



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

Ref: BCCL/ NLW PCW/2024-25/1405

Date: 28.11.2024

To,
The Director,
IRO, Ranchi, MoEF&CC
Harmu, Jharkhand – 834002

Subject – Six monthly report on Compliance of Environmental Clearance of 5.0 MTPA Patherdih NLW Coal Washery for the period April'24 – September'24.

Ref. – Environmental Clearance Letter no. - J-11015/240/2010-LA.II(M), Dated: 25.01.2012.

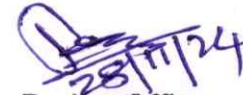
Dear Sir,

Please find enclosed herewith the six- monthly report on Compliance of Environmental Clearance for the period April'24 – September'24 in respect of 5.0 MTPA Patherdih NLW Coal Washery. We hope you will find in order.

Thanking You,

Encl: - As above.

Yours faithfully


Project Officer

5.0 MTPA Patherdih NLW Coal Washery

Copy To: -

1. The Director, 1A Monitoring Cell, Paryavaran Bhawan, CGO Complex, New Delhi- 110003. (via e-mail)
2. The Member Secretary, Jharkhand State Pollution Control Board, TA- Divison Building, Dhurwa, Ranchi – 834004. (via e-mail)
3. Scientist & Incharge, Zonal Office, CPCB, 5th Floor 502, House & Conclave, 1582, Rajdanga Main Road, Kolkata- 700107. (via e-mail)
4. General Manager (Ws), Washery Division.
5. General Manager (Mining/Environment), BCCL – KoylaBhawan, Dhanbad.

ENVIRONMENTAL CLEARANCE COMPLIANCE OF 5.0 MTPA
PATHERDIH NLW COAL WASHERY

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

(APRIL '24 – SEPTEMBER'24)

<u>Sl. No.</u>	<u>Compliance Conditions</u>	<u>Compliance Status</u>
(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	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 sufficient sprinkling arrangements (fixed and mobile) on roads and all coal transfer points. (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.

	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.	Wind breakers have been installed along the boundary of the stockyard. <i>(Photographs of wind barrier installed at Rejects Stockyard are enclosed in ANNEXURE-II)</i> Green-belt with native species is being developed, 1500 saplings have been planted already and plantation drives are also carried out at regular intervals. <i>(Photographs of plantation are enclosed in ANNEXURE-III).</i>
(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. <i>(Photographs of wind barrier installed at Rejects Stockyard are enclosed in ANNEXURE-II).</i>
(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. <i>(Photographs of bag filter and water sprinkling are enclosed in ANNEXURE-IV).</i>
(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. <i>(Photographs of plantation are enclosed in ANNEXURE-III).</i>

(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 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.	Being Complied. Water requirement for washery is being met from the nearest mines of BCCL. Additional water requirement has been obtained by recycle/ reuse and from Rain Water Harvesting measures. Construction of infrastructure for Rain Water Harvesting is being undertaken. 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 proposal for the construction of RCC drain with settling tank at same place is under process. <i>(Photographs of drain along the unloading siding and along the boundary are enclosed in ANNEXURE-VI).</i>
(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. <i>(Photographs of drain along the unloading siding and along the boundary are enclosed in ANNEXURE-VI).</i>
(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 19 th May, 1993 and 31 st 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. <i>(Photographs of Storage tank of Oil and Grease Trap are enclosed in ANNEXURE-</i>

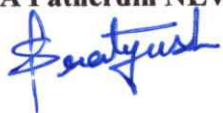
		VII).
(xiv)	Green belt shall be developed using local species all along the periphery of the site, along the areas such as the crushing unit and stockyard, transfer and loading points.	Being Complied. Development of Green-belt using local species in the periphery of site along the area of crushing unit, transfer and loading point, Stockyard, etc is being taken up. <i>(Photographs of plantation are enclosed in ANNEXURE-III).</i>
(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 2023-24 is being enclosed as ANNEXURE-XIII.
(xvi)	Levels of heavy metals such as mercury in 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.	Being Complied. Levels of heavy metals in Coal are analyzed periodically at regular intervals. <i>(Latest report is being enclosed as ANNEXURE-VIII).</i>
(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_Min es_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. <i>(Monitoring Reports are enclosed in ANNEXURE-IX).</i>
(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 analyzed through a laboratory recognized under EP Rules, 1986.	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. Presently, CMPDIL Dhanbad is carrying out regular monitoring of environmental quality work. <i>(Monitoring Reports are enclosed in ANNEXURE-IX).</i>
(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. <i>(Monitoring Reports are enclosed in ANNEXURE-IX).</i>
(vi)	Personnel working in dusty area shall wear protective respiratory devices and they shall also be provided with adequate training and	Being Complied. As per Safety Policy of the Company, necessary protective respiratory devices are

	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.	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-X .
(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 company's website.	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. (<i>Photograph of the display board is enclosed as ANNEXURE-XI</i>).
(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	Being Complied.

