Company.	**Being Complied.** A full- fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives which includes Environment, Mining, Excavation, Civil, Survey, Electrical & Mechanical, Forestry discipline executives and technicians (4 nos.) has been established in BCCL Headquarters. They are also trained in ecological restoration, sustainable development, rainwater harvesting methods, etc. At the project level, one Executive in each Area has also been nominated as Project Nodal Officer (Environment) and is also entrusted with the responsibility of compliance and observance of the Environmental Acts/ Laws including Environment Protection measures. The activities are monitored on regular basis at Area and at Head Quarter levels. HoD (Environment) at Headquarter level coordinates with all the Areas and reports to the Director (Technical) and in turn he reports to the CMD of the company The team is multidisciplinary

		and very much motivated under the guidance of company's Director (Technical) and CMD. Further capacity building. Environment Management Cell, which looks after all the matters related to the statutory compliances, has been constituted at the washery.
(viii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be delivered for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office, Bhubaneswar.	**Being Complied.** Funds for Environment Protection and Environment Compliance related activities are allotted in the Budget every financial year, which are kept separately under Environment Head of the Budget.
(ix)	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the Ministry of Environment & Forest at http://envfor.nic.in.	**Complied.** The Washery has already advertised the EC in local newspapers for wide circulation dated: 01.03.2012 in local daily newspapers Prabhat Khabar and Dainik Jagran.
(x)	A copy of the environmental clearance letter shall be marked to concerned Panchayat/ Zila Parishad/ Municipal Corporation or Urban Local Body/ Local NGO, if any from whom any suggestion/ representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.	**Complied.** The copy of Environmental Clearance has already been made available to District Collector, local Zila Parishad, Ward Councilor, Municipal Corporation. A copy of the Environmental Clearance has also been displayed on the Company's website. A copy of the Environmental Clearance duly received by the local Ward Councilor is enclosed as **ANNEXURE-XI.**
(xi)	A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/ Tehsildar's Office for 30 days.	**Complied.** The Environmental Clearance letter has already been forwarded to Jharkhand State Pollution Control Board, Regional Office, District Industry Centre and Collector's Office for doing the needful.
(xii)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC 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 the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM_{10}, $PM_{2.5}$, SO_2 and NO_x (ambient and stack, if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the	**Being Complied.** The Environmental Clearance letter has been uploaded on the Company's website. Compliance status is also regularly uploaded on the Company's website every six months. Environment Monitoring Report (Air, Water, Noise and Soil) are also displayed on the Company's website. Monitoring data of environmental quality parameters has been displayed at the project office and being updated regularly. (*Photograph of the display board is enclosed as* **ANNEXURE-XII).**

	company's website.	
(xiii)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MoEF, the respective Zonal Offices of CPCB and the SPCB.	**Being Complied.**
(xiv)	The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports.	**Being Complied.**
(xv)	The environmental statement for each financial year ending 31st March in Form- V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF&CC by e-mail.	**Being Complied.** A copy of the Environment Statement is enclosed as **ANNEXURE-XIII.**

Bhudev 29/05/2026

Project Officer
5.0 MTPA Patherdih NLW Coal Washery
BCCL

29/05/2026

Manager
5.0 MTPA Patherdih NLW Coal Washery
BCCL

Annexure I

5.0 MTPA PATHERDIH NLW WASHERY

Production in the year 2025-26

Particular	QTY(in Te.)
RAW COAL FEED	1447050.00
WASHED COAL PRODUCED	366335.00
WASHED POWER COAL PRODUCED	833998.00
REJECTS PRODUCED	261282.00

22/05/2026

Project Officer
5.0 MTPA Patherdih NLW Washery

22.05.26

Manager(CP)
5.0 MTPA Patherdih NLW Washery

5.0 MTPA PATHERDIH NLW WASHERY

Yearly Performance from FY2020-21 to FY 2025-26

FY	RAW COAL	PRODUCTION		
	Raw Coal Feed	Washed Coal	Washed Power Coal	Rejects
	Qty. (MT)	Produced(MT)	Produced(MT)	Produced(MT)
2020-21	488413.57	58720.97	293868.06	158978.46
2021-22	1073692.00	125237.00	643893.48	332694.37
2022-23	1420056.00	146490.00	948926.73	381974.94
2023-24	1563573.00	158155.00	1130597.00	312353.88
2024-25	1575314.00	415903.00	925777.00	257499.00
2025-26(upto Sep25)	723300.00	188935.00	423972.00	117843.00

19/11/2025

Project Officer
5.0 MTPA Patherdih NLW Washery

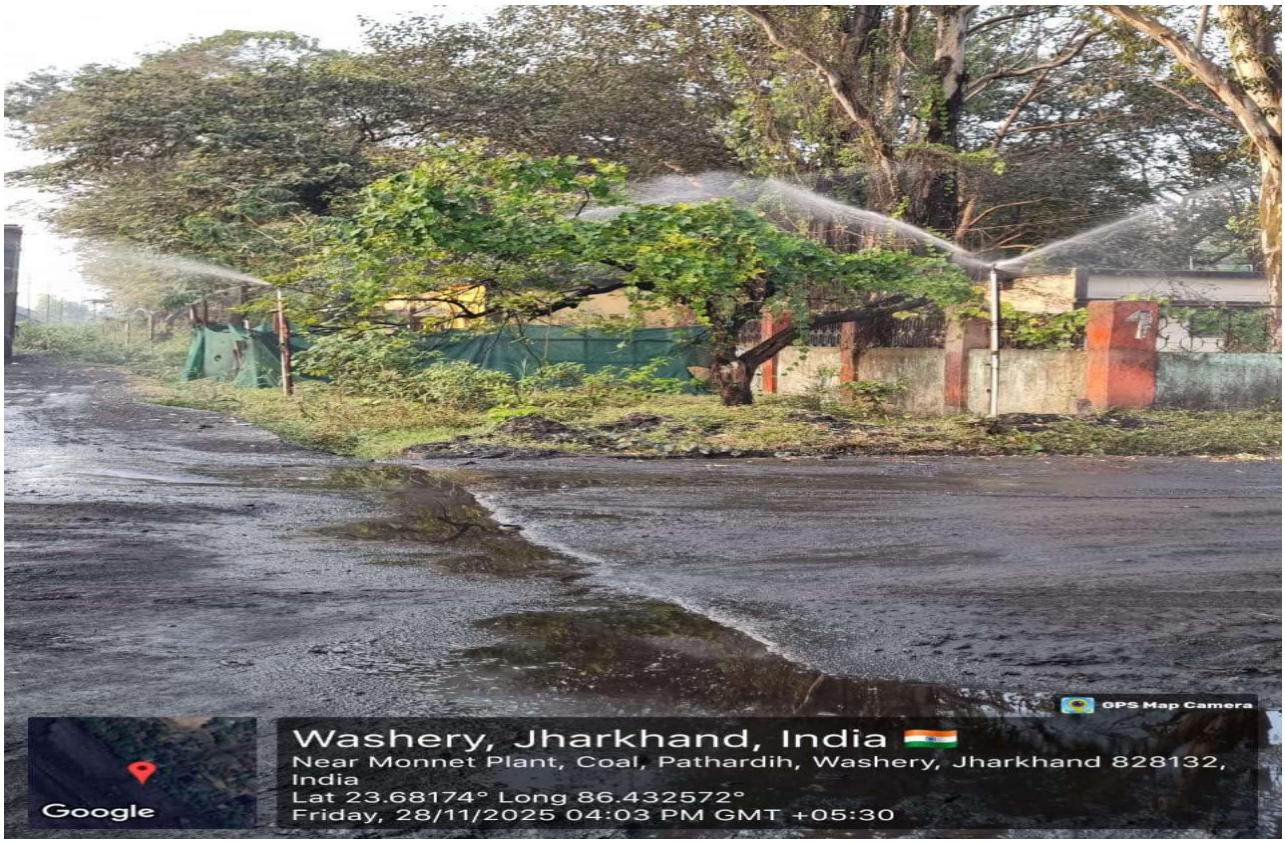
Manager (CP)
5.0 MTPA Patherdih NLW Washery

Scanned with OKEN Scanner

ANNEXURE-II

DUST SUPPRESSION THROUGH WATER SPRINKLING BY MOBILE WATER SPRINKLER AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

DUST SUPPRESSION THROUGH WATER SPRINKLING BY FIXED-TYPE WATER SPRINKLERS AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

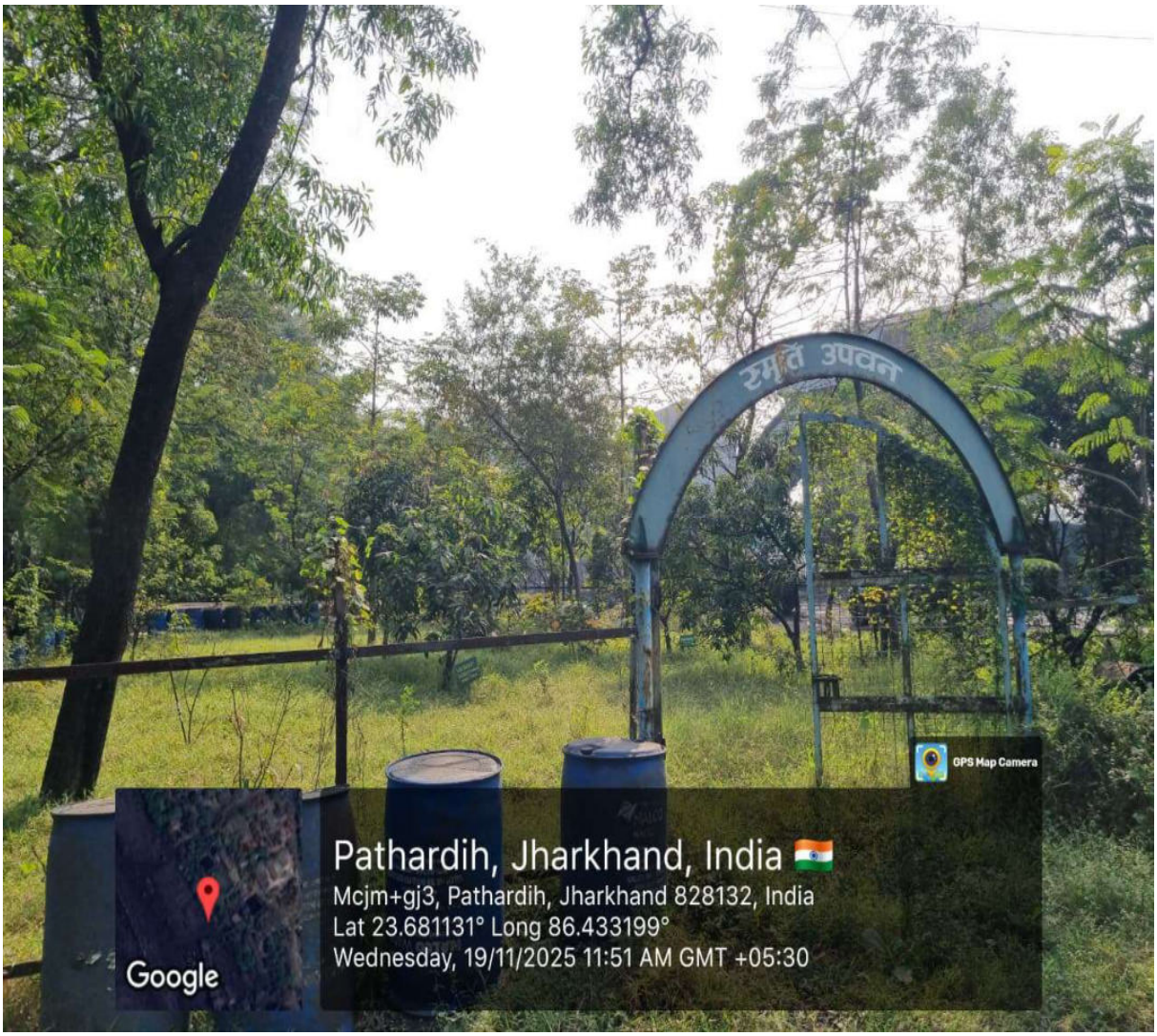


WIND BARRIER INSTALLED AROUND REJECTS STOCKYARD AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

ANNEXURE-III

PLANTATION OF LOCAL SPECIES AROUND THE PERIPHERY OF THE WASHERY

SMRITI UPVAN WITH FRUIT – BEARING PLANTS DEVELOPED IN THE WASHERY



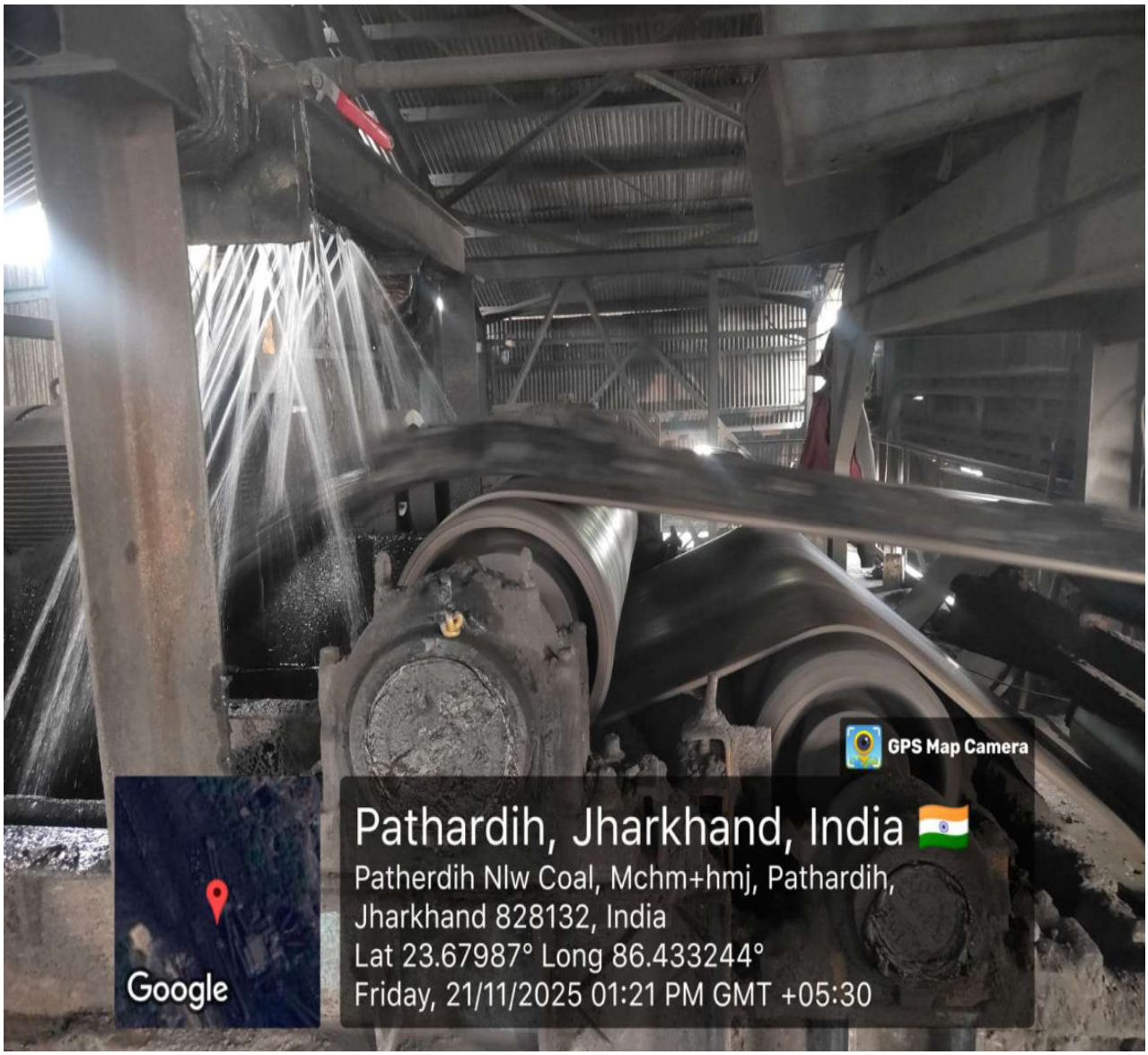
BLACK - TOPPED ROAD WITH AVENUE PLANTATION WITHIN THE WASHERY

RAIN WATER HARVESTING STRUCTURE IN THE WASHERY

ANNEXURE-IV

BAG FILTER IN OPERATION AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

WATER SPRINKLING IN CONVEYOR BELT CARRYING RAW COAL AT 5.0 MTPA PATHERDIH NLW COAL WASHERY



DUST SUPPRESSION ARRANGEMENT OVER THE COAL DUMP HOPPER

Annexure V

Geocoal Engineering Pvt Ltd.