	CPCB and the SPCB.	
(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 31 st 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-XII.


Project Officer
5.0 MTPA Patherdih NLW Coal Washery


5.0 MTPA PATHERDIH NLW COAL WASHERY				
Yearly Performance from FY2020-21 to FY 2024-25				
FY		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 (upto Oct,24)	907600.00	247215.00	539398.00	136884.00


Project Officer

5.0 MTPA Patherdih NLW Washery

Bip

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



Latitude: 23.682102
Longitude: 86.432217
Elevation: 168.74±7 m
Accuracy: 152.6 m

ANNEXURE-III

PLANTATION OF LOCAL SPECIES AROUND THE PERIPHERY OF THE WASHERY



AVENUE PLANTATION ALONG THE ROAD IN THE WASHERY



SNEH- SMRITI UPVAN WITH FRUIT-BEARING PLANTS DEVELOPED 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 AREA



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								
MONTH		Apr-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preparation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/K
1-Apr-24	1-Apr-24	QSS/DHN/11437	1	JGB-06	3.15	1.12	19.83	44.82	34.23	4142
1-Apr-24	1-Apr-24	QSS/DHN/11671	2	KDS II	2.87	0.96	12.16	51.11	35.77	3542
2-Apr-24	2-Apr-24	QSS/DHN/11672	3	EJ SMD	2.91	1.06	21.12	36.44	41.38	4856
2-Apr-24	3-Apr-24	QSS/DHN/11884	4	JGB-09	2.85	1.11	14.74	54.10	30.05	3256
3-Apr-24	4-Apr-24	QSS/DHN/12116	5	KDSK	2.94	1.15	9.82	47.22	41.81	4048
3-Apr-24	4-Apr-24	QSS/DHN/12117	6	EJ SMD	2.87	0.80	20.41	37.23	41.56	4936
5-Apr-24	5-Apr-24	QSS/DHN/12196	7	JGB-06	2.96	0.70	13.76	47.71	37.83	3842
7-Apr-24	8-Apr-24	QSS/DHN/12933	8	EJ SMD	2.89	0.68	19.33	34.82	45.17	5143
8-Apr-24	9-Apr-24	QSS/DHN/12975	9	JGB-06	2.69	0.60	16.84	41.71	40.85	4620
9-Apr-24	10-Apr-24	QSS/DHN/13045	10	JGB-06	2.78	0.50	15.25	42.74	41.51	4557
10-Apr-24	11-Apr-24	QSS/DHN/13348	11	EJ SMD	2.88	0.63	18.67	37.23	43.47	5059
10-Apr-24	11-Apr-24	QSS/DHN/13349	12	JGB-06	3.11	0.66	14.9	44.44	40.00	4320
11-Apr-24	12-Apr-24	QSS/DHN/13398	13	EJ SMD	2.86	0.62	18.97	43.53	36.88	4483
12-Apr-24	12-Apr-24	QSS/DHN/13399	14	EJ SMD	3.12	0.64	19.48	34.57	45.31	5257
12-Apr-24	13-Apr-24	QSS/DHN/13854	15	EJ SMD	2.81	0.72	15.34	46.68	37.26	4284
13-Apr-24	13-Apr-24	QSS/DHN/13855	16	JGB-06	2.73	0.62	14.56	46.09	38.73	4276
13-Apr-24	14-Apr-24	QSS/DHN/14064	17	JGB-06	3.1	0.67	13.14	50.43	35.76	3850
14-Apr-24	15-Apr-24	QSS/DHN/14082	18	EJ SMD	2.76	0.49	18.44	39.91	41.16	4786
15-Apr-24	15-Apr-24	QSS/DHN/14083	19	JGB-06	2.92	0.62	16.62	42.82	39.94	4536
16-Apr-24	16-Apr-24	QSS/DHN/14386	20	JGB-06	2.86	0.76	13.78	48.89	36.57	4068
16-Apr-24	17-Apr-24	QSS/DHN/14580	21	EJ SMD	2.94	0.83	18.87	41.56	38.74	4564
16-Apr-24	17-Apr-24	QSS/DHN/14581	22	EJ SMD	2.99	0.84	21.83	36.90	40.43	5081
17-Apr-24	23-Apr-24	QSS/DHN/15768	23	JGB-06	2.82	1.14	13.74	47.02	38.10	4158
18-Apr-24	23-Apr-24	QSS/DHN/15769	24	JGB-06	2.71	0.99	14.27	46.84	37.90	4201
18-Apr-24	23-Apr-24	QSS/DHN/15780	25	EJ SMD	2.59	0.94	19.88	37.29	41.89	5301
19-Apr-24	23-Apr-24	QSS/DHN/15795	26	JGB-06	2.64	0.54	17.65	41.21	40.60	4665
20-Apr-24	23-Apr-24	QSS/DHN/15808	27	JGB-06	2.46	0.51	14.75	47.80	36.94	4201
23-Apr-24	24-Apr-24	QSS/DHN/16138	28	JGB-06	2.66	0.58	16.50	44.80	38.12	4390
24-Apr-24	25-Apr-24	QSS/DHN/16323	29	EJ SMD	2.49	0.67	23.05	32.23	44.05	5504
25-Apr-24	25-Apr-24	QSS/DHN/16324	30	EJ SMD	2.71	0.85	22.90	34.93	41.32	5245
25-Apr-24	26-Apr-24	QSS/DHN/16447	31	JGB-06	2.81	0.36	16.06	45.97	37.61	4310