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

5.0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

Name of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Oct-25

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV Kcal/K
1-Oct-25	7-Oct-25	GCEPL/LAB/E/0356	01	SOUTH BHOWRAH	4.23	48.25	1.12	18.15	32.48	3891
1-Oct-25	7-Oct-25	GCEPL/LAB/E/0357	02	JGB-06	4.19	50.78	1.20	17.94	30.08	3650
2-Oct-25										
3-Oct-25										
4-Oct-25	7-Oct-25	GCEPL/LAB/E/0358	03	JGB-06	4.30	43.70	1.13	19.12	36.05	4319
5-Oct-25	8-Oct-25	GCEPL/LAB/E/0359	04	JGB-06	4.21	48.21	1.15	18.05	32.59	3894
6-Oct-25	8-Oct-25	GCEPL/LAB/E/0360	05	SOUTH BHOWRAH	4.37	48.87	1.19	18.11	31.83	3831
6-Oct-25	8-Oct-25	GCEPL/LAB/E/0361	06	JGB-06	4.29	52.56	1.10	17.39	28.95	3487
7-Oct-25	14-Oct-25	GCEPL/LAB/E/0362	07	SOUTH BHOWRAH	4.18	51.91	1.13	17.44	29.52	3546
8-Oct-25	14-Oct-25	GCEPL/LAB/E/0363	08	SOUTH BHOWRAH	4.24	46.15	1.21	18.03	34.61	4085
8-Oct-25	14-Oct-25	GCEPL/LAB/E/0364	09	JGB-06	4.31	52.74	1.18	17.27	28.81	3467
9-Oct-25										
10-Oct-25										
11-Oct-25										
12-Oct-25	14-Oct-25	GCEPL/LAB/E/0365	10	SOUTH BHOWRAH	4.16	42.40	1.14	19.21	37.25	4441
12-Oct-25	14-Oct-25	GCEPL/LAB/E/0366	11	SOUTH BHOWRAH	4.12	49.28	1.16	17.69	31.87	3793
13-Oct-25	14-Oct-25	GCEPL/LAB/E/0367	12	SOUTH BHOWRAH	4.25	48.30	1.19	17.93	32.58	3884
14-Oct-25	16-Oct-25	GCEPL/LAB/E/0368	13	SOUTH BHOWRAH	4.19	52.32	1.12	17.60	28.96	3508
14-Oct-25	16-Oct-25	GCEPL/LAB/E/0369	14	SOUTH BHOWRAH	4.33	54.17	1.17	17.21	27.45	3332
15-Oct-25	16-Oct-25	GCEPL/LAB/E/0370	15	SOUTH BHOWRAH	4.21	53.97	1.10	17.29	27.64	3354
16-Oct-25	18-Oct-25	GCEPL/LAB/E/0371	16	SOUTH BHOWRAH	4.15	45.39	1.13	18.20	35.28	4165
16-Oct-25	1-Nov-25	GCEPL/LAB/E/0372	17	SOUTH BHOWRAH	4.28	48.73	1.11	17.85	32.31	3847
17-Oct-25	1-Nov-25	GCEPL/LAB/E/0373	18	SOUTH BHOWRAH	4.13	50.17	1.16	18.06	30.61	3709
17-Oct-25	1-Nov-25	GCEPL/LAB/E/0374	19	SOUTH BHOWRAH	4.22	49.42	1.21	17.70	31.67	3778
18-Oct-25	1-Nov-25	GCEPL/LAB/E/0375	20	SOUTH BHOWRAH	4.27	48.56	1.12	18.23	32.09	3862
19-Oct-25	1-Nov-25	GCEPL/LAB/E/0376	21	SOUTH BHOWRAH	4.18	47.16	1.17	18.34	33.33	3992
19-Oct-25	1-Nov-25	GCEPL/LAB/E/0377	22	SOUTH BHOWRAH	4.26	47.81	1.14	17.90	33.15	3932
20-Oct-25	1-Nov-25	GCEPL/LAB/E/0378	23	SOUTH BHOWRAH	4.20	45.91	1.18	18.01	34.90	4110
20-Oct-25	1-Nov-25	GCEPL/LAB/E/0379	24	SOUTH BHOWRAH	4.33	46.18	1.09	18.15	34.58	4087
21-Oct-25	1-Nov-25	GCEPL/LAB/E/0380	25	JGB-09	4.10	49.27	1.11	17.88	31.74	3796
22-Oct-25										
23-Oct-25										
24-Oct-25										
25-Oct-25	1-Nov-25	GCEPL/LAB/E/0381	26	SOUTH BHOWRAH	4.15	47.14	1.13	18.08	33.65	3995
26-Oct-25										
27-Oct-25	1-Nov-25	GCEPL/LAB/E/0382	27	SOUTH BHOWRAH	4.24	43.71	1.21	19.21	35.87	4316
28-Oct-25	1-Nov-25	GCEPL/LAB/E/0383	28	SOUTH BHOWRAH	4.08	45.69	1.15	18.24	34.92	4131
29-Oct-25										
30-Oct-25										
31-Oct-25										

GEOCOAL ENGINEERING PVT. LTD. DHANBAD

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Annexure V

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

5.0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

Name of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Nov-25

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV Kcal/Kg
1-Nov-25										
2-Nov-25	3-Nov-25	GCEPL/LAB/E/0384	01	SOUTH BHOWRAH	4.27	52.75	1.16	17.29	28.80	3467
3-Nov-25	3-Nov-25	GCEPL/LAB/E/0385	02	SOUTH BHOWRAH	4.09	51.08	1.13	18.12	29.67	3625
3-Nov-25	7-Nov-25	GCEPL/LAB/E/0386	03	SOUTH BHOWRAH	4.32	51.23	1.17	17.76	29.84	3609
6-Nov-25	7-Nov-25	GCEPL/LAB/E/0387	04	SOUTH BHOWRAH	4.18	52.15	1.19	17.33	29.33	3522
7-Nov-25	8-Nov-25	GCEPL/LAB/E/0388	05	SOUTH BHOWRAH	4.23	46.75	1.14	18.01	34.10	4029
7-Nov-25	8-Nov-25	GCEPL/LAB/E/0389	06	SOUTH BHOWRAH	4.30	47.63	1.20	18.20	32.97	3947
9-Nov-25	13-Nov-25	GCEPL/LAB/E/0390	07	SOUTH BHOWRAH	4.21	47.12	1.15	17.64	34.09	3997
9-Nov-25	13-Nov-25	GCEPL/LAB/E/0391	08	SOUTH BHOWRAH	4.33	47.58	1.18	17.50	33.74	3952
10-Nov-25	13-Nov-25	GCEPL/LAB/E/0392	09	JGB-06	4.15	45.34	1.16	18.25	35.25	4164
12-Nov-25	13-Nov-25	GCEPL/LAB/E/0393	10	JGB-06	4.20	44.21	1.21	18.58	36.00	4269
12-Nov-25	13-Nov-25	GCEPL/LAB/E/0394	11	SOUTH BHOWRAH	4.32	48.83	1.10	17.95	32.12	3838
12-Nov-25	15-Nov-25	GCEPL/LAB/E/0395	12	JGB-06	4.19	52.95	1.13	18.20	27.72	3449
13-Nov-25	15-Nov-25	GCEPL/LAB/E/0396	13	JGB-06	4.31	42.85	1.17	17.81	38.17	4398
14-Nov-25	15-Nov-25	GCEPL/LAB/E/0397	14	SOUTH BHOWRAH	4.25	41.49	1.15	18.34	39.02	4527
15-Nov-25	18-Nov-25	GCEPL/LAB/E/0398	15	JGB-06	4.17	44.06	1.19	17.90	36.85	4284
15-Nov-25	18-Nov-25	GCEPL/LAB/E/0399	16	SOUTH BHOWRAH	4.26	43.79	1.14	18.82	36.25	4315
16-Nov-25	20-Nov-25	GCEPL/LAB/E/0400	17	JGB-06	4.05	44.10	1.18	18.29	36.43	4280
16-Nov-25	20-Nov-25	GCEPL/LAB/E/0401	18	SOUTH BHOWRAH	4.11	46.49	1.12	18.03	34.36	4057
17-Nov-25	20-Nov-25	GCEPL/LAB/E/0402	19	JGB-06	4.20	49.14	1.10	17.89	31.87	3808
17-Nov-25	20-Nov-25	GCEPL/LAB/E/0403	20	SOUTH BHOWRAH	4.25	47.30	1.15	17.60	33.95	3980
18-Nov-25	20-Nov-25	GCEPL/LAB/E/0404	21	JGB-06	4.14	42.56	1.13	18.78	37.53	4427
18-Nov-25	20-Nov-25	GCEPL/LAB/E/0405	22	SOUTH BHOWRAH	4.22	47.95	1.11	17.54	33.40	3920
19-Nov-25	20-Nov-25	GCEPL/LAB/E/0406	23	JGB-06	4.13	47.70	1.20	17.71	33.39	3941
19-Nov-25	20-Nov-25	GCEPL/LAB/E/0407	24	SOUTH BHOWRAH	4.09	46.66	1.17	18.50	33.67	4039
20-Nov-25	20-Nov-25	GCEPL/LAB/E/0408	25	SOUTH BHOWRAH	4.16	42.58	1.14	19.05	37.23	4424
20-Nov-25	26-Nov-25	GCEPL/LAB/E/0409	26	JGB-06	4.02	44.55	1.19	18.12	36.14	4237
21-Nov-25	26-Nov-25	GCEPL/LAB/E/0410	27	JGB-06	4.11	47.59	1.21	17.76	33.44	3951
21-Nov-25	26-Nov-25	GCEPL/LAB/E/0411	28	JGB-06	4.16	41.98	1.15	18.45	38.42	4479
22-Nov-25	26-Nov-25	GCEPL/LAB/E/0412	29	JGB-06	4.04	41.76	1.11	18.67	38.46	4502
23-Nov-25	26-Nov-25	GCEPL/LAB/E/0413	30	SOUTH BHOWRAH	4.09	46.47	1.09	17.89	34.55	4060
23-Nov-25	26-Nov-25	GCEPL/LAB/E/0414	31	SOUTH BHOWRAH	4.13	41.20	1.17	18.75	38.88	4553
24-Nov-25	26-Nov-25	GCEPL/LAB/E/0415	32	JGB-06	4.17	40.15	1.13	19.39	39.33	4654
24-Nov-25	29-Nov-25	GCEPL/LAB/E/0416	33	SOUTH BHOWRAH	4.20	43.19	1.18	18.82	36.81	4366
25-Nov-25	29-Nov-25	GCEPL/LAB/E/0417	34	JGB-06	4.08	41.80	1.10	19.12	37.98	4498
26-Nov-25	29-Nov-25	GCEPL/LAB/E/0418	35	JGB-06	4.10	40.41	1.16	19.53	38.90	4627
26-Nov-25	29-Nov-25	GCEPL/LAB/E/0419	36	JGB-06	4.23	39.82	1.14	19.70	39.34	4684
27-Nov-25	29-Nov-25	GCEPL/LAB/E/0420	37	JGB-06	4.11	42.09	1.19	18.76	37.96	4469
28-Nov-25	29-Nov-25	GCEPL/LAB/E/0421	38	SOUTH BHOWRAH	4.29	41.21	1.21	18.64	38.94	4551
28-Nov-25	1-Dec-25	GCEPL/LAB/E/0422	39	JGB-06	4.13	44.19	1.15	18.28	36.38	4273
29-Nov-25	1-Dec-25	GCEPL/LAB/E/0423	40	SOUTH BHOWRAH	4.09	50.69	1.13	17.80	30.38	3662
30-Nov-25	1-Dec-25	GCEPL/LAB/E/0424	41	JGB-06	4.22	40.82	1.20	19.66	38.32	4588
30-Nov-25	1-Dec-25	GCEPL/LAB/E/0425	42	SOUTH BHOWRAH	4.16	42.57	1.12	19.09	37.22	4426

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Annexure V

Geocoal Engineering Pvt Ltd.

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

5.0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

Name of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Dec-25

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV Kcal/Kg
1-Dec-25	9-Dec-25	GCEPL/LAB/E/0426	01	JGB-06	4.25	43.51	1.10	18.53	36.86	4338
2-Dec-25	9-Dec-25	GCEPL/LAB/E/0427	02	JGB-06	4.12	40.83	1.18	19.05	38.94	4589
2-Dec-25	9-Dec-25	GCEPL/LAB/E/0428	03	JGB-06	4.09	38.58	1.12	19.48	40.82	4802
3-Dec-25	9-Dec-25	GCEPL/LAB/E/0429	04	SOUTH BHOWRAH	4.15	44.54	1.14	18.32	36.00	4240
4-Dec-25	13-Dec-25	GCEPL/LAB/E/0430	05	JGB-06	4.11	41.71	1.16	18.75	38.38	4506
5-Dec-25	13-Dec-25	GCEPL/LAB/E/0431	06	JGB-06	4.20	42.50	1.11	18.54	37.85	4432
5-Dec-25	13-Dec-25	GCEPL/LAB/E/0432	07	SOUTH BHOWRAH	4.14	41.14	1.20	19.06	38.60	4558
6-Dec-25	13-Dec-25	GCEPL/LAB/E/0433	08	SOUTH BHOWRAH	4.21	38.09	1.19	19.58	41.14	4845
7-Dec-25	13-Dec-25	GCEPL/LAB/E/0434	09	SOUTH BHOWRAH	4.25	42.01	1.15	19.32	37.52	4478
8-Dec-25	13-Dec-25	GCEPL/LAB/E/0435	10	JGB-06	4.02	40.66	1.12	19.70	38.52	4605
9-Dec-25	13-Dec-25	GCEPL/LAB/E/0436	11	SOUTH BHOWRAH	4.13	41.85	1.14	19.21	37.80	4493
10-Dec-25										
11-Dec-25										
12-Dec-25										
13-Dec-25	20-Dec-25	GCEPL/LAB/E/0437	12	JGB-06	4.57	40.66	1.18	18.93	39.23	4604
14-Dec-25										
15-Dec-25	20-Dec-25	GCEPL/LAB/E/0438	13	SOUTH BHOWRAH	4.45	40.84	1.11	20.05	38.00	4589
16-Dec-25	20-Dec-25	GCEPL/LAB/E/0439	14	SOUTH BHOWRAH	4.62	43.30	1.16	19.73	35.81	4356
17-Dec-25	26-Dec-25	GCEPL/LAB/E/0440	15	JGB-06	4.56	38.47	1.20	20.11	40.22	4812
18-Dec-25	26-Dec-25	GCEPL/LAB/E/0441	16	SOUTH BHOWRAH	4.33	39.48	1.12	19.76	39.64	4719
19-Dec-25	26-Dec-25	GCEPL/LAB/E/0442	17	JGB-06	4.61	41.56	1.17	19.49	37.78	4520
20-Dec-25	27-Dec-25	GCEPL/LAB/E/0443	18	JGB-06	4.47	37.29	1.19	20.07	41.45	4921
21-Dec-25	27-Dec-25	GCEPL/LAB/E/0444	19	JGB-06	4.69	40.12	1.14	19.97	38.77	4653
22-Dec-25	27-Dec-25	GCEPL/LAB/E/0445	20	JGB-06	4.75	43.01	1.16	18.64	37.19	4384
23-Dec-25	27-Dec-25	GCEPL/LAB/E/0446	21	JGB-06	4.52	42.96	1.10	18.53	37.41	4392
24-Dec-25	27-Dec-25	GCEPL/LAB/E/0447	22	JGB-06	4.63	40.83	1.13	20.15	37.89	4589
24-Dec-25	30-Dec-25	GCEPL/LAB/E/0448	23	JGB-06	4.71	43.51	1.19	19.01	36.29	4335
25-Dec-25	30-Dec-25	GCEPL/LAB/E/0449	24	JGB-06	4.55	36.03	1.15	20.23	42.59	5041
25-Dec-25	30-Dec-25	GCEPL/LAB/E/0450	25	JGB-06	4.43	40.12	1.11	19.86	38.91	4657
26-Dec-25	30-Dec-25	GCEPL/LAB/E/0451	26	JGB-06	4.62	43.69	1.20	18.77	36.34	4318
26-Dec-25	30-Dec-25	GCEPL/LAB/E/0452	27	JGB-06	4.57	39.46	1.18	19.91	39.45	4717
27-Dec-25	30-Dec-25	GCEPL/LAB/E/0453	28	JGB-06	4.45	45.87	1.16	18.06	34.91	4114
27-Dec-25	30-Dec-25	GCEPL/LAB/E/0454	29	JGB-06	4.66	41.32	1.10	19.55	38.03	4544
28-Dec-25	30-Dec-25	GCEPL/LAB/E/0455	30	JGB-06	4.39	41.05	1.13	19.64	38.18	4569
29-Dec-25										
30-Dec-25										
31-Dec-25	2-Jan-26	GCEPL/LAB/E/0456	31	JGB-06	4.58	38.73	1.18	20.12	39.97	4790

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Annexure V

Geocoal Engineering Pvt Ltd.