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/K
26-Apr-24	26-Apr-24	QSS/DHN/16448	32	EJ SMD	2.69	0.47	22.05	40.57	36.91	4728
27-Apr-24	27-Apr-24	QSS/DHN/16539	33	EJ SMD	2.73	1.02	21.68	37.72	39.58	5080
27-Apr-24	28-Apr-24	QSS/DHN/16804	34	JGB-06	2.55	0.93	15.65	45.36	38.06	4371
28-Apr-24	28-Apr-24	QSS/DHN/16805	35	JGB-06	2.63	1.07	15.67	45.86	37.40	4347
28-Apr-24	29-Apr-24	QSS/DHN/16902	36	JGB-06	2.72	1.03	15.91	44.71	38.35	4459
29-Apr-24	30-Apr-24	QSS/DHN/17316	37	EJ SMD	2.61	0.80	21.59	45.09	32.52	4242
30-Apr-24	30-Apr-24	QSS/DHN/17317	38	JGB-06	2.55	0.64	15.61	49.58	34.17	3925
30-Apr-24	2-May-24	QSS/DHN/17658	39	EJ SMD	2.21	1.03	21.19	41.63	36.15	4624

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								
MONTH		May-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
1-May-24	2-May-24	QSS/DHN/17656	1	EJ SMD	2.43	0.86	21.05	42.01	36.08	4537
1-May-24	2-May-24	QSS/DHN/17657	2	JGB-06	2.51	0.88	20.86	45.93	32.33	4177
2-May-24	3-May-24	QSS/DHN/17925	3	JGB-06	2.39	0.62	16.78	48.22	34.38	4028
3-May-24	3-May-24	QSS/DHN/17926	4	JGB-06	2.22	0.69	15.32	47.12	36.87	4150
3-May-24	4-May-24	QSS/DHN/17981	5	JGB-06	2.11	0.55	15.62	46.44	37.39	4276
3-May-24	4-May-24	QSS/DHN/17982	6	JGB-06	2.32	0.66	15.2	47.22	36.92	3992
4-May-24	5-May-24	QSS/DHN/18360	7	JGB-06	2.28	0.73	15.68	46.91	36.68	4240
5-May-24	6-May-24	QSS/DHN/18614	8	EJ SMD	2.35	1.13	22.48	34.62	41.77	5313
6-May-24	6-May-24	QSS/DHN/18615	9	EJ SMD	2.41	1.14	22.44	36.26	40.16	5156
6-May-24	7-May-24	QSS/DHN/18689	10	S BHOWRA	2.49	0.83	22.47	36.22	40.48	5047
7-May-24	8-May-24	QSS/DHN/18841	11	S BHOWRA	2.54	0.95	21.96	39.27	37.82	4776
8-May-24	9-May-24	QSS/DHN/18951	12	JGB-06	2.41	1.00	20.2	41.86	36.94	4649
9-May-24	11-May-24	QSS/DHN/19405	13	S BHOWRA	2.32	1.01	20.09	43.00	35.90	4511
11-May-24	11-May-24	QSS/DHN/19406	14	S BHOWRA	2.25	0.94	19.6	43.82	35.64	4419
12-May-24	12-May-24	QSS/DHN/19646	15	S BHOWRA	2.18	0.73	21.79	40.80	36.68	4682
12-May-24	13-May-24	QSS/DHN/19906	16	S BHOWRA	2.31	1.08	22.41	40.73	35.78	4512
13-May-24	14-May-24	QSS/DHN/19991	17	S BHOWRA	2.24	0.94	20.84	44.24	33.98	4259
14-May-24	15-May-24	QSS/DHN/20078	18	S BHOWRA	2.17	0.77	20.99	34.20	44.04	5227
15-May-24	16-May-24	QSS/DHN/20451	19	S BHOWRA	2.21	0.82	20.46	38.53	40.19	4906
16-May-24	16-May-24	QSS/DHN/20452	20	S BHOWRA	2.11	0.73	20.19	43.36	35.72	4421
17-May-24	17-May-24	QSS/DHN/20489	21	S BHOWRA	2.19	1.19	21.58	36.17	41.06	5142
17-May-24	18-May-24	QSS/DHN/20745	22	S BHOWRA	2.27	0.98	21.95	44.94	32.13	4240
21-May-24	21-May-24	QSS/DHN/21295	23	S BHOWRA	2.32	0.68	20.36	42.44	36.52	4443
22-May-24	22-May-24	QSS/DHN/21507	24	S BHOWRA	2.21	0.87	22.78	40.10	36.25	4596
23-May-24	23-May-24	QSS/DHN/21711	25	S BHOWRA	2.69	1.17	23.73	34.98	40.12	5197
24-May-24	24-May-24	QSS/DHN/21901	26	S BHOWRA	2.6	1.09	21.93	41.65	35.33	4497
25-May-24	26-May-24	QSS/DHN/22185	27	S BHOWRA	2.45	1.33	21.96	43.77	32.94	4275
27-May-24	27-May-24	QSS/DHN/22425	28	S BHOWRA	2.48	1.14	19.52	43.75	35.59	4304
29-May-24	30-May-24	QSS/DHN/23330	29	S BHOWRA	2.42	1.34	20.86	37.74	40.06	4962
30-May-24	31-May-24	QSS/DHN/23368	30	JGB-06	2.56	0.95	15.09	48.86	35.10	3926
31-May-24	31-May-24	QSS/DHN/23369	31	S BHOWRA	2.80	1.14	22.14	36.55	40.17	5062
31-May-24	1-Jun-24	QSS/DHN/23782	32	JGB-06	2.21	0.80	14.80	47.96	36.44	4009

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								
MONTH		Jun-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/K
1-Jun-24	1-Jun-24	QSS/DHN/23781	1	S BHOWRA	2.43	1.05	21.90	44.61	32.44	4166
1-Jun-24	2-Jun-24	QSS/DHN/23999	2	JGB-9	2.22	0.90	17.77	37.22	44.11	4901
2-Jun-24	3-Jun-24	QSS/DHN/24021	3	JGB-9	2.89	1.07	18.23	40.64	40.06	4595
3-Jun-24	4-Jun-24	QSS/DHN/24419	4	JGB-6	2.65	1.35	17.94	43.18	37.53	4357
4-Jun-24	4-Jun-24	QSS/DHN/24420	5	S BHOWRA	2.45	1.12	20.18	38.76	39.94	4680
4-Jun-24	5-Jun-24	QSS/DHN/24682	6	JGB-6	3.01	1.24	14.68	49.05	35.03	3925
5-Jun-24	5-Jun-24	QSS/DHN/24683	7	S BHOWRA	2.78	1.12	20.61	38.51	39.76	4835
5-Jun-24	6-Jun-24	QSS/DHN/24921	8	S BHOWRA	2.54	0.77	19.26	46.04	33.93	4114
6-Jun-24	7-Jun-24	QSS/DHN/25065	9	JGB-9	3.01	0.96	18.78	42.30	37.96	4439
7-Jun-24	7-Jun-24	QSS/DHN/25066	10	S BHOWRA	3.09	0.83	21.78	39.24	38.15	4692
7-Jun-24	8-Jun-24	QSS/DHN/25316	11	JGB-9	3.05	0.55	18.28	38.85	42.32	4893
8-Jun-24	8-Jun-24	QSS/DHN/25317	12	S BHOWRA	3.10	0.64	23.34	40.91	35.11	4548
8-Jun-24	9-Jun-24	QSS/DHN/25422	13	JGB-9	3.21	0.44	18.21	44.03	37.32	4314
11-Jun-24	11-Jun-24	QSS/DHN/25915	14	JGB-9	2.89	0.53	15.90	41.63	41.94	4641
11-Jun-24	12-Jun-24	QSS/DHN/26352	15	S BHOWRA	2.74	0.58	23.25	39.91	36.26	4632
12-Jun-24	13-Jun-24	QSS/DHN/26586	16	JGB-9	2.11	0.96	17.08	40.08	41.88	4611
12-Jun-24	13-Jun-24	QSS/DHN/26587	17	S BHOWRA	2.02	1.00	19.54	38.98	40.48	4717
13-Jun-24	13-Jun-24	QSS/DHN/26588	18	JGB-9	2.17	0.81	18.18	40.53	40.48	4612
14-Jun-24	16-Jun-24	QSS/DHN/27054	19	S BHOWRA	2.01	1.17	19.32	35.00	44.51	5158
14-Jun-24	16-Jun-24	QSS/DHN/27055	20	S BHOWRA	2.10	1.05	20.40	37.86	40.69	4869
15-Jun-24	18-Jun-24	QSS/DHN/27520	21	S BHOWRA	2.21	0.93	20.40	37.97	40.70	4901
15-Jun-24	18-Jun-24	QSS/DHN/27521	22	JGB-6	2.11	0.61	15.17	43.23	40.99	4506
16-Jun-24	18-Jun-24	QSS/DHN/27522	23	JGB-9	2.05	0.69	17.89	42.89	38.53	4352
17-Jun-24	18-Jun-24	QSS/DHN/27523	24	S BHOWRA	2.19	0.87	23.13	31.86	44.14	5441
17-Jun-24	18-Jun-24	QSS/DHN/27524	25	S BHOWRA	2.25	0.93	21.93	34.23	42.91	5214
18-Jun-24	22-Jun-24	QSS/DHN/28371	26	JGB-6	2.59	1.02	19.40	39.61	39.97	4690
19-Jun-24	22-Jun-24	QSS/DHN/28372	27	JGB-9	2.60	0.99	16.32	41.34	41.35	4552
19-Jun-24	22-Jun-24	QSS/DHN/28373	28	S BHOWRA	2.75	1.21	19.62	41.96	37.21	4469
20-Jun-24	22-Jun-24	QSS/DHN/28374	29	S BHOWRA	2.80	1.01	20.53	37.47	40.99	4917
20-Jun-24	22-Jun-24	QSS/DHN/28375	30	JGB-9	2.49	1.01	17.70	44.13	37.16	4211
21-Jun-24	22-Jun-24	QSS/DHN/28376	31	JGB-9	2.70	1.03	18.75	38.23	41.99	4839
22-Jun-24	23-Jun-24	QSS/DHN/28646	32	S BHOWRA	2.80	0.80	24.33	31.09	43.78	5493