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

5.0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

Name of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Jan-26

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV Kcal/Kg
1-Jan-26										
2-Jan-26										
3-Jan-26	8-Jan-26	GCEPL/LAB/E/0457	01	JGB-06	4.67	44.49	1.20	18.78	35.53	4243
3-Jan-26	8-Jan-26	GCEPL/LAB/E/0458	02	JGB-06	4.78	41.23	1.15	19.37	38.25	4551
4-Jan-26	8-Jan-26	GCEPL/LAB/E/0459	03	JGB-06	4.53	40.21	1.13	19.62	39.04	4648
4-Jan-26	8-Jan-26	GCEPL/LAB/E/0460	04	JGB-06	4.70	41.83	1.18	19.50	37.49	4494
5-Jan-26	8-Jan-26	GCEPL/LAB/E/0461	05	JGB-06	4.59	39.95	1.10	20.13	38.82	4673
6-Jan-26	10-Jan-26	GCEPL/LAB/E/0462	06	JGB-06	4.82	34.97	1.13	19.98	43.92	5140
7-Jan-26										
8-Jan-26	10-Jan-26	GCEPL/LAB/E/0463	07	JGB-06	4.53	38.32	1.16	20.04	40.48	4825
8-Jan-26	10-Jan-26	GCEPL/LAB/E/0464	08	JGB-06	4.64	37.02	1.11	19.73	42.14	4947
9-Jan-26	14-Jan-26	GCEPL/LAB/E/0465	09	SOUTH BHOWRAH	4.76	37.48	1.14	19.95	41.43	4914
9-Jan-26	14-Jan-26	GCEPL/LAB/E/0466	10	JGB-06	4.49	38.27	1.19	19.59	40.95	4835
10-Jan-26	16-Jan-26	GCEPL/LAB/E/0467	11	JGB-06	4.73	38.16	1.12	20.04	40.68	4841
11-Jan-26	16-Jan-26	GCEPL/LAB/E/0468	12	JGB-06	4.44	41.47	1.18	19.76	37.59	4527
11-Jan-26	16-Jan-26	GCEPL/LAB/E/0469	13	JGB-06	4.52	41.82	1.21	19.45	37.52	4493
12-Jan-26	16-Jan-26	GCEPL/LAB/E/0470	14	JGB-06	4.65	39.67	1.13	19.90	39.30	4698
13-Jan-26	16-Jan-26	GCEPL/LAB/E/0471	15	JGB-06	4.39	41.91	1.17	19.67	37.25	4482
14-Jan-26	16-Jan-26	GCEPL/LAB/E/0472	16	JGB-06	4.50	43.76	1.20	18.15	36.89	4311
14-Jan-26	16-Jan-26	GCEPL/LAB/E/0473	17	JGB-06	4.67	35.37	1.16	20.34	43.13	5102
15-Jan-26	22-Jan-26	GCEPL/LAB/E/0474	18	JGB-06	4.72	38.91	1.14	19.76	40.19	4770
16-Jan-26	22-Jan-26	GCEPL/LAB/E/0475	19	SOUTH BHOWRAH	4.58	32.68	1.18	20.51	45.63	5355
17-Jan-26	22-Jan-26	GCEPL/LAB/E/0476	20	JGB-06	4.63	41.93	1.10	19.62	37.35	4487
18-Jan-26	22-Jan-26	GCEPL/LAB/E/0477	21	JGB-06	4.70	34.51	1.17	20.42	43.90	5183
18-Jan-26	22-Jan-26	GCEPL/LAB/E/0478	22	SOUTH BHOWRAH	4.52	42.78	1.21	19.83	36.18	4403
19-Jan-26	25-Jan-26	GCEPL/LAB/E/0479	23	JGB-06	4.43	34.20	1.25	19.94	44.61	5209
20-Jan-26	25-Jan-26	GCEPL/LAB/E/0480	24	JGB-06	4.5	36.20	1.14	19.65	43.01	5024
21-Jan-26	25-Jan-26	GCEPL/LAB/E/0481	25	JGB-06	4.69	36.25	1.09	19.74	42.92	5018
22-Jan-26	25-Jan-26	GCEPL/LAB/E/0482	26	JGB-06	4.75	37.12	1.13	19.58	42.17	4938
23-Jan-26	25-Jan-26	GCEPL/LAB/E/0483	27	SOUTH BHOWRAH	4.38	38.79	1.16	19.73	40.32	4780
24-Jan-26	30-Jan-26	GCEPL/LAB/E/0484	28	JGB-06	4.59	35.22	1.20	20.11	43.47	5118
25-Jan-26	30-Jan-26	GCEPL/LAB/E/0485	29	JGB-06	4.72	36.14	1.13	19.94	42.79	5030
25-Jan-26	30-Jan-26	GCEPL/LAB/E/0486	30	SOUTH BHOWRAH	4.53	34.70	1.19	20.33	43.78	5167
26-Jan-26	30-Jan-26	GCEPL/LAB/E/0487	31	SOUTH BHOWRAH	4.62	37.02	1.10	20.05	41.83	4950
27-Jan-26										
28-Jan-26										
29-Jan-26										
30-Jan-26	3-Feb-26	GCEPL/LAB/E/0488	32	JGB-06	4.70	36.81	1.15	20.16	41.88	4967
31-Jan-26	3-Feb-26	GCEPL/LAB/E/0489	33	JGB-06	4.57	38.45	1.18	19.72	40.65	4811

GEOCOAL ENGINEERING PVT. LTD. DHANBAD

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Annexure V

Geocoal Engineering Pvt Ltd.

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

ame of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Feb-26

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV (Kcal/Kg)
1-Feb-26										
2-Feb-26	6-Feb-26	GCEPL/LAB/E/0490	01	BHOWRAH N&S	4.59	40.57	1.19	19.84	38.40	4614
3-Feb-26	6-Feb-26	GCEPL/LAB/E/0491	02	BHOWRAH N&S	4.63	37.29	1.12	20.21	41.38	4920
3-Feb-26	6-Feb-26	GCEPL/LAB/E/0492	03	JGB-06	4.48	41.30	1.17	19.97	37.56	4546
4-Feb-26	14-Feb-26	GCEPL/LAB/E/0493.	04	JGB-06	4.22	34.95	1.10	20.16	43.79	5144
5-Feb-26	14-Feb-26	GCEPL/LAB/E/0494	05	JGB-06	4.51	40.56	1.18	19.75	38.51	4613
6-Feb-26	14-Feb-26	GCEPL/LAB/E/0495	06	JGB-06	4.36	40.85	1.21	19.59	38.35	4585
7-Feb-26	14-Feb-26	GCEPL/LAB/E/0496	07	JGB-06	4.49	38.17	1.11	20.04	40.68	4840
8-Feb-26	14-Feb-26	GCEPL/LAB/E/0497	08	JGB-06	4.35	38.39	1.17	20.21	40.23	4818
9-Feb-26	14-Feb-26	GCEPL/LAB/E/0498	09	JGB-06	4.60	41.94	1.20	19.52	37.34	4483
10-Feb-26	14-Feb-26	GCEPL/LAB/E/0499	10	JGB-06	4.41	40.51	1.12	19.47	38.90	4620
11-Feb-26	14-Feb-26	GCEPL/LAB/E/0500	11	BHOWRAH N&S	4.52	39.01	1.19	19.86	39.94	4759
11-Feb-26	14-Feb-26	GCEPL/LAB/E/0501	12	JGB-06	4.47	41.58	1.10	20.03	37.29	4520
12-Feb-26	14-Feb-26	GCEPL/LAB/E/0502	13	BHOWRAH N&S	4.31	41.36	1.14	19.55	37.95	4539
13-Feb-26	17-Feb-26	GCEPL/LAB/E/0503	14	BHOWRAH N&S	4.25	34.68	1.18	20.08	44.06	5166
13-Feb-26	17-Feb-26	GCEPL/LAB/E/0504	15	JGB-06	4.42	39.29	1.12	19.95	39.64	4734
14-Feb-26										
15-Feb-26	19-Feb-26	GCEPL/LAB/E/0505	16	JGB-06	4.67	43.30	1.16	18.72	36.82	4356
15-Feb-26	19-Feb-26	GCEPL/LAB/E/0506	17	BHOWRAH N&S	4.50	38.31	1.21	20.07	40.41	4824
16-Feb-26	19-Feb-26	GCEPL/LAB/E/0507	18	JGB-06	4.36	38.92	1.13	19.59	40.36	4769
17-Feb-26	19-Feb-26	GCEPL/LAB/E/0508	19	JGB-06	4.59	37.76	1.19	19.73	41.32	4876
17-Feb-26	19-Feb-26	GCEPL/LAB/E/0509	20	JGB-06	4.44	39.40	1.10	19.91	39.59	4725
18-Feb-26	26-Feb-26	GCEPL/LAB/E/0510	21	JGB-06	4.62	40.62	1.21	19.82	38.35	4606
19-Feb-26	26-Feb-26	GCEPL/LAB/E/0511	22	JGB-06	4.45	38.44	1.14	20.13	40.29	4814
20-Feb-26	26-Feb-26	GCEPL/LAB/E/0512	23	JGB-06	4.57	40.73	1.19	19.93	38.15	4596
21-Feb-26	26-Feb-26	GCEPL/LAB/E/0513	24	JGB-06	4.39	43.54	1.13	18.76	36.57	4334
21-Feb-26	26-Feb-26	GCEPL/LAB/E/0514	25	JGB-06	4.50	38.79	1.20	20.07	39.94	4779
22-Feb-26	26-Feb-26	GCEPL/LAB/E/0515	26	JGB-06	4.44	38.16	1.16	19.92	40.76	4840
22-Feb-26	26-Feb-26	GCEPL/LAB/E/0516	27	JGB-06	4.38	41.93	1.12	19.75	37.20	4486
23-Feb-26										
24-Feb-26	26-Feb-26	GCEPL/LAB/E/0517	28	JGB-06	4.56	44.19	1.15	18.90	35.76	4272
24-Feb-26	2-Mar-26	GCEPL/LAB/E/0518	29	[illegible]	4.62	43.01	1.13	18.74	37.12	4384

GEOCOAL ENGINEERING PVT. LTD. DHANBAD

Sandeep Soren

Annexure V

Geocoal Engineering Pvt Ltd.

Janki Complex, Bara Jamua, Barwadda

Dhanbad, Jharkhand Pin- 826004

5.0 MTPA Patherdih NLW Washery Date Wise & Shift Wise Quality Test Report of Raw Coal Receipt from Rake

Name of Client	5.0 MTPA Patherdih NLW Washery BCCL
MONTH	Mar-26

Raw Coal (Rake)

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						ASH %	M %	VM %	FC %	GCV (Kcal/Kg)
1-Mar-26	7-Mar-26	GCEPL/LAB/E/0525	01	JGB-06	4.56	47.59	1.16	18.19	33.06	3952
2-Mar-26	7-Mar-26	GCEPL/LAB/E/0526	02	JGB-06	4.63	46.81	1.21	18.35	33.63	4023
3-Mar-26	7-Mar-26	GCEPL/LAB/E/0527	03	JGB-06	4.49	41.84	1.13	19.61	37.42	4494
4-Mar-26	7-Mar-26	GCEPL/LAB/E/0528	04	JGB-06	4.71	44.47	1.20	18.46	35.87	4245
5-Mar-26										
6-Mar-26	7-Mar-26	GCEPL/LAB/E/0529	05	JGB-06	4.47	41.91	1.18	19.73	37.18	4486
6-Mar-26	11-Mar-26	GCEPL/LAB/E/0530	06	JGB-06	4.50	36.82	1.14	20.12	41.92	5035
7-Mar-26	11-Mar-26	GCEPL/LAB/E/0531	07	JGB-06	4.61	41.73	1.10	19.20	37.97	4505
8-Mar-26	11-Mar-26	GCEPL/LAB/E/0532	08	JGB-06	4.42	41.57	1.19	19.46	37.78	4517
9-Mar-26										
10-Mar-26	15-Mar-26	GCEPL/LAB/E/0533	09	JGB-06	4.39	34.92	1.15	20.13	43.80	5145
10-Mar-26	15-Mar-26	GCEPL/LAB/E/0534	10	JGB-06	4.56	36.64	1.20	19.82	42.34	4981
11-Mar-26	15-Mar-26	GCEPL/LAB/E/0535	11	JGB-06	4.45	38.71	1.13	19.71	40.45	4789
12-Mar-26	15-Mar-26	GCEPL/LAB/E/0536	12	JGB-06	4.61	35.63	1.18	19.90	43.29	5077
13-Mar-26	15-Mar-26	GCEPL/LAB/E/0537	13	JGB-06	4.35	35.12	1.10	20.04	43.74	5128
14-Mar-26	20-Mar-26	GCEPL/LAB/E/0538	14	JGB-06	4.62	34.17	1.21	19.92	44.70	5214
15-Mar-26	20-Mar-26	GCEPL/LAB/E/0539	15	JGB-06	4.45	33.62	1.13	20.15	45.10	5268
16-Mar-26	20-Mar-26	GCEPL/LAB/E/0540	16	JGB-06	4.37	40.12	1.19	19.69	39.00	4654
17-Mar-26	20-Mar-26	GCEPL/LAB/E/0541	17	JGB-09	4.50	49.26	1.14	17.95	31.65	3796
17-Mar-26	20-Mar-26	GCEPL/LAB/E/0542	18	JGB-09	4.35	43.72	1.11	18.72	36.45	4318
18-Mar-26										
19-Mar-26	20-Mar-26	GCEPL/LAB/E/0543	19	JGB-06	4.44	43.01	1.17	19.01	36.81	4383
20-Mar-26	25-Mar-26	GCEPL/LAB/E/0544	20	JGB-06	4.69	39.86	1.20	19.88	39.06	4678
21-Mar-26										
22-Mar-26	25-Mar-26	GCEPL/LAB/E/0545	21	JGB-06	4.51	38.78	1.16	20.25	39.81	4781
23-Mar-26	25-Mar-26	GCEPL/LAB/E/0546	22	JGB-09	4.45	51.79	1.12	17.76	29.33	3558
23-Mar-26	31-Mar-26	GCEPL/LAB/E/0547	23	JGB-09	4.60	44.82	1.17	18.30	35.71	4213
24-Mar-26	31-Mar-26	GCEPL/LAB/E/0548	24	JGB-09	4.39	39.21	1.20	20.04	39.55	4740
25-Mar-26	31-Mar-26	GCEPL/LAB/E/0549	25	JGB-09	4.52	41.53	1.13	19.78	37.56	4524
25-Mar-26	31-Mar-26	GCEPL/LAB/E/0550	26	JGB-09	4.47	43.14	1.19	18.67	37.00	4370
26-Mar-26	31-Mar-26	GCEPL/LAB/E/0551	27	JGB-09	4.20	47.83	1.15	17.98	33.04	3930
27-Mar-26	31-Mar-26	GCEPL/LAB/E/0552	28	JGB-09	4.63	46.95	1.18	18.05	33.82	4012
27-Mar-26	31-Mar-26	GCEPL/LAB/E/0553	29	JGB-09	4.45	47.22	1.10	17.72	33.96	3989
28-Mar-26	31-Mar-26	GCEPL/LAB/E/0554	30	JGB-09	4.38	48.86	1.16	17.91	32.07	3833
29-Mar-26	31-Mar-26	GCEPL/LAB/E/0555	31	JGB-06	4.54	45.59	1.14	18.12	35.15	4141
29-Mar-26	31-Mar-26	GCEPL/LAB/E/0556	32	JGB-06	4.36	45.21	1.09	18.31	35.39	4179
30-Mar-26	31-Mar-26	GCEPL/LAB/E/0557	33	JGB-09	4.50	42.79	1.21	19.40	36.60	4402
30-Mar-26	4-Apr-26	GCEPL/LAB/E/0558	34	JGB-09	4.44	40.22	1.17	19.77	38.84	4645
31-Mar-26	4-Apr-26	GCEPL/LAB/E/0559	35	JGB-09	4.71	41.73	1.14	19.54	37.59	4504

GEOCOAL ENGINEERING PVT. LTD. DHANBAD

Sandeep Soren

Ref. No: - BCCL/WD/LOA/CO/2025-26/ 01 **Dated:** 29/07/2025

Letter Of Acceptance

To
Dilip Kumar Singh,
Chothai Kulhi Katras More
Jharia, Dhanbad,
Jharkhand - 828111
Email: contractordilipsingh0@gmail.com

Sub: Letter of Acceptance for the work of "Construction of RCC Drain along Unloading Platform at PCW Under EWZ Area."
Ref: 1. NIT Ref. No. : BCCL/WD/ACE/Ten/5MTPA/24-25/ 02, Dated: 09/10/2024

Dear Sir,

With reference to the above referred tender, this is to inform you that your offer to undertake the subject work at a value of Rs. **30,28,999.31 (Rupees Thirty Lakh Twenty Eight Thousand Nine Hundred Ninety nine And Paise Thirty one) (including GST of Rs 4,62,050.74) which is over all 41.49% (Forty One Point Four Nine Percent) Below** the Estimated Cost has been accepted by the Competent Authority based on terms and conditions contained in the NIT & Tender Document subject to the following stipulations:

1. The work is awarded on Percentage Rate basis.
2. All the materials and equipment required for the work will be arranged by you.
3. PAN No and GST No. as per submitted documents is **DLCPS2768P** and GST- **20DLCPS2768P1ZL** respectively.
4. **Performance Security** i.e. 5% of the work value shall be **Rs. 1,51,449.97 (Rupees One Lakh Fifty One Thousand Four Hundred Forty Nine And Paise Ninety Seven Only)** including Earnest Money amounting to **Rs. 54,900.00.**
   You are required to deposit **Rs. 96,549.97 (Rupees Ninety Six Thousand Five Hundred Forty Nine And Paise Ninety Seven Only)** towards Balance amount of Performance within **21**(twenty One) days from issue of this "Letter of Acceptance" to facilitate issue of work order.
   All running on account bills shall be paid at 95% (ninety five percent) of work value. This 5% (five percent) i.e. **Rs. 1,51,449.97 (Rupees One Lakh Fifty One Thousand Four Hundred Forty Nine And Paise Ninety Seven Only)** deduction towards Retention Money will be the second part of Security Deposit. The total security deposit for the whole work shall be **₹ 3,02,899.94 (Rupees Three Lakh Two Thousand Eight Hundred Ninety Nine and Paise Ninety Four only)**.
5. The duration of the work is **90 (Ninety) Days** from the date of commencement of the work. The work shall be commenced within 10 (ten) days from the issue of Letter of Acceptance or 7(seven) days after handing over the site of work whichever is later. However, the date of commencement may be decided with mutual consent with the contractor on any date prior to the date as prescribed above.