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/K
23-Jun-24	25-Jun-24	QSS/DHN/28972	33	JGB-9	2.45	1.12	15.42	44.84	38.62	4290
23-Jun-24	25-Jun-24	QSS/DHN/28973	34	JGB-9	2.21	0.89	16.40	38.76	43.95	4872
24-Jun-24	27-Jun-24	QSS/DHN/29592	35	S BHOWRA	2.60	0.99	19.34	40.91	38.76	4611
25-Jun-24	27-Jun-24	QSS/DHN/29593	36	JGB-6	2.78	0.48	16.14	40.89	42.49	4767
25-Jun-24	27-Jun-24	QSS/DHN/29594	37	JGB-9	2.81	1.52	14.38	51.95	32.15	3338
26-Jun-24	28-Jun-24	QSS/DHN/29707	38	JGB-9	2.55	1.16	15.77	48.57	34.50	3809
27-Jun-24	29-Jun-24	QSS/DHN/30003	39	JGB-6	2.98	1.41	17.24	44.64	36.71	4140
28-Jun-24	29-Jun-24	QSS/DHN/30004	40	JGB-9	2.87	1.22	18.90	40.90	38.98	4520
28-Jun-24	30-Jun-24	QSS/DHN/30014	41	S BHOWRA	2.66	0.76	21.65	32.78	44.81	5321
29-Jun-24	2-Jul-24	QSS/DHN/30653	42	S BHOWRA	3.10	1.32	20.05	33.70	44.93	5218
30-Jun-24	2-Jul-24	QSS/DHN/30654	43	S BHOWRA	3.25	1.05	22.45	38.38	38.12	4712

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								
MONTH		Jul-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
1-Jul-24	3-Jul-24	QSS/DHN/30710	1	JGB-06	3.24	0.99	16.98	41.44	40.59	4536
1-Jul-24	3-Jul-24	QSS/DHN/30711	2	JGB-06	3.38	1.11	16.60	41.92	40.37	4489
2-Jul-24	5-Jul-24	QSS/DHN/31111	3	JGB-09	3.45	1.09	15.47	49.02	34.42	3794
2-Jul-24	5-Jul-24	QSS/DHN/31112	4	SOUTH BHOURA	3.69	1.47	20.75	33.95	43.83	5164
2-Jul-24	5-Jul-24	QSS/DHN/31113	5	JGB-09	3.54	1.65	17.87	41.50	38.98	4594
3-Jul-24	5-Jul-24	QSS/DHN/31114	6	SOUTH BHOURA	3.12	1.46	20.42	39.69	38.43	4627
4-Jul-24	5-Jul-24	QSS/DHN/31115	7	JGB-09	3.25	1.40	17.57	46.72	34.31	3917
4-Jul-24	7-Jul-24	QSS/DHN/31524	8	JGB-09	3.17	1.00	17.92	47.93	33.15	3842
5-Jul-24	8-Jul-24	QSS/DHN/31670	9	SOUTH BHOURA	3.21	0.82	20.04	38.96	40.18	4810
5-Jul-24	8-Jul-24	QSS/DHN/31671	10	SOUTH BHOURA	3.12	0.86	21.94	32.02	45.18	5481
6-Jul-24	8-Jul-24	QSS/DHN/31672	11	SOUTH BHOURA	3.19	0.86	21.53	33.04	44.57	5379
6-Jul-24	8-Jul-24	QSS/DHN/31673	12	JGB-09	3.25	0.79	20.55	35.83	42.83	5073
7-Jul-24	8-Jul-24	QSS/DHN/31674	13	SOUTH BHOURA	3.29	0.72	21.47	35.26	42.55	5085
8-Jul-24	9-Jul-24	QSS/DHN/31697	14	SOUTH BHOURA	3.32	0.82	24.14	28.17	46.87	5825
10-Jul-24	11-Jul-24	QSS/DHN/32131	15	SOUTH BHOURA	3.50	0.86	21.12	40.78	37.24	4541
11-Jul-24	12-Jul-24	QSS/DHN/32267	16	SOUTH BHOURA	3.67	0.96	21.40	38.25	39.39	4782
12-Jul-24	13-Jul-24	QSS/DHN/32421	17	SOUTH BHOURA	3.15	1.05	19.75	42.06	37.14	4375
12-Jul-24	13-Jul-24	QSS/DHN/32422	18	SOUTH BHOURA	3.32	0.78	23.74	36.12	39.36	4970
13-Jul-24	14-Jul-24	QSS/DHN/32556	19	JGB-09	3.11	1.33	24.54	36.62	37.51	4886
14-Jul-24	16-Jul-24	QSS/DHN/33020	20	JGB-09	3.19	1.04	21.58	36.07	41.31	4917
14-Jul-24	16-Jul-24	QSS/DHN/33021	21	SOUTH BHOURA	3.11	0.98	22.46	38.17	38.39	4768
16-Jul-24	16-Jul-24	QSS/DHN/33022	22	JGB-09	3.25	0.77	17.19	44.09	37.95	4300
17-Jul-24	20-Jul-24	QSS/DHN/33833	23	SOUTH BHOURA	3.51	1.26	18.99	42.56	37.19	4403
19-Jul-24	22-Jul-24	QSS/DHN/I/937	24	SOUTH BHOURA	3.50	1.38	20.02	43.84	34.76	4184
20-Jul-24	22-Jul-24	QSS/DHN/I/938	25	SOUTH BHOURA	3.35	1.46	20.99	44.82	32.73	4081
21-Jul-24	23-Jul-24	QSS/DHN/I/978	26	SOUTH BHOURA	3.80	1.05	22.60	37.80	38.55	4872
21-Jul-24	23-Jul-24	QSS/DHN/I/979	27	SOUTH BHOURA	3.96	0.77	19.50	42.46	37.27	4383
23-Jul-24	24-Jul-24	QSS/DHN/I/1405	28	SOUTH BHOURA	4.10	1.15	21.88	38.41	38.56	4901
24-Jul-24	27-Jul-24	QSS/DHN/I/1852	29	SOUTH BHOURA	4.20	0.96	22.51	36.94	39.59	5106
24-Jul-24	27-Jul-24	QSS/DHN/I/1853	30	SOUTH BHOURA	4.36	1.15	26.60	34.50	37.75	5017
26-Jul-24	28-Jul-24	QSS/DHN/I/2012	31	SOUTH BHOURA	4.25	1.12	24.94	34.23	39.71	5067
26-Jul-24	28-Jul-24	QSS/DHN/I/2013	32	SOUTH BHOURA	4.32	1.59	18.51	34.18	45.72	5089

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
27-Jul-24	30-Jul-24	QSS/DHN/I/2575	33	SOUTH BHOURA	4.50	1.00	21.33	42.95	34.72	4346
28-Jul-24	30-Jul-24	QSS/DHN/I/2576	34	SOUTH BHOURA	4.36	1.09	21.27	42.05	35.59	4481
29-Jul-24	30-Jul-24	QSS/DHN/I/2577	35	SOUTH BHOURA	4.47	0.83	21.44	37.37	40.36	4950
30-Jul-24	1-Aug-24	QSS/DHN/I/2967	36	SOUTH BHOURA	4.23	1.23	21.36	35.86	41.55	5151
30-Jul-24	1-Aug-24	QSS/DHN/I/2968	37	JGB-09	4.31	2.31	20.73	38.00	38.96	4883
31-Jul-24	1-Aug-24	QSS/DHN/I/2969	38	JGB-06	4.40	1.19	18.19	38.59	42.03	4860