6. On receipt of Letter of Acceptance, you shall forthwith Register and obtain License from the Competent Authority under the Contract Labour (Regulation & Abolition) Act 1970, the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the execution authorities and to office of ACE, Civil Engineering Department, WWZ, Washery Division, BCCL.

7. The payment of minimum wages through Bank and duly certified by competent authority to be ensured during execution of work.

Sri Punit Sharma, Sr.Overseer (Civil), 5MTPA NLW Patherdih Washery shall be responsible for recording the Measurement in the M.B & first check will be done by **Asst.Mgr (Civil)/WD.** However, subsequent changes if needed during progress of work may be made by the Engineer-In-Charge/Competent Authority with intimation to this office.

You are requested to contact **ACE (WD)** for further instruction towards execution of the work.

Yours faithfully,

29.07.25

ACE/WD

Copy to:-

1. CVO, BCCL, KB
2. G.M(Ws)/WD
3. GM (civil) / CED
4. A.F.M, WD. This Has Reference to
   a.PR. No. 1600001042, dt:- 08/10/2024, Rs. 51,76,891.68/-
   b. Total Goods & Service Tax impact is at 18.00 %**(18 x 25,66,948.57/100) = Rs. 4,62,050.74** and the payment of total goods and service tax amount of **Rs.4,62,050.74** will be made on the bidder submitting Bill/invoice in accordance with the provision of relevant GST Act and the rules made thereunder and after online filing of valid return on GST portal.
5. ALC (C), ShramBhawan, New Colony, Jagjiwan Nagar, Dhanbad-826003
6. LEO (C), ShramBhawan, New Colony, Jagjiwan Nagar, Dhanbad-826003
7. PO/5MTPA NLW Patherdih Washery
8. Asst.Mgr (Civil)/ Sr. Overseer (Civil)/5MTPA NLW Patherdih Washery.
9. TCR File.

ANNEXURE-VI

DRAIN ALONG THE UNLOADING SIDING AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

DRAIN ALONG THE BOUNDARY WALL AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

ANNEXURE-VII

OIL & GREASE TRAP AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

Annual CSR Action Plan for FY 2025-26							
Sl. No.	**CSR Project/Programme**	**Item from the list of the activities in schedule VII to the act**	**Estimated Budget (₹ in Lakhs)**	**Manner of execution/Executing Agency**	**Implementation Schedule**	**Monitoring and reporting mechanism**	**Details of need and impact assessment **, if any; as evaluated by BCCL**
CSR projects/activities under HQ							
1	Skill development program through Central Tool Room, Kolkata for 250 candidates	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	300.10	BCCL through Central Tool Room, Kolkata	1.Signing of MoU: July 2025 2.Selection of candidates: July - August 2025 3.Training of candidates: August 2025 - February 2026	Central Tool Room, Kolkata	Benefit to 250 candidates. Impact assessment mandatory
2	Skill development program through CIPET, Ranchi for 160 candidates	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	124.96	BCCL through CIPET, Ranchi	1.Signing of MoU: July 2025 2.Selection of candidates: July - August 2025 3.Training of candidates: August 2025 - February 2026	CIPET, Ranchi	Benefit to 160 candidates. Impact assessment mandatory
3	Skill development program through CIPET, Raipur for 120 candidates	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	132.00	BCCL through CIPET, Raipur	1.Signing of MoU: July 2025 2.Selection of candidates: July - August 2025 3.Training of candidates: August 2025 - February 2026	CIPET, Raipur	Benefit to 120 candidates. Impact assessment mandatory
4	Skill development program through National Skill Training Institute Hyderabad for 100 candidates	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	99.13	BCCL through National Skill Training Institute Hyderabad	1.Signing of MoU: July 2025 2.Selection of candidates: August-September 2025 3.Training of candidates: September 2025 - March 2026	National Skill Training Institute Hyderabad	Benefit to 100 candidates. Impact assessment not mandatory (IANM)
5	Teacher Training Programme for skill upgradation of teachers	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	18.75	BCCL through implementing agency	1.Signing of MoU: July 2025 2.Project period:- Six months	Implementing Agency	Benefit to teachers & students of 2 schools,IANM
6	Mega Health Camp	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	50.00	BCCL through implementing agency	1. Approval of estimate: within 1 month after approval of action plan 3. Camp: 02 - 05 days	Implementing Agency	Benefit to large populace of Dhanbad,IANM
7	Installation of Mini Science Centre Labs through Child Rights and You (CRY) (extension of pilot project of 2024-25)	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	82.25	BCCL through CRY	1.Project start: July-August 2025 2.Project period: 12 months	CRY	Benefit to approximately 15000 students,IANM

8	Operation of two electric buses for three years primarily for the people of Belgaria rehabilitation township, 2 buses, Estimate: ₹ 3.28 Cr. for 03 years (procurement + 1st year = ₹ 1.92 Cr.). Multi year project.	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	192.00	BCCL through implementing agency	1. Floating of tender: within 1 month after approval of action plan and obtainment of NOC (as applicable) 2. Selection of executing party: within 2 months 3. Initiation of operation of the project: within 4 months after award of work	Implementing Agency	Primarily targetting polulation of Belgaria. Impact assessment mandatory
9	Construction of boundary wall of Shibu Soren Degree college	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	73.24	BCCL	1. Project period: 90 days	BCCL	Targetting 200 students, IANM
10	Construction of rotary for Birsa Munda Statue	Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional art and handicrafts	5.74	BCCL	1. Project period: 60 days	BCCL	Targetting local populace towards promotion of art & culture, IANM
11	Skill development project through Multi Skill Development Institute (MSDI), (set up through NSDC) (additional budget for project)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	78.90	NSDC	1. Project completion period: 1 year	NSDC	Benefitting 300 candidates, IANM
12	Installation of smart classroom in Utkramit middle school and Upgradation of school building at Utkramit Madhya Vidyalaya, Chatatand, Belgaria and Naya Vihar Primary school, Jharia Vihar Belgaria And installation of smart classroom in Utkramit Madhya Vidyaylaya	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	14.50	BCCL	1. Selection of executing Party- Within two months of approval of action plan 2. Award of work-with in 45 days of tender opening 3. Project period: 120 days	BCCL	Benefit to 200 students, IANM
13	Promoting STEM education through IIT (ISM) in 40 Govt. Schools (extension of pilot project of 2024-25)	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	99.88	BCCL through IIT(ISM)	1.Signing of MoU: July-August 2025 2.Project start: August-September 2025 3.Project period: 12 months	IIT(ISM)	Benefit to students of 40 schools,IANM
14	Project Intergenerational Learning Centre (IGLC) through Healthy Aging India (extension of pilot project of 2023-24)	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	36.33	BCCL through Healthy Aging India	1.Signing of MoU: July-August 2025 2.Project start: August-September 2025 3.Project period: 12 months	Healthy Aging India	Benefit to approximately 1500 students and elderly,IANM

15	Upgradation of Hindu Mission orphanage Hirapur, Dhanbad	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	47.92	BCCL	1. Selection of executing Party- Within two months of approval of action plan 2. Award of work-with in 60 days of tender opening 3. Project period: 120 days	BCCL	Benefit to approximately 20 students,IANM
16	Upgradation of Abhoya Sundari Girls High School, Hirapur, Dhanbad	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	40.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 120 days	BCCL	Benefit to approximately 200 students,IANM
17	Upgradation of Lindsay Club and library, Hirapur, Dhanbad	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	23.95	BCCL	1. Estimate preparation- prepared 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 120 days	BCCL	Benefit to local populace,IANM
18	Skill development training on bamboo crafts through IIT(ISM)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	30.50	BCCL through IIT(ISM)	1.Signing of MoU: July-August 2025 2.Project start: August-September 2025 3.Project period: 12 months	IIT(ISM)	Benefit to approximately 100 persons,IANM
19	Construction of community hall at Tumadaha	Rural development	35.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 120 days	BCCL	Benefit to local populace,IANM
20	Operation of two Mobile Medical Vans, Estimate: ₹ 4.13 Cr.	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	137.00	BCCL through implementing agency	1. Approval of estimate: Within one month of approval of action plan 2. Selection of executing Party- Within four months of approval of action plan 3. Project period: 1 year	Implementing agency	Benefit to local populace of Dhanbad, Impact Assessment mandatory
21	Construction of hall with kitchen space and allied upgradation work for the underprivileged at Hirapur	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	30.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 120 days	BCCL	Free food, vocational training and free cultural ceremonies to approx. 1,00,000 people annually,IANM
	Sub-total		**1652.15**				

Projects by Areas							
22	Providing modern stitching machine to 550 women self-help groups of Chandrapura panchayat **(Barora Area)**	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement project	20.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 60 days	BCCL	Benefit to 550 women, IANM
23	Construction of hall at Saraswati Shishu Vidya Mandir, Baghmara	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement project	35.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--Within two months after approval of action plan and obtainment of NOC (as applicable) 3. Award of work-with in 60 days of tender opening 4. Project period: 60 days	BCCL	Benefit to students of the region,IANM
24	Infrastruction upgradation work at Ambedkar Academy, Loyabad **(Sijua Area)**	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	21.28	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 90 days	BCCL	Benefit to 280 students, IANM
25	Rejuvenation of Shivshankar Nagar Pond **(PB Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water. Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga	98.90	BCCL	1. Estimate preparation- prepared 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 120 days of tender opening 5. Project period: 180 days	BCCL	Benefit to approximately 1000 persons, IANM
26	Rejuvenation of two nos. of pond **(W.J. Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga	150.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 180 days	BCCL	Benefit to approximately 2000 persons, Impact assessment mandatory

27	Construction of Shaded platform for Birsa Statue at Birsa Bridge **(EJ Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga	5.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 45 days	BCCL	Benefit to local polucace through promotion of art & culture,IANM
28	Providing And Laying Pit Water Pipe Line At 2 No. Pit Jealgora To Dumariatand Basti **(Lodna Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	13.21	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 60 days	BCCL	Benefit to approximately 1000 residents,IANM
29	Upgradation of Utkrahmit Madhya Vidyalaya Surunga **(Lodna Area)**	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	30.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 120 days	BCCL	Benefit to 500 students ,IANM
30	Upgradation at Jharia Gujrati Sanskrit School, Jharia	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	21.80	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 120 days	BCCL	Benefit to approximately 500 students,IANM
31	Construction of Indian Medical Association (IMA) multipurpose hall, Kumardubi **(CV Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	37.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 90 days	BCCL	Benefit to local populace,IANM
32	Providing three units of water purifier and one noiseless generator for Saraswati Vidyamandir Sr. Sec. School, Dugdha **(Washery)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	15.76	BCCL	1. Estimate preparation- prepared and approved 2. Tender call-with in 10 days of estimate approval 3. Award of work-with in 45 days of tender opening 5. Project period: 90 days	BCCL	Benefit to approximately 100 students,IANM

33	Construction of park at Barmasiya **(Barora Area)**	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	429.00	BCCL	1. Project period: 120 days	BCCL	Benefit to local populace, Impact assessment mandatory, Impact Assessment mandatory
34	Upgradation work at DAV Mahila Mahavidyalaya, Katras **(Katras Area)**	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	33.50	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 120 days	BCCL	Benefit to 2100 rural female students,IANM
35	Construction of Hall with changing room and separate toilets for boys and girls at Suryadeo Singh Foundation School, Dhanbad	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	40.00	BCCL	1. Estimate preparation- under preparation 2. Approval of estimate--within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 120 days	BCCL	Benefit to 458 students,IANM
36	Construction of toilet block at Durgapur airport, West Bengal	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health and sanitation including contribution to the Swatch Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	10.82	BCCL	1. Estimate preparation- under technical vetting 3. Tender call-with in 10 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. Project period: 90 days	BCCL	Targetting the persons associated with the airport and visitors/workers etc.,IANM
	Sub-total		**961.27**				
	Total		**2613.42**				
	Contingent budget	For activities listed under Schedule VII	**269.58**				
	Grand Total		**2883.00**				

BHARAT COKING COAL LIMITED
(A Subsidiary of Coal India Ltd.)
भारत कोकिंग कोल लिमिटेड
Bharat Coking Coal Ltd
Washery Division,,
PO: Saraidhela,Dist- Dhanbad,Jharkhand,India-828127

Coal India Limited
A Maharatna Company
www.coalindia.in

Phone :
Fax :
Website : Email :
CIN : U10101JH1972GOI000918 GSTN : 20AAACB7934MFZB

SERVICE PURCHASE ORDER

PO No. : 5700471394

Date : 28/11/2025

MSE Status: MSE- GENERAL

To,
INDIAN INSTITUTE OF TECHNOLOGY

DHANBAD
HIRAPUR, SARDAR PATEL NAGAR
DHANBAD
DHANBAD
826004
Jharkhand
India

Vendor Code: 10002451
PAN: AAAAI0686D
GSTIN: 20AAAAI0686D1ZA
Delivery Date: 31/03/2026
Department: Washery

Header Text:

Heavy Metal Analysis of 3 NO OF Coal Sample for EC compliance.

Item	Material/Service		Qty	Unit	Unit Price	Value	Net Value
10	Heavy Metal Analysis of Coal Sample						64900.00
	10	Heavy Metal Analysis of 3 NO Coal Sample	1	AU	55000.00 per 1 unit	55000.00	
				Gross Price		55,000	
				Goods & Services Tax		9,900	
				Value exclusive of Tax		55,000	

Annexure IX

		Inp-Eligible- CGST-9%, SGST-9%, No TCS	9,900	

Net value	**64900.00**	INR
Amount in words :SIXTY FOUR THOUSAND NINE HUNDRED RUPEES		

Released By :

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ENVIRONMENTAL MONITORING REPORT OF
BHARAT COKING COAL LIMITED,

FOR MISCELLANEOUS UNITS/WASHERIES,

s

(FOR THE MONTH MARCH, 2026)

CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

s

AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

2.1.1 Ambient Air Quality Sampling Locations

i) Bhojudih Washery(A34): Industrial Area

The location of the sampling station is 23°36'56.00'' N &086°28' 40.00''E. The sampler was placed at a height of approx. 2 m height at rooftop of Bhojudih Guest House in vicinity of the existing Washery.

ii) Dugda Washery (A35): Industrial Area

The location of the sampling station is 23°44'55.19'' N &086°09'04.17''E. The sampler was placed at a height of approx. 2 m height at rooftop of Dugda Guest House in vicinity of the existing Washery

iii) Mahuda Washery(A36): Industrial Area

The location of the sampling station is 23°44'29.00'' N &086°16'52.00''E. The sampler was placed at a height of approx. 1.5m above ground level at Washery Office.

iv) Sinidih Workshop (A38):Industrial Area

The location of the sampling station is 23°46'55.60'' N &086°15'29.76''E The sampler was placed at a height of approx. 1.5m above ground level at SinidihWorkshopOffice.

v) Pathadih Washery (A39):Industrial Area

The location of the sampling station is 23°40'52.00"N &86°26'0.00"E The sampler was placed at a height of approx. 1.5m above ground level at washery

vi) Koyla Nagar Hospital (A40):Residential Area

The location of the sampling station is 23°48'21.58"N &86°27'56.75"E.The sampler was placed at a height of approx. 1.5m above ground level.

vii) Central Hospital Dhanbad (A43):Residential Area

The location of the sampling station is 23°42'32"N &86°26'38"E.The sampler was placed at a height of approx. 1.5m above ground level.

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TC-14321

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A Miniratna Company

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	03/2026	**Cluster**	Misc.	**ULR No.**	TC1432126000002475F
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)			**Date of Issue**	04.05.2026
Project	Patherdih Washery :Industrial Area	**Sample Ref. No.**	REM/BCCL/2026/03	**Sampling Method**	CMPDI/RI-II/LPM 11 , (IS 5182)
Date of Sampling	02.03.26	20.03.26	**Period of Analysis** 02.03.2026 – 25.04.2026	**Zone of Station:**	CORE ZONE

Sl. No.	Parameter	Method of Analysis	Observed Values (in µg/m³) A5297	Observed Values (in µg/m³) A5375	Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009
1	PM_{10}	IS -5182(Part 23):2006, R-2017	126	142	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	66	70	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	**10**	**<10**	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	**29**	**27**	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny

** LDL indicates Lower Detection Limit,*

***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY

(Gaurav Kant)
REVIEWED BY

(Kumar Vaibhav)
Authorised Signatory

***Note**: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.*

---- End of Report ----

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Annexure X

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
KOYLA BHAWAN COMPLEX
DHANBAD. -826005
Phone:0326-223-850
email: rdri2cmpdi@coalindia.in

Month & Year	**03/2026**	**Cluster**	**Misc.**	**ULR No.**	**TC1432126000002509F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	**14.04.2026**
Project		**Sample Ref. No.**	**REM/BCCL/2026/03**	**Sampling Method**	**CMPDI/RI-II/LPM 22**
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling** 02.03.26 – 20.03.26	**Zone Category of Station:**	CORE ZONE

Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards Zones	Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	45.7	48.2	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	45.5	54.9					
3		08:00 - 09:00	48.4	56.2					
4		09:00 – 10:00	51.5	50.7					
5		10:00 - 11:00	53.1	56.1					
6		11:00 - 12:00	53.6	56.7					
7		12:00 - 13:00	60.8	56.8					
8		13:00 - 14:00	60.9	56.8					
9		14:00 - 15:00	62.3	56.2					
10		15:00 - 16:00	53.3	54.4					
11		16:00 - 17:00	61.8	58					
12		17:00 - 18:00	52.6	50.1					
13		18:00 - 19:00	46.2	52.7					
14		19:00 - 20:00	45.9	53					
15		20:00 - 21:00	44.8	53.9					
16		21:00 - 22:00	45.1	53.5					
		Leq Day	56.3	55.0					
1	Noise Level dB(A)Leq -Night	22:00-23:00	50	51.2	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	49.1	50.4					
3		00:00- 01:00	46.3	49.4					
4		01.00-02.00	48.5	48.8					
5		02.00-03.00	48.1	49.4					
6		03.00-04.00	47.8	48					
7		04.00-05.00	47.4	48					
8		05:00-06:00	48.4	48.8					
		Leq Night	48.3	49.4					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.

---- End of Report ----

Page -1 of 1

Annexure X

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ENVIRONMENTAL MONITORING REPORT OF
BHARAT COKING COAL LIMITED,

FOR MISCELLANEOUS UNITS/WASHERIES,

s

(FOR THE MONTH JANUARY, 2026)

CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

s

AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

2.1.1 Ambient Air Quality Sampling Locations

i) Bhojudih Washery(A34): Industrial Area

The location of the sampling station is 23°36'56.00'' N &086°28' 40.00''E. The sampler was placed at a height of approx. 2 m height at rooftop of Bhojudih Guest House in vicinity of the existing Washery.

ii) Dugda Washery (A35): Industrial Area

The location of the sampling station is 23°44'55.19'' N &086°09'04.17''E. The sampler was placed at a height of approx. 2 m height at rooftop of Dugda Guest House in vicinity of the existing Washery

iii) Mahuda Washery(A36): Industrial Area

The location of the sampling station is 23°44'29.00'' N &086°16'52.00''E. The sampler was placed at a height of approx. 1.5m above ground level at Washery Office.

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v) Pathadih Washery (A39):Industrial Area

The location of the sampling station is 23°40'52.00"N &86°26'0.00"E The sampler was placed at a height of approx. 1.5m above ground level at washery

vi) Koyla Nagar Hospital (A40):Residential Area

The location of the sampling station is 23°48'21.58"N &86°27'56.75"E.The sampler was placed at a height of approx. 1.5m above ground level.

vii) Central Hospital Dhanbad (A43):Residential Area

The location of the sampling station is 23°42'32"N &86°26'38"E.The sampler was placed at a height of approx. 1.5m above ground level.

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	**01/2026**	**Cluster**	**Misc.**	**ULR No.**	**TC143212612700002367F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	05.03.2026
Project	**Patherdih Washery :Industrial Area**	**Sample Ref. No.**	**REM/BCCL/2026/01**	**Sampling Method**	**CMPDI/RI-II/LPM 11 , (IS 5182)**
Date of Sampling	02.01.26	26.01.26	**Period of Analysis**	02.01.2026 – 25.02.2026	**Zone of Station:** CORE ZONE

Sl. No.	**Parameter**	**Method of Analysis**	**Observed Values (in µg/m³)**		**Range Of Testing**	**LDL**	**MoEF Standards Notification dated 25th September,2000 (GSR 742 E)**	**NAAQS, 2009**
			A5105	A5222				
1	PM_{10}	IS -5182(Part 23):2006, R-2017	157	135	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	75	68	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	10	<10	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	23	31	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny
** LDL indicates Lower Detection Limit,*
***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY	(Gaurav Kant) ***REVIEWED BY***	(Kumar Vaibhav) ***Authorised Signatory***

***Note**: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.*

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Page -1 of 1

Annexure X

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
KOYLA BHAWAN COMPLEX
DHANBAD. -826005
Phone:0326-223-850
email: rdri2cmpdi@coalindia.in

Month & Year	**01/2026**	**Cluster**	**Misc.**			**ULR No.**	**TC143212616100002401F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**					**Date of Issue**	**05.03.2026**
Project		**Sample Ref. No.**	**REM/BCCL/2026/01**		**Sampling Method**	**CMPDI/RI-II/LPM 22**	
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling**	02.01.26	26.01.26	**Zone Category of Station:**	CORE ZONE

Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards: Zones	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards: Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	46.2	46.7	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	48.7	53.2					
3		08:00 - 09:00	49.9	54.4					
4		09:00 – 10:00	50.7	49.1					
5		10:00 - 11:00	51.4	54.3					
6		11:00 - 12:00	55	54.9					
7		12:00 - 13:00	55	55					
8		13:00 - 14:00	54.4	55					
9		14:00 - 15:00	54.5	54.4					
10		15:00 - 16:00	53.9	52.7					
11		16:00 - 17:00	52.9	51.2					
12		17:00 - 18:00	52.7	48.5					
13		18:00 - 19:00	52.3	51.1					
14		19:00 - 20:00	51.8	51.3					
15		20:00 - 21:00	50.7	52.2					
16		21:00 - 22:00	50.8	51.8					
		Leq Day	52.5	52.8					
1	Noise Level dB(A)Leq -Night	22:00-23:00	50.1	50.3	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	48.9	49.2					
3		00:00- 01:00	48.6	49.2					
4		01.00-02.00	48.3	48.6					
5		02.00-03.00	48	49.2					
6		03.00-04.00	47.7	47.9					
7		04.00-05.00	47.3	47.9					
8		05:00-06:00	48.2	48.6					
		Leq Night	47.6	48.1					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

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Annexure X

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BHARAT COKING COAL LIMITED,

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(FOR THE MONTH JANUARY, 2026)

CMPDI

ISO 9001 Company
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Dhanbad, Jharkhand

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AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

2.1.1 Ambient Air Quality Sampling Locations

i) Bhojudih Washery(A34): Industrial Area

The location of the sampling station is 23°36'56.00'' N &086°28' 40.00''E. The sampler was placed at a height of approx. 2 m height at rooftop of Bhojudih Guest House in vicinity of the existing Washery.

ii) Dugda Washery (A35): Industrial Area

The location of the sampling station is 23°44'55.19'' N &086°09'04.17''E. The sampler was placed at a height of approx. 2 m height at rooftop of Dugda Guest House in vicinity of the existing Washery

iii) Mahuda Washery(A36): Industrial Area

The location of the sampling station is 23°44'29.00'' N &086°16'52.00''E. The sampler was placed at a height of approx. 1.5m above ground level at Washery Office.

iv) Sinidih Workshop (A38):Industrial Area

The location of the sampling station is 23°46'55.60'' N &086°15'29.76''E The sampler was placed at a height of approx. 1.5m above ground level at SinidihWorkshopOffice.

v) Pathadih Washery (A39):Industrial Area

The location of the sampling station is 23°40'52.00"N &86°26'0.00"E The sampler was placed at a height of approx. 1.5m above ground level at washery

vi) Koyla Nagar Hospital (A40):Residential Area

The location of the sampling station is 23°48'21.58"N &86°27'56.75"E.The sampler was placed at a height of approx. 1.5m above ground level.

vii) Central Hospital Dhanbad (A43):Residential Area

The location of the sampling station is 23°42'32"N &86°26'38"E.The sampler was placed at a height of approx. 1.5m above ground level.

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TC-14321

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	**01/2026**	**Cluster**	**Misc.**	**ULR No.**	**TC143212612700002367F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	05.03.2026
Project	**Patherdih Washery :Industrial Area**	**Sample Ref. No.**	**REM/BCCL/2026/01**	**Sampling Method**	**CMPDI/RI-II/LPM 11 , (IS 5182)**
Date of Sampling	02.01.26	26.01.26	**Period of Analysis**	02.01.2026 – 25.02.2026	**Zone of Station:** CORE ZONE

Sl. No.	**Parameter**	**Method of Analysis**	**Observed Values (in µg/m³)**		**Range Of Testing**	**LDL**	**MoEF Standards Notification dated 25th September,2000 (GSR 742 E)**	**NAAQS, 2009**
			A5105	A5222				
1	PM_{10}	IS -5182(Part 23):2006, R-2017	157	135	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	75	68	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	10	<10	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	23	31	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny
** LDL indicates Lower Detection Limit,*
***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY	(Gaurav Kant) ***REVIEWED BY***	(Kumar Vaibhav) ***Authorised Signatory***

***Note**: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.*

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Annexure X

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
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Month & Year	**01/2026**	**Cluster**	**Misc.**			**ULR No.**	**TC143212616100002401F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**					**Date of Issue**	**05.03.2026**
Project		**Sample Ref. No.**	**REM/BCCL/2026/01**		**Sampling Method**	**CMPDI/RI-II/LPM 22**	
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling**	02.01.26	26.01.26	**Zone Category of Station:**	CORE ZONE

Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards: Zones	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards: Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	46.2	46.7	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	48.7	53.2					
3		08:00 - 09:00	49.9	54.4					
4		09:00 – 10:00	50.7	49.1					
5		10:00 - 11:00	51.4	54.3					
6		11:00 - 12:00	55	54.9					
7		12:00 - 13:00	55	55					
8		13:00 - 14:00	54.4	55					
9		14:00 - 15:00	54.5	54.4					
10		15:00 - 16:00	53.9	52.7					
11		16:00 - 17:00	52.9	51.2					
12		17:00 - 18:00	52.7	48.5					
13		18:00 - 19:00	52.3	51.1					
14		19:00 - 20:00	51.8	51.3					
15		20:00 - 21:00	50.7	52.2					
16		21:00 - 22:00	50.8	51.8					
		Leq Day	52.5	52.8					
1	Noise Level dB(A)Leq -Night	22:00-23:00	50.1	50.3	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	48.9	49.2					
3		00:00- 01:00	48.6	49.2					
4		01.00-02.00	48.3	48.6					
5		02.00-03.00	48	49.2					
6		03.00-04.00	47.7	47.9					
7		04.00-05.00	47.3	47.9					
8		05:00-06:00	48.2	48.6					
		Leq Night	47.6	48.1					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

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Annexure X

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ENVIRONMENTAL MONITORING REPORT OF
BHARAT COKING COAL LIMITED,

FOR MISCELLANEOUS UNITS/WASHERIES,

s

(FOR THE MONTH DECEMBER, 2025)

CMPDI
ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

s

AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

2.1.1 Ambient Air Quality Sampling Locations

i) Bhojudih Washery(A34): Industrial Area

The location of the sampling station is 23°36'56.00'' N &086°28' 40.00''E. The sampler was placed at a height of approx. 2 m height at rooftop of Bhojudih Guest House in vicinity of the existing Washery.

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The location of the sampling station is 23°44'55.19'' N &086°09'04.17''E. The sampler was placed at a height of approx. 2 m height at rooftop of Dugda Guest House in vicinity of the existing Washery

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The location of the sampling station is 23°44'29.00'' N &086°16'52.00''E. The sampler was placed at a height of approx. 1.5m above ground level at Washery Office.

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The location of the sampling station is 23°46'55.60'' N &086°15'29.76''E The sampler was placed at a height of approx. 1.5m above ground level at SinidihWorkshopOffice.

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The location of the sampling station is 23°48'21.58"N &86°27'56.75"E.The sampler was placed at a height of approx. 1.5m above ground level.

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The location of the sampling station is 23°42'32"N &86°26'38"E.The sampler was placed at a height of approx. 1.5m above ground level.

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	**12/2025**	**Cluster**	**Misc.**	**ULR No.**	**TC14321267400002313F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	**13.02.2026**
Project	**Patherdih Washery :Industrial Area**	**Sample Ref. No.**	**REM/BCCL/2025/12**	**Sampling Method**	**CMPDI/RI-II/LPM 11 , (IS 5182)**
Date of Sampling	09.12.25	24.12.25	**Period of Analysis**	09.12.25 – 25.01.2026	**Zone of Station:** CORE ZONE

Sl. No.	**Parameter**	**Method of Analysis**	**Observed Values (in µg/m³)** A4834	A4912	**Range Of Testing**	**LDL**	**MoEF Standards Notification dated 25th September,2000 (GSR 742 E)**	**NAAQS, 2009**
1	PM_{10}	IS -5182(Part 23):2006, R-2017	104	142	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	62	64	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	28	26	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny
** LDL indicates Lower Detection Limit,*
***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY	(Gaurav Kant) ***REVIEWED BY***	(Kumar Vaibhav) ***Authorised Signatory***

Note: *The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.*

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Annexure X

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
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Month & Year	**12/2025**	**Cluster**	**Misc.**	**ULR No.**	**TC143212610800002347F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	**02.02.2025**
Project		**Sample Ref. No.**	**REM/BCCL/2025/12**	**Sampling Method**	**CMPDI/RI-II/LPM 22**
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling** 09.12.25 – 24.12.25	**Zone Category of Station:**	CORE ZONE

Sl. No.	Parameter	Hour / Time of day	Observed Values (in Leq dB(A)) First Fortnight	Observed Values (in Leq dB(A)) Second Fortnight	Method of Analysis	Range Of Testing	LDL	NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards Zones	Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	46.6	50.9	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	47.7	52					
3		08:00 - 09:00	48.4	47					
4		09:00 – 10:00	49.2	51.9					
5		10:00 - 11:00	52.7	49.6					
6		11:00 - 12:00	52.7	47.7					
7		12:00 - 13:00	52	48.7					
8		13:00 - 14:00	52.1	52					
9		14:00 - 15:00	51.5	50.4					
10		15:00 - 16:00	50.6	49					
11		16:00 - 17:00	50.4	46.4					
12		17:00 - 18:00	50	48.8					
13		18:00 - 19:00	49.6	49.1					
14		19:00 - 20:00	48.4	49.2					
15		20:00 - 21:00	48.5	49.6					
16		21:00 - 22:00	51.6	48.7					
		Leq Day	50.5	49.7					
1	Noise Level dB(A)Leq -Night	22:00-23:00	46.7	46.9	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	45.6	45.9					
3		00:00- 01:00	45.3	45.9					
4		01.00-02.00	45.1	45.3					
5		02.00-03.00	44.8	45.9					
6		03.00-04.00	44.5	44.7					
7		04.00-05.00	44.1	44.7					
8		05:00-06:00	45	45.3					
		Leq Night	45.2	45.6					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

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Annexure X

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ENVIRONMENTAL MONITORING REPORT OF
BHARAT COKING COAL LIMITED,

FOR MISCELLANEOUS UNITS/WASHERIES,

s

(FOR THE MONTH NOVEMBER, 2025)

CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

s

AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

2.1.1 Ambient Air Quality Sampling Locations

i) Bhojudih Washery(A34): Industrial Area

The location of the sampling station is 23°36'56.00'' N &086°28' 40.00''E. The sampler was placed at a height of approx. 2 m height at rooftop of Bhojudih Guest House in vicinity of the existing Washery.

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The location of the sampling station is 23°46'55.60'' N &086°15'29.76''E The sampler was placed at a height of approx. 1.5m above ground level at SinidihWorkshopOffice.