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								
MONTH		Aug-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
1-Aug-24	6-Aug-24	QSS/DHN/I/3728	1	JGB-06	4.20	0.81	16.82	41.87	40.50	4604
2-Aug-24	6-Aug-24	QSS/DHN/I/3729	2	JGB-09	4.05	1.04	17.65	37.85	43.46	4930
3-Aug-24	6-Aug-24	QSS/DHN/I/3730	3	JGB-09	4.16	0.97	17.93	36.45	44.65	5058
4-Aug-24	6-Aug-24	QSS/DHN/I/3731	4	JGB-06	4.32	0.83	15.24	46.91	37.02	4132
6-Aug-24	10-Aug-24	QSS/DHN/I/4270	5	JGB-06	4.20	1.00	14.95	44.93	39.12	4275
6-Aug-24	10-Aug-24	QSS/DHN/I/4271	6	JGB-06	4.15	1.13	18.23	40.84	39.80	4624
7-Aug-24	10-Aug-24	QSS/DHN/I/4272	7	JGB-09	4.30	0.71	14.59	45.72	38.98	4227
8-Aug-24	10-Aug-24	QSS/DHN/I/4273	8	JGB-06	4.24	0.85	14.49	43.98	40.68	4399
9-Aug-24	10-Aug-24	QSS/DHN/I/4274	9	JGB-09	4.35	0.78	15.7	44.96	38.56	4381
10-Aug-24	12-Aug-24	QSS/DHN/I/4778	10	JGB-09	4.25	0.74	16.4	41.82	41.04	4459
10-Aug-24	12-Aug-24	QSS/DHN/I/4779	11	JGB-06	4.39	0.92	16.19	42.37	40.52	4545
11-Aug-24	13-Aug-24	QSS/DHN/I/4800	12	JGB-06	4.28	1.34	14.03	40.40	44.23	4666
16-Aug-24	17-Aug-24	QSS/DHN/I/5363	15	SLG	4.54	1.30	13.44	42.32	42.94	4519
14-Aug-24	24-Aug-24	QSS/DHN/I/6518	13	JGB-06	4.59	1.13	15.04	38.90	44.93	4774
15-Aug-24	24-Aug-24	QSS/DHN/I/6519	14	JGB-09	4.65	1.41	14.29	39.25	45.05	4727
21-Aug-24	24-Aug-24	QSS/DHN/I/6520	16	JGB-09	4.39	0.90	17.04	40.09	41.97	4685
21-Aug-24	24-Aug-24	QSS/DHN/I/6521	17	BANSJORA	4.24	0.90	14.41	46.07	38.62	4199
22-Aug-24	24-Aug-24	QSS/DHN/I/6522	18	JGB-09	4.33	0.78	16.62	44.25	38.35	4305
23-Aug-24	24-Aug-24	QSS/DHN/I/6523	19	JGB-09	4.40	0.81	16.28	44.10	38.81	4344
23-Aug-24	24-Aug-24	QSS/DHN/I/6524	20	S.BHOWRA	4.16	1.48	17.62	30.65	50.25	5489
25-Aug-24	27-Aug-24	QSS/DHN/I/7077	21	JGB-09	4.35	0.99	20.09	43.41	35.51	4393
25-Aug-24	27-Aug-24	QSS/DHN/I/7078	22	S.BHOWRA	4.46	1.45	19.42	36.77	42.36	4976
26-Aug-24	29-Aug-24	QSS/DHN/I/7419	23	JGB-09	4.56	1.28	17.63	42.37	38.72	4466
27-Aug-24	29-Aug-24	QSS/DHN/I/7420	24	S.BHOWRA	4.48	1.42	20.76	35.79	42.03	5080
28-Aug-24	29-Aug-24	QSS/DHN/I/7421	25	S.BHOWRA	4.37	1.33	18.79	42.94	36.94	4400
29-Aug-24	3-Sep-24	QSS/DHN/I/7848	26	JGB-09	4.27	0.88	18.06	33.66	47.40	5344
29-Aug-24	3-Sep-24	QSS/DHN/I/7849	27	S.BHOWRA	4.32	1.04	21.43	36.17	41.36	4970
30-Aug-24	3-Sep-24	QSS/DHN/I/7850	28	JGB-06	4.36	1.15	14.75	40.59	43.51	4633
30-Aug-24	3-Sep-24	QSS/DHN/I/7851	29	S.BHOWRA	4.45	1.12	21.25	33.34	44.29	5281
31-Aug-24	3-Sep-24	QSS/DHN/I/7852	30	JGB-06	4.21	0.81	14.68	45.77	38.74	4243