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	**11/2025**	**Cluster**	**Misc.**	**ULR No.**	**TC14321251800002257F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	**12.01.2025**
Project	**Patherdih Washery :Industrial Area**	**Sample Ref. No.**	**REM/BCCL/2025/11**	**Sampling Method**	**CMPDI/RI-II/LPM 11 , (IS 5182)**
Date of Sampling	11.11.25	25.11.25	**Period of Analysis**	11.11.25 – 25.12.25	**Zone of Station:** CORE ZONE

Sl. No.	**Parameter**	**Method of Analysis**	**Observed Values (in µg/m³)** A4835	A4913	**Range Of Testing**	**LDL**	**MoEF Standards Notification dated 25th September,2000 (GSR 742 E)**	**NAAQS, 2009**
1	PM_{10}	IS -5182(Part 23):2006, R-2017	110	145	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	65	66	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	12	<10	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	23	23	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny

** LDL indicates Lower Detection Limit,*

***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY	(Gaurav Kant) ***REVIEWED BY***	(Kumar Vaibhav) ***Authorised Signatory***

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Annexure X

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CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
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Month & Year	**11/2025**	**Cluster**	**Misc.**			**ULR No.**	**TC14321255200002291F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**					**Date of Issue**	**12.01.2025**
Project		**Sample Ref. No.**	**REM/BCCL/2025/11**		**Sampling Method**	**CMPDI/RI-II/LPM 22**	
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling**	11.11.25	25.11.25	**Zone Category of Station:**	CORE ZONE

Sl. No.	**Parameter**	**Hour / Time of day**	**Observed Values (in Leq dB(A))**	**Observed Values (in Leq dB(A))**	**Method of Analysis**	**Range Of Testing**	**LDL**	**NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards**	
			First Fortnight	**Second Fortnight**				**Zones**	**Limits in dB**
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	44.5	45	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	46.9	51.2					
3		08:00 - 09:00	48	52.4					
4		09:00 – 10:00	48.8	47.2					
5		10:00 - 11:00	49.5	52.3					
6		11:00 - 12:00	52.9	52.8					
7		12:00 - 13:00	52.9	52.9					
8		13:00 - 14:00	52.4	52.9					
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10		15:00 - 16:00	51.9	50.7					
11		16:00 - 17:00	50.9	49.3					
12		17:00 - 18:00	50.7	46.7					
13		18:00 - 19:00	50.3	49.1					
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15		20:00 - 21:00	48.8	50.2					
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		Leq Day	50.5	50.8					
1	Noise Level dB(A)Leq -Night	22:00-23:00	46.7	46.9	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	45.6	45.9					
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4		01.00-02.00	45.1	45.3					
5		02.00-03.00	44.8	45.9					
6		03.00-04.00	44.5	44.7					
7		04.00-05.00	44.1	44.7					
8		05:00-06:00	45	45.3					
		Leq Night	45.2	45.6					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

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Annexure X

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ENVIRONMENTAL MONITORING REPORT OF
BHARAT COKING COAL LIMITED,

FOR MISCELLANEOUS UNITS/WASHERIES,

s

(FOR THE MONTH OCTOBER, 2025)

CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

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AMBIENT AIR QUALITY MONITORING

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(As per G.S.R. 742 (E) dt. 25th December, 2000)

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The location of the sampling station is 23°46'55.60'' N &086°15'29.76''E The sampler was placed at a height of approx. 1.5m above ground level at SinidihWorkshopOffice.

v) Pathadih Washery (A39):Industrial Area

The location of the sampling station is 23°40'52.00"N &86°26'0.00"E The sampler was placed at a height of approx. 1.5m above ground level at washery

vi) Koyla Nagar Hospital (A40):Residential Area

The location of the sampling station is 23°48'21.58"N &86°27'56.75"E.The sampler was placed at a height of approx. 1.5m above ground level.

vii) Central Hospital Dhanbad (A43):Residential Area

The location of the sampling station is 23°42'32"N &86°26'38"E.The sampler was placed at a height of approx. 1.5m above ground level.

CMPDIL, RI-II
KOYLA BHAWAN COMPLEX
DHANBAD. -826005
Phone:0326-223-850
email: rdri2cmpdi@coalindia.in

TC-14321

cmpdi
A Miniratna Company

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED

Environment Laboratory, Regional Institute-II

Ambient Air Quality Test Report

Test Report for Ambient Air Samples

Month & Year	**10/2025**	**Cluster**	**Misc.**	**ULR No.**	**TC1432125000002203F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**			**Date of Issue**	05.12.2025
Project	**Patherdih Washery :Industrial Area**	**Sample Ref. No.**	**REM/BCCL/2025/10**	**Sampling Method**	**CMPDI/RI-II/LPM 11 , (IS 5182)**
Date of Sampling	14.10.25	24.10.25	**Period of Analysis**	14.10..2025	25.11.2025	**Zone of Station:**	CORE ZONE

Sl. No.	**Parameter**	**Method of Analysis**	**Observed Values (in µg/m³)**		**Range Of Testing**	**LDL**	**MoEF Standards Notification dated 25th September,2000 (GSR 742 E)**	**NAAQS, 2009**
			A4697	A4745				
1	PM_{10}	IS -5182(Part 23):2006, R-2017	86	76	10 µg/m³ - 1000 µg/m³	10 µg/m³	300	100
2	$PM_{2.5}$	IS -5182(Part 24):2019	45	36	10 µg/m³ - 400 µg/m³	10 µg/m³	Not Specified	60
3	SO_2	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 µg/m³ - 1050 µg/m³	10 µg/m³	120sss	80
4	NO_2	IS-5182 (Part-6): 2006 , R-2017	20	32	06 µg/m³ - 420 µg/m³	06 µg/m³	120	80

Environmental Condition : Sunny
** LDL indicates Lower Detection Limit,*
***All units are in µg/m3, 24 hourly Average,*

ANALYSED BY	(Gaurav Kant) ***REVIEWED BY***	(Kumar Vaibhav) ***Authorised Signatory***

***Note**: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.*

---- End of Report ----

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Annexure X

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Noise Level Test Report

CMPDIL, RI-II
KOYLA BHAWAN COMPLEX
DHANBAD. -826005
Phone:0326-223-850
email: rdri2cmpdi@coalindia.in

Month & Year	**10/2025**	**Cluster**	**Misc.**			**ULR No.**	**TC1432125000002237F**
Customer	**Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)**					**Date of Issue**	**05.12.2025**
Project		**Sample Ref. No.**	**REM/BCCL/2025/10**		**Sampling Method**	**CMPDI/RI-II/LPM 22**	
Sampling Stations	**i**	**Pathardih Washery**	**Date of Sampling**	14.10.25	24.10.25	**Zone Category of Station:**	CORE ZONE

Sl. No.	**Parameter**	**Hour / Time of day**	**Observed Values (in Leq dB(A))** First Fortnight	**Observed Values (in Leq dB(A))** Second Fortnight	**Method of Analysis**	**Range Of Testing**	**LDL**	**NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 Standards** Zones	Limits in dB
1	Noise Level dB(A)Leq - Day	06:00 - 07:00	46.2	46.7	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	75 65 55 50
2		07:00 - 08:00	48.7	53.2					
3		08:00 - 09:00	49.9	54.4					
4		09:00 – 10:00	50.7	49.1					
5		10:00 - 11:00	51.4	54.3					
6		11:00 - 12:00	55	54.9					
7		12:00 - 13:00	55	55					
8		13:00 - 14:00	54.4	55					
9		14:00 - 15:00	54.5	54.4					
10		15:00 - 16:00	53.9	52.7					
11		16:00 - 17:00	52.9	51.2					
12		17:00 - 18:00	52.7	48.5					
13		18:00 - 19:00	52.3	51.1					
14		19:00 - 20:00	51.8	51.3					
15		20:00 - 21:00	50.7	52.2					
16		21:00 - 22:00	50.8	51.8					
		Leq Day	52.5	52.8					
1	Noise Level dB(A)Leq -Night	22:00-23:00	47.8	48	CPCB, Protocol for Ambient Level Noise Monitoring -2015	35 dB-135 dB	35 dB(A)	Industrial Commercial Residential Silence	70 55 45 50
2		23:00- 00:00	46.6	46.9					
3		00:00- 01:00	46.4	46.9					
4		01.00-02.00	46.1	46.4					
5		02.00-03.00	45.8	46.9					
6		03.00-04.00	45.5	45.7					
7		04.00-05.00	45.1	45.7					
8		05:00-06:00	46	46.4					
		Leq Night	46.2	46.7					

**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants	(Gaurav Kant)	(Kumar Vaibhav)
ANALYSED BY	***REVIEWED BY***	***Authorised Signatory***

Note: The results above relate to the samples tested as received. This report can not be reproduced in part or full without the written permission of the HOD(Env) , CMPDI, RI-II.

---- End of Report ----

Page -1 of 1

Annexure X

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

TRACE METAL CONCENTRATION OF AMBIENT AIR QUALITY REPORT OF BHARAT COKING COAL LIMITED,

(FOR THE HALF YEAR ENDING, DECEMBER, 2025)

CMPDI
ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

(FOR THE Q.E. DECEMBER**, 2025)**

CONTENTS

SL. NO.	CHAPTER	PARTICULARS
1.	CHAPTER - I	EXECUTIVE SUMMARY INTRODUCTION
2.	CHAPTER-II	AIR SAMPLING & ANALYSIS
3.	**PLATES:** PLATE NO. - I	SURFACE PLAN SHOWING AIR & NOISE MONITORING LOCATIONS

EXECUTIVE SUMMARY

1.0 Introduction

The purpose of environmental monitoring is to assess the quality of various attributes that affects the environment around us. In accordance with the quality of these attributes appropriate strategy is to be developed to control the pollution level within the permissible limits. One of these major attributes is water.

Bharat Coking Coal Limited (BCCL), a Subsidiary company of Coal India Limited is operating Underground and Opencast Mines in Jharia Coalfield (JCF) is a part of Gondwana Coalfields located in Dhanbad district of Jharkhand, the JCF is bounded by $23^0$37' N to $23^0$52' N latitudes and $86^0$09' E to $86^0$30' E longitude occupying an area of 450 Sq.km. BCCL has awarded Environmental monitoring work of Jharia Coalfield (JCF) to Central Mine Planning & Design Institute Limited (CMPDIL). The environmental monitoring has been carried out as per the conditions laid down by the MoEF&CC while granting environmental clearance of project, consent letter issued by the respective SPCB, and other statutory requirements.

2.0 Sampling location and rationale

2.1 Ambient air sampling locations

The ambient air quality monitoring stations were selected to represent core, buffer zone area. The rationale has been based on the guidelines stipulated by MoEF&CC, consent letter of SPCB, as well as other statutory requirements.

3.0 Methodology of sampling and analysis

3.1 Heavy Metal in Ambient Air

Parameters chosen for assessment of Heavy metal in Ambient Air Quality were Cadmium (Cd), Mercury (Hg), Arsenic (As), Chromium (Cr), Nickel (Ni), and Lead (Pb). Respirable Dust Samplers (RDS) were used for sampling these heavy metals on EPM filter paper. These heavy metals are analyzed regularly on half yearly basis. The samples were analyzed in Environment Laboratory of CMPDI, RI-II, Dhanbad.

4.0 Results and interpretations

4.1 Heavy Metal in Ambient Air

The results of Heavy metal in Ambient Air Quality are presented in tabular form for each monitoring station. The concentration of heavy metals in ambient air is well within the permissible limit.

CHAPTER - I

INTRODUCTION

1.0 Any industry and development activities including coal mining is bound to affect environmental attributes. There are positive as well as negative impacts of such operations. For controlling the adverse impacts a regular monitoring is essential. The environmental monitoring is being done as per the guidelines stipulated by Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India.

The very purpose of environmental monitoring is to assess the quality of various attributes which affects the environment. As per quality of these attributes appropriate strategy is to be developed to control the pollution level within the permissible limits. The three major attributes are air, water and noise level.

Bharat Coking Coal Limited (BCCL), a subsidiary company of Coal India Limited (CIL) is operating UG Mines and Opencast Mines in Jharia Coalfield (JCF). The Jharia Coalfield (JCF) having an area of 450 Sq.KM.

Bharat Coking Coal has awarded Environmental Monitoring work of all Projects, Cluster wise, to Central Mine Planning & Design Institute Limited (CMPDIL). The environmental monitoring has been carried out as per conditions laid down by MoEF&CC while granting environmental clearance to different projects. CMPDI has trained manpower and well equipped laboratory to carry out monitoring, analysis and R&D work in the field of environment.
In compliance of these conditions the Environmental Monitoring has been carried out & report prepared for submission to MoEF&CC & JSPCB and other statutory authorities.

CHAPTER – II

AMBIENT AIR QUALITY MONITORING

2.1 Results and interpretations

The results of Heavy metal in Ambient Air Quality are presented in tabular form for each monitoring station. The concentration of heavy metals in ambient air is well within the permissible limit.

TRACE METAL CONCENTRATION IN AMBIENT AIR QUALITY

Name of the Company: **Bharat Coking Coal Limited** Year : **2025-26.**

PERIOD: **HALF YEAR ENDING DECEMBER, 2025**

HEAVY METAL ANALYSIS REPORT OF AMBIENT AIR QUALITY

Results of 6 Heavy Metal for the month of NOV-2025								
SAMPLE CODE	**DATE**	**Station Name**	**Cd CONC. IN µg/m3**	**Hg CONC. IN µg/m3**	**As CONC. IN ng/m3**	**Cr CONC. IN µg/m3**	**Ni CONC. IN ng/m3**	**Pb CONC. IN µg/m3**
A1	24.11.25	Karmatand Village	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A2	18.11.25	Damoda	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A3	19.11.25	Madhuband Washery	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A4	25.11.25	Block-II	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A5	19.11.25	Muraidih	<0.001	<0.001	<1.0	<0.01	2.05	<0.005
A6	21.11.25	Block-IV	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A7	28.11.25	Govindpur/Ramkanali	<0.001	<0.001	<1.0	<0.01	<2.0	0.016
A8	24.11.25	Nichitpur	<0.001	<0.001	<1.0	<0.01	<2.0	0.005
A9	27.11.25	East Basseriya	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A10	24.11.25	Dhansar/Kusunda	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A11	21.11.25	Dobari	<0.001	<0.001	<1.0	<0.01	<2.0	0.005
A12	21.11.25	Kusmatand Village	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A13	26.11.25	Jeenagora	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A14	26.11.25	Bhowrah North	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A15	25.11.25	Sudamdih Washery	<0.001	0.001	<1.0	<0.01	<2.0	<0.005
A16	26.11.25	Pootki	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A17	27.11.25	Moonidih UGP	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A18	21.11.25	Rudih Basti	<0.001	<0.001	<1.0	<0.01	<2.0	0.007
A19	27.11.25	Murlidih 20/21	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A20	21.11.25	Lohapatti	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005

Results of 6 Heavy Metal for the month of NOV-2025								
SAMPLE CODE	DATE	Station Name	Cd CONC. IN µg/m3	Hg CONC. IN µg/m3	As CONC. IN ng/m3	Cr CONC. IN µg/m3	Ni CONC. IN ng/m3	Pb CONC. IN µg/m3
A21	20.11.25	Kharkharee	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A22	20.11.25	Dahibari	<0.001	<0.001	<1.0	<0.01	<2.0	0.020
A23	20.11.25	Basantimata	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A24	20.11.25	Gopinathpur	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A25	21.11.25	Guliardih	<0.001	<0.001	<1.0	<0.01	<2.0	0.005
A26	18.11.25	Begunia	<0.001	<0.001	<1.0	<0.01	<2.0	0.011
A27	17.11.25	Damagoria	<0.001	<0.001	<1.0	<0.01	<2.0	0.020
A28	26.11.25	Hurriladih	<0.001	<0.001	<1.0	<0.01	<2.0	0.014
A29	27.11.25	Moonidih Washery	<0.001	0.005	<1.0	<0.01	<2.0	<0.005
A30	24.11.25	Sitanala	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A31	25.11.25	Dumarda	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A32	20.11.25	Telmacho Bridge	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A33	24.11.25	Madhuband UGP	<0.001	0.001	<1.0	<0.01	<2.0	<0.005
A34	24.11.25	Bhojudih Washery	<0.001	0.015	<1.0	<0.01	<2.0	0.024
A35	17.11.25	Dugda Washery	<0.001	0.006	<1.0	<0.01	<2.0	0.016
A36	28.11.25	Mahuda	<0.001	0.005	<1.0	<0.01	<2.0	<0.005
A37	28.11.25	Katras Choitudih	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A38	26.11.25	Sinidih Workshop	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A39	25.11.25	Patherdih	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A40	20.11.25	Koyla Nagar	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A41	25.11.25	Sudamdih Shaft	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A42	20.11.25	RHB	<0.001	<0.001	<1.0	<0.01	2.04	<0.005
A43	17.11.25	Pandwabhita	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A44	17.11.25	Sadariadih	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005
A45	24.11.25	Bhojudih Buffer	<0.001	<0.001	<1.0	<0.01	<2.0	<0.012
A46	17.11.25	C.H.D	<0.001	<0.001	<1.0	<0.01	<2.0	<0.005

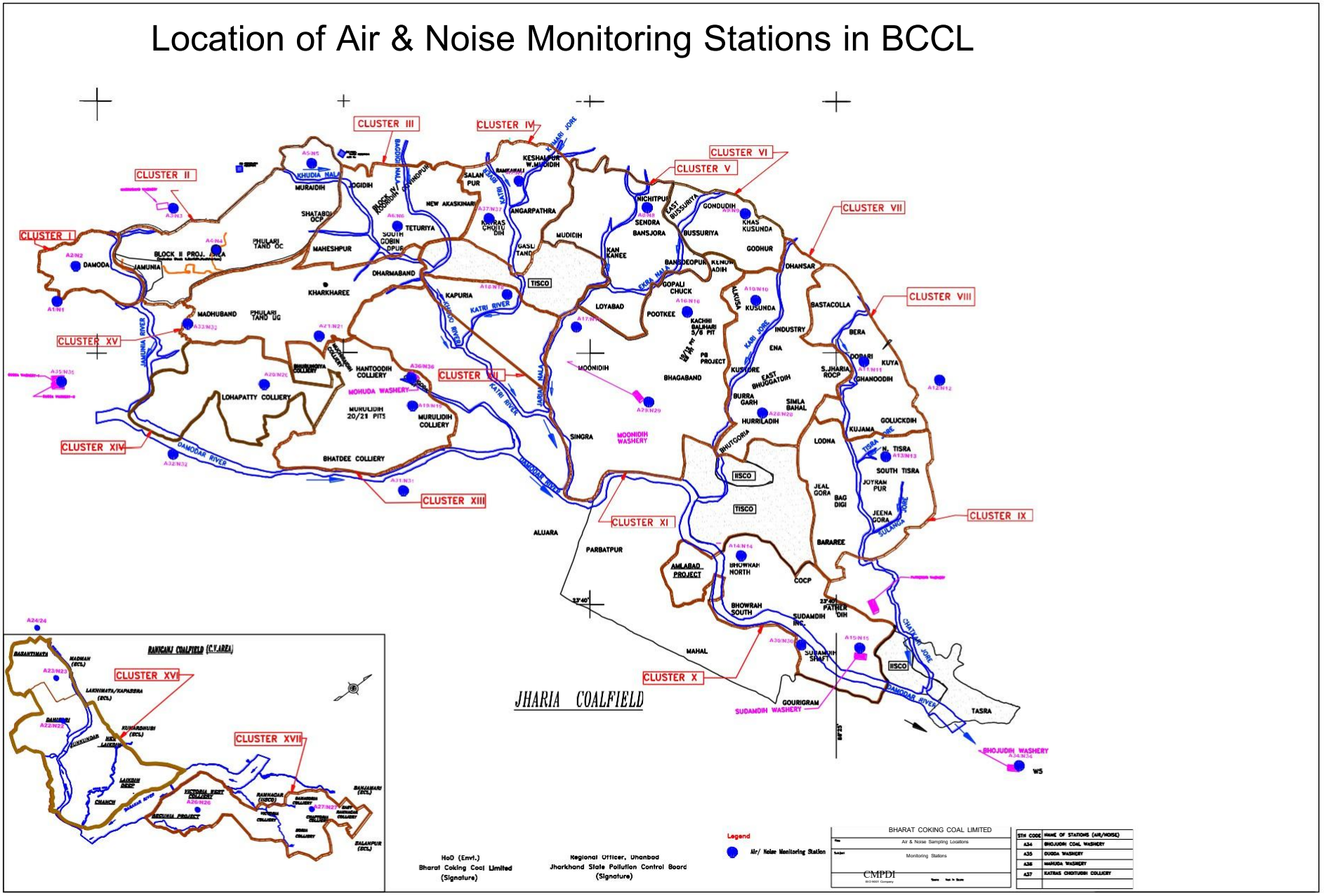
#BDL-Below detection limit

Metal	BDL	Standard as per NAAQS
Hg (µg/m^3)	0.001	*Standard Not defined
Cr(µg/m^3)	0.01	*Standard Not defined
As (ng/m^3)	1	6
Pb (µg/m^3)	0.005	0.5
Ni (ng/m^3)	2	20
Cd (µg/m^3)	0.001	*Standard Not defined

Analysed By
JSA/SA/SSA

Checked By
Lab In Charge
RI-2, CMPDI, Dhanbad

Location of Air & Noise Monitoring Stations in BCCL



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TRACE METAL CONCENTRATION OF AMBIENT AIR QUALITY REPORT OF BHARAT COKING COAL LIMITED,

(FOR THE HALF YEAR ENDING, JUNE, 2025)

CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

(FOR THE Q.E. JUNE, 2025)

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1.0 Introduction

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2.0 Sampling location and rationale

2.1 Ambient air sampling locations

The ambient air quality monitoring stations were selected to represent core, buffer zone area. The rationale has been based on the guidelines stipulated by MoEF&CC, consent letter of SPCB, as well as other statutory requirements.

3.0 Methodology of sampling and analysis

3.1 Heavy Metal in Ambient Air

Parameters chosen for assessment of Heavy metal in Ambient Air Quality were Cadmium (Cd), Mercury (Hg), Arsenic (As), Chromium (Cr), Nickel (Ni), and Lead (Pb). Respirable Dust Samplers (RDS) were used for sampling these heavy metals on EPM filter paper. These heavy metals are analyzed regularly on half yearly basis. The samples were analyzed in Environment Laboratory of CMPDI, RI-II, Dhanbad.

4.0 Results and interpretations

4.1 Heavy Metal in Ambient Air

The results of Heavy metal in Ambient Air Quality are presented in tabular form for each monitoring station. The concentration of heavy metals in ambient air is well within the permissible limit.

CHAPTER - I

INTRODUCTION

1.0 Any industry and development activities including coal mining is bound to affect environmental attributes. There are positive as well as negative impacts of such operations. For controlling the adverse impacts a regular monitoring is essential. The environmental monitoring is being done as per the guidelines stipulated by Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India.

The very purpose of environmental monitoring is to assess the quality of various attributes which affects the environment. As per quality of these attributes appropriate strategy is to be developed to control the pollution level within the permissible limits. The three major attributes are air, water and noise level.

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In compliance of these conditions the Environmental Monitoring has been carried out & report prepared for submission to MoEF&CC & JSPCB and other statutory authorities.

CHAPTER – II

AMBIENT AIR QUALITY MONITORING

2.1 Results and interpretations

The results of Heavy metal in Ambient Air Quality are presented in tabular form for each monitoring station. The concentration of heavy metals in ambient air is well within the permissible limit.

TRACE METAL CONCENTRATION IN AMBIENT AIR QUALITY

Name of the Company: **Bharat Coking Coal Limited** Year : **2025-26.**

PERIOD: **HALF YEAR ENDING JUNE, 2025**

HEAVY METAL ANALYSIS REPORT OF AMBIENT AIR QUALITY

Results of 6 Heavy Metal for the month of May-2025								
SAMPLE CODE	DATE	Station Name	Cd CONC. IN µg/m3	Hg CONC. IN µg/m3	As CONC. IN ng/m3	Cr CONC. IN µg/m3	Ni CONC. IN ng/m3	Pb CONC. IN µg/m3
A1	20.05.25	Karmatand Village	BDL	BDL	BDL	BDL	2.03	0.005
A2	19.05.25	Damoda	BDL	BDL	BDL	BDL	2.14	BDL
A3	20.05.25	Madhuband Washery	BDL	BDL	BDL	BDL	BDL	BDL
A4	19.05.25	Block-II	BDL	BDL	BDL	BDL	BDL	0.006
A5	16.05.25	Muraidih	BDL	BDL	BDL	BDL	2.25	BDL
A6	29.05.25	Block-IV	BDL	BDL	BDL	BDL	BDL	BDL
A7	30.05.25	Govindpur/Ramkanali	BDL	BDL	BDL	BDL	BDL	0.032
A8	26.05.25	Nichitpur	BDL	BDL	BDL	BDL	BDL	BDL
A9	27.05.25	East Basseriya	BDL	BDL	BDL	BDL	BDL	BDL
A10	16.05.25	Dhansar/Kusunda	BDL	BDL	BDL	BDL	BDL	BDL
A11	16.05.25	Dobari	BDL	BDL	BDL	BDL	BDL	0.006
A12	30.05.25	Kusmatand Village	BDL	BDL	BDL	BDL	BDL	BDL
A13	30.05.25	Jeenagora	BDL	BDL	BDL	BDL	BDL	BDL
A14	22.05.25	Bhowrah North	BDL	BDL	BDL	BDL	BDL	BDL
A15	20.05.25	Sudamdih Washery	BDL	0.001	BDL	BDL	BDL	0.030
A16	21.05.25	Pootki	BDL	BDL	BDL	BDL	BDL	0.015
A17	21.05.25	Moonidih UGP	BDL	BDL	BDL	BDL	BDL	BDL
A18	22.05.25	Rudih Basti	BDL	BDL	BDL	BDL	BDL	0.007
A19	28.05.25	Murlidih 20/21	BDL	BDL	BDL	BDL	BDL	BDL
A20	21.05.25	Lohapatti	BDL	BDL	BDL	BDL	BDL	BDL
A21	26.05.25	Kharkharee	BDL	BDL	BDL	BDL	BDL	BDL

Annexure X

Results of 6 Heavy Metal for the month of May-2025

SAMPLE CODE	DATE	Station Name	Cd CONC. IN µg/m3	Hg CONC. IN µg/m3	As CONC. IN ng/m3	Cr CONC. IN µg/m3	Ni CONC. IN ng/m3	Pb CONC. IN µg/m3
A22	29.05.25	Dahibari	BDL	BDL	BDL	BDL	BDL	0.010
A23	29.05.25	Basantimata	BDL	BDL	BDL	BDL	BDL	BDL
A24	30.05.25	Gopinathpur	BDL	BDL	BDL	BDL	BDL	BDL
A25	28.05.25	Guliardih	BDL	BDL	BDL	BDL	BDL	0.005
A26	27.05.25	Begunia	BDL	BDL	BDL	BDL	2.32	0.021
A27	26.05.25	Damagoria	BDL	BDL	BDL	BDL	BDL	0.030
A28	16.05.25	Hurriladih	BDL	BDL	BDL	BDL	BDL	0.010
A29	21.05.25	Moonidih Washery	BDL	0.005	BDL	BDL	BDL	BDL
A30	19.05.25	Sitanala	BDL	BDL	BDL	BDL	BDL	0.025
A31	30.05.25	Dumarda	BDL	BDL	BDL	BDL	BDL	BDL
A32	21.05.25	Telmacho Bridge	BDL	BDL	BDL	BDL	BDL	BDL
A33	27.05.25	Madhuband UGP	BDL	0.002	BDL	BDL	BDL	BDL
A34	19.05.25	Bhojudih Washery	BDL	0.01	BDL	BDL	BDL	0.033
A35	21.05.25	Dugda Washery	BDL	0.001	BDL	BDL	BDL	0.026
A36	22.05.25	Mahuda	BDL	0.002	BDL	BDL	BDL	BDL
A37	30.05.25	Katras Choitudih	BDL	BDL	BDL	BDL	BDL	BDL
A38	29.05.25	Sinidih Workshop	BDL	BDL	BDL	BDL	BDL	0.010
A39	20.05.25	Patherdih	BDL	BDL	BDL	BDL	BDL	BDL
A40	22.05.25	Koyla Nagar	BDL	BDL	BDL	BDL	BDL	BDL
A41	20.05.25	Sudamdih Shaft	BDL	BDL	BDL	BDL	BDL	0.020
A42	16.05.25	RHB	BDL	BDL	BDL	BDL	2.05	0.010
A43	16.05.25	Pandwabhita	BDL	BDL	BDL	BDL	BDL	BDL
A44	16.05.25	Sadariadih	BDL	BDL	BDL	BDL	BDL	0.005
A45	19.05.25	Bhojudih Buffer	BDL	BDL	BDL	BDL	BDL	BDL
A46	22.05.25	C.H. D	BDL	BDL	BDL	BDL	BDL	BDL

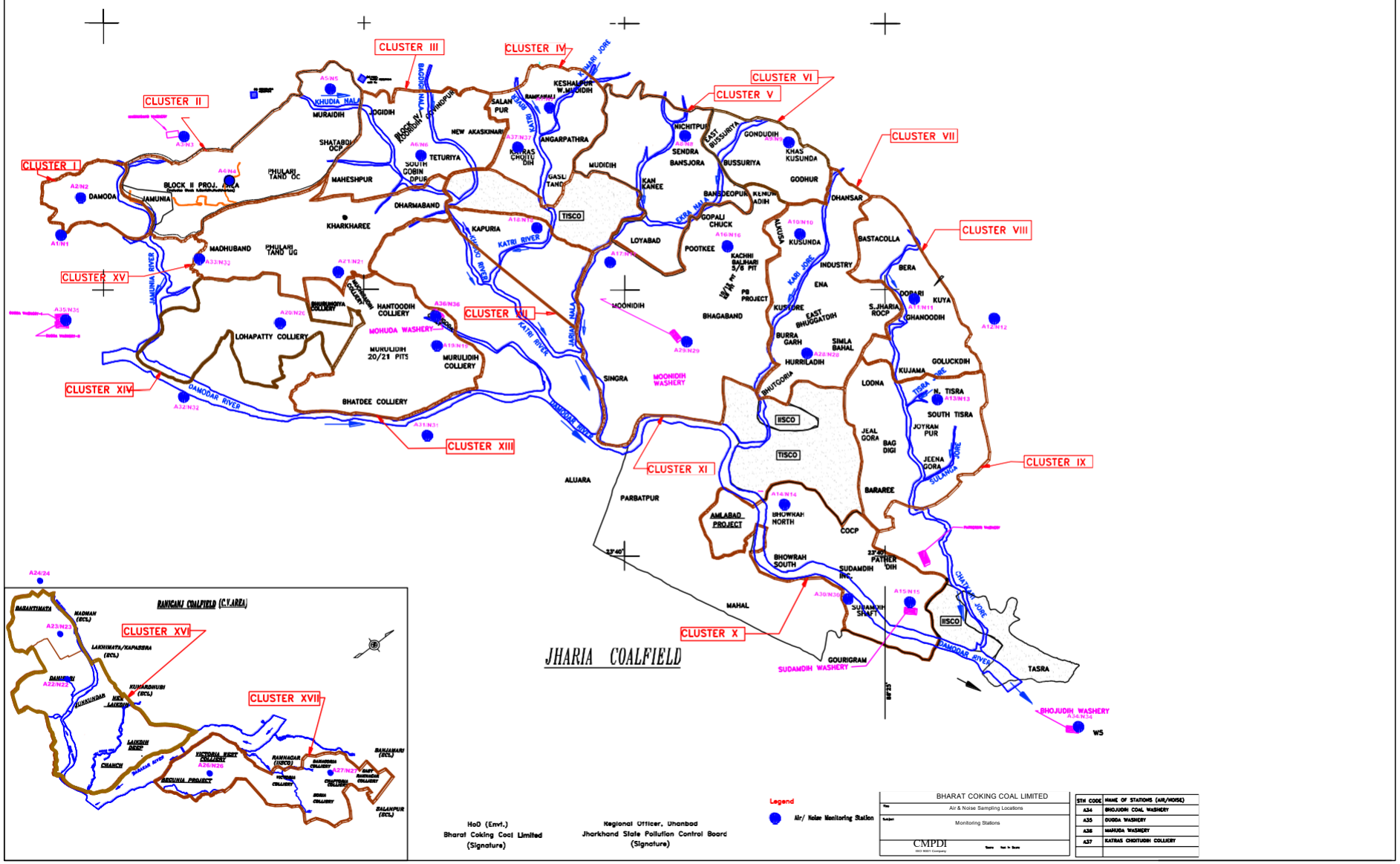
#BDL-Below detection limit

Metal	BDL	Standard as per NAAQS
Hg (µg/m^3)	0.001	*Standard Not defined
Cr(µg/m^3)	0.01	*Standard Not defined
As (ng/m^3)	1	6
Pb (µg/m^3)	0.005	0.5
Ni (ng/m^3)	2	20
Cd (µg/m^3)	0.001	*Standard Not defined

Analysed By
JSA/SA/SSA

Checked By
Lab In Charge
RI-2, CMPDI, Dhanbad

Location of Air & Noise Monitoring Stations in BCCL



Annexure XI

BHARAT COKING COAL LTD.
A MINI RATNA COMPANY
(A Subsidiary of Coal India Limited)
Office of the Project Officer (5.0 MTPA Patherdih NLW)
P.O.Patherdih, Dist. Dhanbad
(Jharkhand)
Email:-nlwpatherdihbccl@gmail.com

Ref: No. BCCL/NLW PCW/2022/ 1054 Dated: 10/10/2022

To
Dhanbad Municipal Corporation,
Luby Circular Road, Dhanbad- 826001

Sub:- Copy Environmental Clearance to 5.0 MTPA NLW Patherdih Coal Washery.

Dear Sir/ Madam,

Please find enclosed copy of Environmental Clearance granted to 5.0 MTPA NLW Patherdih Coal Washery having **Ref. no. J-11015/240/2010-IA.II (M)**, Dated with **25-01-2012.**Issued by Director (MoEF & CC).

Thinking you

Yours Faithfully
Dev Singh 10.10.2022
Project Officer
5.0 MTPA Patherdih NLW Washery

Recipt
Babita Gorai
श्रीमति बांबेता गाराई 10.10.2022
पार्षद
वार्ड संख्या–49
धनबाद नगर निगम

Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O.Complex, Lodi Road
New Delhi -110003.

No. J-11015/240/2010-IA.II (M)

To

Dated: 25th January 2012

Director (P&P),
M/s Bharat Coking Coal Ltd,
Koyla Bhawan, Dhanbad.

Sub: Patherdih NLW Coal Washery (5 MTPA normative with a peak capacity of 6.5 MTPA in an area of 12 ha) of M/s Bharat Coking Coal Ltd. located in Jharia Coalfields, in district Dhanbad, Jharkhand - Environmental Clearance - reg.

Sir,

This has reference to letter No. 43011/25/2010-CPAM dated 01.07.2010 of Ministry of Coal along with application for Terms of Reference (TOR) and this Ministry's grant of TOR vide letter dated 23.09.2010 and application for environmental clearance vide letter No. CIL/DLI/EMP-TOR/2011/08 dated 13.09.2011 and letter dated 19.11.2011 on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. The proposed is for **establishing a new Patherdih Coking Coal Washery,** which is a non-linked washery (NLW) **of a capacity of 5 million tonnes per annum (MTPA) and 6.5 MTPA (peak) in an area of 12 ha in Jharia Coalfields,** identified as a critically polluted area. The washery is a 3-product coal washery using Jig and HM Cyclone Technology. The washery is being sited in total area of 12 ha land which is a non-coal bearing area. No forestland is involved. The site has been chosen keeping in view the existing railway line available for transportation of raw coal from 3 collieries, namely N/S Tisra OCP, Goluckdih OCP (NC), Ganoodih OCP and Rajapur OCP located at a distance of 5-7 km from the washery and for despatch of washed coal and middling to be sent to powerhouses in Durgapur and Bokaro.

S.N.	Name of the Linked Mine	Capacity (MTPA)	Reserve Capacity (MT)	Life of mine (in Years)

1.	N/S Tisra OCP	2.1	13.9	6.6
2.	Goluckdih OCP	1.0	22.85	22.85
3.	Ghanoodih OCP	1.3	4.3	3.3
4.	Rajapur OCP	0.75	18.0	24
	TOTAL	**5.15**	**59.05**	

Raw coal (5 MTPA) has an ash content of 41.1% would yield 1.12 MTPA of clean (washed) coal of an ash content of 18.1% would be used in steel plants at Durgapur, Bokaro and Rourkela and power grade coal (2.58 MTPA) with an ash content of 39.93% for use in thermal coal for power generation in TPPs and coal rejects of 1.3 MTPA of > 60% ash content would be utilised in an FBC based Thermal Power Plant. The Company has called for an open tender for use of the coal rejects in an FBC based TPP. The water requirement of the plant (make-up water) is 0.5 MGD and would be obtained from old abandoned mines near the washery. The washery will be provided with a Filter Press and Thickener to extract the water from the slurry. Transportation of raw coal would be by road and washed coal from the washery would be by rail form railway siding located within the premises. The entire clean coal and coal rejects would be from the washery by closed conveyors to adjoining Railway Siding by Rapid Loading system consisting of hopper and surge bunker and thereafter transported by rail mode only. In addition, the entire flyash generated from the FBC based TPP would be utilised by cement units in clinker production/ flyash brick unit. A provision of Rs 2 cores and Rs 5/T of coal for recurring expenditure has been made for activities under CSR. CSR activities would cover education, water supply, health care, social empowerment, infrastructure development i.e. road, water supply, electricity and a community centre. A full time Monitoring Cell is proposed to be constituted.Life of the washery is about 18 years. Public Hearing was held on 02.06.2011. Capital cost of the project is Rs 157.50 crores.

2.0 The Ministry of Environment & Forests hereby accords environmental clearance for the establishment of the above-mentioned **Patherdih NLW Coking Coal Washery of 5million tonnes per annum (MTPA) capacity with a peak capacity of 6.5 MTPA in an area of 12ha of M/s Bharat Coking Coal Ltd.** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Circulars there under and subject to conditions specified below:

Specific Conditions

(i) The capacity of the washery shall not exceed 6.5 MTPA without prior environmental clearance from this Ministry.

(ii) Transport of raw coal from the identified mines of the company, washed coal from the washery to the steel plants in Durgapur, Bhilai and Bokaro and middling to TPPs and coal rjects to FBC based TPP shall be by rail mode only from the railway siding located within the premises.

(iii) The entire coal rejects from the washery shall be fully utilised in an FBC based TPP for which open tender for operation of the FBC based TPP has been called by the proponent. The FBC based TPPs shall be preferably located in or near Jharia coalfields. The Company shall enter into a long-term MOU for utilisation of the coal rejects from the washery within 3 months and also for utilisation of flyash generated from the FBC based TPP with a suitable company.

(iv) As the washery is located in Jharia Coalfields, which forms a part of the Critically Polluted Area of Dhanbad, the company shall implement the mitigative measures outlined in the Environmental Action Plan for CPA-Dhanbad applicable to the project, which would be in conformity with the Environmental Action Plan prepared for Dhanbad Area to keep the levels of air quality parameters well within limits. The proponent shall implement mitigative measures such as providing water sprinkling arrangements at various transfer points and loading/unloading points, regular maintenance of vehicles used for coal transportation, periodic and regular checking of vehicles for source emission, main approach roads used for transportation of raw coal to be black topped, monitoring for particulate matter (PM_{10} and $PM_{2.5}$) and maintenance of records thereof, bag filter at suitable locations of the washery, wind shelters/wind breaks in coal stockyards (raw coal, clean coal and coal rejects), providing 3-tier green belt with native species.

(v) The proponent shall implement a plan to regularly dredge River Damodar 0.5 km upstream and 1km length downstream of the washery free of sludge, coal fines and silt which has accumulated in the river over a period of time and dispose the wastes in an environmentally friendly manner, in consultation with the Jharkhand State Pollution Control Board.

(vi) The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored raw coal, washed coal and coal wastes do not catch fire.

(vii) Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.

(viii) All approach roads shall be black topped and all internal roads shall be black topped or concreted. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using local species shall be developed along the main roads, and approach roads to the washery.

(ix) The proponent shall maintain proper records of the ash content of raw (ROM) coal, clean coal and coal rejects of every consignment received and washed and the same shall be uploaded along with quantum of raw coal obtained and washed and dispatched every month on the company's website every month.

(x) Water for the coal washery shall be met from mine water from BCCL mines. No groundwater shall be used for the washery plant operations. Any additional water requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rainwater harvesting measures. Pressure Filter and Thickener shall be installed in the washery for water recovery and reuse.

(xi) The Washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. The Washery shall be provided with a garland drain to carry/recycle the effluents generated from the washery operations and coal fines collected shall be recovered from the slurry and concentrated and also sold for users. The wastewater from the washery shall be free of coal dust and particles and recycled for development and maintenance of green belt and in the plant operations.

(xii) A separate storm water drain to carry storm water from the washery for discharge outside the premises to nallahs/streams shall be established. The storm water drains shall be regularly deslited.

(xiii) Industrial wastewater (workshop and wastewater from the washery) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed for treatment of workshop effluents.

(xiv) Green belt shall be developed using local species all along the periphery of the site, along the areas such as the crushing unit and stockyard, transfer and loading points.

(xv) Socio-economic and welfare measures for the local communities shall be implemented under CSR with an outlay of Rs 2 crores and Rs 5/T of coal as recurring expenditure. The village-wise activities undertaken and proposed and the expenditure thereon shall be displayed on the company website every year. A Monitoring Cell shall be established for monitoring activities undertaken under CSR.

(xvi) Levels of heavy metals such as mercury in raw coal, washed coal and rejects shall be analysed twice in a year and records maintained thereof and furnished as part of the Compliance Report to the MOEF RO, Bhubaneshwar.

(xvii) Corporate Environment Responsibility:

a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
b) The Environment Policy shall prescribe for standard operating process procedures to bring into focus any infringements/deviation/violation of the enviroental or forest norms/conditions.
c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the enviroental clearance conditions shall be furnished.
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 stakeholders at large.

B. General Conditions

(i) No change in technology and scope of working of the washery shall be made without prior approval of the Ministry of Environment and Forests.

(ii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM_{10}, $PM_{2.5}$, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg. As. Ni, Cd, Cr, in $PM_{10}$and $PM_{2.5}$ etc. shall be carried out at least once in six months.

(iii) Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EP Rules, 1986.

(iv) Data on ambient air quality (PM_{10}, $PM_{2.5}$, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneshwar and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent

laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.

(v) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.

(v) 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.

Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.

(vi) A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.

(vii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office Bhubaneshwar.

(viii) The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at http://envfor.nic.in

(ix) A copy of the environmental clearance letter shall be marked to concerned Panchayat/ Zila Parishad/Municipal Corporation or Urban Local Body local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.

(x) A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.

(xi) The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC 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 the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM_{10}, $PM_{2.5}$, SO2 and NOx (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.

(xii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.

(xiii) The Regional Office of this Ministry located Bhubaneshwar shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information monitoring reports.

(xiv) The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent tot the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.

3. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

5. 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 occupational and other diseases due to the mining operations.

(Dr.T.Chandini)
Director

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarpur, Bhubaneshwar – 751023.
4. Chairman, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi – 834004.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
8. Dr.R.K.Garg, Advisor, M/s Coal India Ltd., SCOPE Minar, New Delhi.
9. District Collector, Dhanbad, Government of Jharkhand.
10. Monitoring File 11. Guard File 12. Record File.

(Dr.T.Chandini)
Director

Annexure XI

C

EJ323410571IN IVR:697432341057I
SP PATHERDIH COAL WASHERY SO <828132>
Counter No:1,13/10/2022,15:21
To:D M C,LUBY CIRCULAR RD
PIN:826001, Dhanbad HO
From:PROJECT OFFICER,S.OMIPA PCW
Wt:30gms
Amt:41.30()Tax:6.30
<Track on www.indiapost.gov.in>
<Dial 18002666868> <Wear Masks, Stay Safe>

ANNEXURE-XI

ENVIRONMENTAL PARAMETERS DISPLAY BOARD AT 5.0 MTPA PATHERDIH NLW COAL WASHERY

बीसीसीएल
BCCL
Serving coking coal to the nation

भारत कोकिंग कोल लिमिटेड
(कोल इंडिया लिमिटेड की एक अनुषंगी कंपनी)
Bharat Coking Coal Limited
(A Subsidiary of Coal India Limited)
(एक मिनीरत्न कंपनी / A Miniratna Company)
(भारत सरकार का उपक्रम / A Government of India Undertaking)

Ref: BCCL/ NLW PCW/2025-26/ 626 **Date: 19.09.2025**

To,

The Member Secretary,
Jharkhand State Pollution Control Board,
TA- Divison Building,
Dhurwa, Ranchi 834004

Subject – Submission of the Environmental Statement/ Form.-V of 5.0 MTPA Patherdih NLW Coal Washery for FY 2024-25.

Respected Sir/Madam,

Please find enclosed herewith the copy of the Environmental Statement/ Form-V in respect of 5.0 MTPA Patherdih NLW Coal Washery for FY 2024-25.

This is for your kind reference.

Thanking You.

Encl: - As above.

Yours faithfully

19/09/2025

Project Officer
5.0 MTPA Patherdih NLW Coal Washery

Copy To: -

1. The Director, IRO, Ranchi, MoEF&CC Harmu, Jharkhand – 834002 – (via e-mail).
2. Scientist & Incharge, Zonal Office, CPCB, 5th Floor 502, House & Conclave, 1582, Rajdanga Main Road, Kolkata- 700107. (*via e-mail*)
3. General Manager (Wy), Washery Division
4. General Manager (Mining/Environment), Koyla Bhawan.
5. Nodal Officer (Environment), Washery Div.

ENVIRONMENTAL STATEMENT (FORM-V)

(Environmental Statement of 5.0 MTPA Patherdih NLW Coal Washery for the financial year 2024-25 ended on 31st March 2025.)

PART-A

i. **Name and address of the owner/occupier of the industry Operation or process**

Name: Sri Sanjay Kumar Singh
Designation: Director (Technical) / Operations
Address: Koyla Bhawan, Koyla Nagar, BCCL Township, Dhanbad- 826005
Industry Category- Primary (ORANGE Category)

ii. **Production Capacity** – 5.0 MTPA (Peak – 6.5 MTPA)
iii. **Year of Establishment** – 2020 (Year of Commissioning)
iv. **Date of the last Environmental Statement submitted-** 28.09.2024

PART –B

Water and Raw Material Consumption

I (A) Water Consumption (In m^3/d):

Name of Products	Water Consumption (m^3/day)	
	Washing Operation	Domestic Supply
Washed Coal	40.10	NIL
Washed Power Coal	238.00	
Rejects	13	

I (B) Process Water Consumption per unit of Product Output:

Name of Products	During the previous financial year (2023-24)	During the current financial year (2024-25)
Washed Coal	0.0950 m^3/Tonne	0.0312 m^3/Tonne
Washed Power Coal	0.0902 m^3/Tonne	0.0695 m^3/Tonne
Rejects	0.1206 m^3/Tonne	0.0193 m^3/Tonne

II Raw Material Consumption:

Name of Raw Materials	Name of Products	Consumption of raw material per unit of output (Tonnes)	
		During the previous financial year	During the current financial year
Raw Coal	Washed Coal	9.69 Tonnes/Te	3.79 Tonnes/Te
Raw Coal	Washed Power Coal	1.50 Tonnes/Te	1.70 Tonnes/Te
Raw Coal	Rejects	3.72 Tonnes/Te	6.12 Tonnes/Te

PART C

Pollution Discharged to Environment/Unit of Output

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a) Water	Washery operates under Zero Liquid Discharge.		
(b) Air	Monitoring Reports attached.		
(c) Noise	Monitoring Reports attached.		

Note: Routine Environmental Monitoring is being done by Central Mine Planning and Design Institute Limited.

PART-D
HAZARDOUS WASTES

As specified under Hazardous Wastes (Management & Handling Rules, 2016).

Hazardous Wastes	Total Quantity	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
1. From Process:		
Burnt Oil (Used/Spent Oil)	1000 ltr.	100 ltr.
2. From Pollution Control Facilities	NIL	NIL

PART-E
SOLID WASTES

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
a. From process	NIL	NIL
b. From Pollution Control Facility	NIL	NIL
c. Quantity recycled or re-utilized within the unit.	NIL	NIL

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.

As already mentioned in Part D of this statement, Burnt Oil (Spent Oil/Used Oil) is being generated from Operation and Maintenance of Washery. Burnt oil is disposed off to a Disposal Facility through E- auction on MSTC Portal, a Govt. of India Undertaking.

PART-G

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

In order to carry out washery operations in eco-friendly manner the following pollution control measures have been adopted:

- Water sprinkling is being done on coal transportation road by mobile water tanker.
- Fixed- type water sprinklers have been installed along the approach road and internal roads of the washery to control fugitive dust emission.
- Regular sprinkling of water through fixed-type water sprinklers at coal transfer points and loading points as well as other dusty areas are been done and sprinklers are regularly maintained to ensure higher efficiency in dust suppression.
- Regular maintenance of plant machinery engaged in coal washing and other machines at washery is done.
- Safety equipment such as safety helmets, ear muffs, etc. are to be provided to operators and others who are exposed to high level noise.
- In addition to that, plantation is being done in undisturbed area/ transportation roads etc.

PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution.

- Ambient Environmental Monitoring will be continued as per the guidelines of MoEF&CC and Jharkhand State Pollution Control Board.
- Application for consent for emission/continuation of emission under section 21 of the Air (prevention and control of pollution) Act, 1981 and Application for consent for discharge Continuation of discharge under section 25/26 of Water (Prevention and Control of Pollution) Act, 1974will be regularly done and Conditions laid down in Consent to Operate granted by JSPCB will be strictly followed.
- Continuous Monitoring online PM_{10} analyzer has been installed in the washery and also linked to the JSPCB Servers-
https://jsac.jharkhand.gov.in/pm10/Inlisted_Child.aspx?XqIeZnkvql=sRKxzpLjMjSeCWHYj/rdvQVv5zjx3q4KA6WzxBJWP8NEvF3HC+ooJsAC76u8w9lwS7gVPgKCR4AtEdFj2cfEU9YE3pM/itMF2wgB/+iWOEEcBto/VhRk4nTabG2lIHcWduILGfWMig8z+upfD4GYxirKp2CNZPVVfT90unNvmY9WMGpYHeFjnpwlajEH3is34uYwSMBIYms2PqG64gWMcZO9acWyhex7QPbzyCa7H5WeoagRB2uUIFmDG/DB/1D

- The Conveyor Belts carrying the Raw Coal are installed with fixed sprinkling arrangements.

PART –I
MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

- Water sprinkling is being done on coal transportation road by mobile sprinkler or truck mounted fog cannon.
- Avenue plantation has been done along the approach roads and internal roads of the washery.
- Plantation has been done along the boundary of the Slurry Ponds of the washery.
- A Sneh Smriti Upvan has also been developed in the washery with native species.

19/09/2015

Project Officer
5.0 MTPA Patherdih NLW Washery