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								
MONTH		Sep-24								
Raw Coal (Rake)										
Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
31-Aug-24	3-Sep-24	QSS/DHN/I/7853	1	JGB-09	4.20	0.72	16.73	42.48	40.07	4524
1-Sep-24	3-Sep-24	QSS/DHN/I/7854	2	S.BHOWRA	4.05	1.09	24.69	31.14	43.08	5416
2-Sep-24	4-Sep-24	QSS/DHN/I/7975	3	JGB-09	4.21	0.82	16.26	47.33	35.59	4052
2-Sep-24	4-Sep-24	QSS/DHN/I/7976	4	S.BHOWRA	4.11	1.06	23.93	30.10	44.91	5616
2-Sep-24	5-Sep-24	QSS/DHN/I/8174	5	JGB-09	4.25	0.94	17.64	42.19	39.23	4517
3-Sep-24	5-Sep-24	QSS/DHN/I/8175	6	JGB-06	4.17	1.02	16.64	43.52	38.82	4403
4-Sep-24	8-Sep-24	QSS/DHN/I/8469	7	S.BHOWRA	4.12	1.26	20.52	36.49	41.73	4995
5-Sep-24	8-Sep-24	QSS/DHN/I/8470	8	S.BHOWRA	4.21	1.30	21.87	32.05	44.78	5433
5-Sep-24	8-Sep-24	QSS/DHN/I/8471	9	S.BHOWRA	4.17	1.15	18.05	36.11	44.69	5086
6-Sep-24	8-Sep-24	QSS/DHN/I/8472	10	S.BHOWRA	4.32	1.58	22.36	31.16	44.90	5421
8-Sep-24	10-Sep-24	QSS/DHN/I/8637	11	S.BHOWRA	4.27	1.23	23.77	31.08	43.92	5577
8-Sep-24	12-Sep-24	QSS/DHN/I/8836	12	S.BHOWRA	4.21	1.06	21.00	40.45	37.49	4571
9-Sep-24	12-Sep-24	QSS/DHN/I/8837	13	S.BHOWRA	4.11	1.01	24.68	31.46	42.85	5435
10-Sep-24	12-Sep-24	QSS/DHN/I/8838	14	S.BHOWRA	4.31	0.98	24.33	31.30	43.39	5514
10-Sep-24	12-Sep-24	QSS/DHN/I/8839	15	S.BHOWRA	4.27	0.98	23.88	30.60	44.54	5663
11-Sep-24	14-Sep-24	QSS/DHN/I/9146	16	S.BHOWRA	4.50	1.30	23.96	36.06	38.68	4962
12-Sep-24	14-Sep-24	QSS/DHN/I/9147	17	JGB-09	4.36	1.23	16.74	44.95	37.08	3921
12-Sep-24	14-Sep-24	QSS/DHN/I/9148	18	S.BHOWRA	4.56	1.27	17.77	41.47	39.49	4477
13-Sep-24	16-Sep-24	QSS/DHN/I/9419	19	S.BHOWRA	4.22	1.19	25.34	31.73	41.74	5402
13-Sep-24	16-Sep-24	QSS/DHN/I/9420	20	S.BHOWRA	4.25	1.19	22.01	35.00	41.80	5160
14-Sep-24	16-Sep-24	QSS/DHN/I/9421	21	S.BHOWRA	4.32	1.19	23.15	30.81	44.85	5517
15-Sep-24	19-Sep-24	QSS/DHN/I/9607	22	S.BHOWRA	4.30	1.48	21.91	31.51	45.10	5453
15-Sep-24	19-Sep-24	QSS/DHN/I/9608	23	S.BHOWRA	4.45	1.38	21.74	31.19	45.69	5513
16-Sep-24	19-Sep-24	QSS/DHN/I/9609	24	S.BHOWRA	4.24	1.47	20.42	33.31	44.80	5306
17-Sep-24	21-Sep-24	QSS/DHN/I/9891	25	S.BHOWRA	4.27	0.92	22.65	33.33	43.10	5314
19-Sep-24	21-Sep-24	QSS/DHN/I/9892	26	S.BHOWRA	4.32	0.94	24.37	30.66	44.03	5513
20-Sep-24	23-Sep-24	QSS/DHN/I/10205	27	S.BHOWRA	4.52	1.07	22.67	32.48	43.78	5381
20-Sep-24	24-Sep-24	QSS/DHN/I/10236	28	S.BHOWRA	4.68	1.24	22.57	31.97	44.22	5418
22-Sep-24	25-Sep-24	QSS/DHN/I/10393	29	S.BHOWRA	4.56	1.41	22.67	32.00	43.92	5396
23-Sep-24	25-Sep-24	QSS/DHN/I/10394	30	S.BHOWRA	4.42	1.37	21.72	36.12	40.79	5026
24-Sep-24	27-Sep-24	QSS/DHN/I/10666	31	S.BHOWRA	4.32	1.27	24.21	30.89	43.63	5552
25-Sep-24	28-Sep-24	QSS/DHN/I/10721	32	S.BHOWRA	4.20	0.92	23.58	35.02	40.48	5108

Date Of Sampling	Date of Preperation	Sample ID No.	Rake No	Source	TM %	ADB				
						M %	VM %	ASH %	FC %	GCV Kcal/Kg
26-Sep-24	28-Sep-24	QSS/DHN/I/10722	33	S.BHOWRA	4.31	1.22	23.82	34.25	40.71	5234
27-Sep-24	28-Sep-24	QSS/DHN/I/10723	34	S.BHOWRA	4.37	1.20	23.45	38.08	37.27	4726
28-Sep-24	30-Sep-24	QSS/DHN/I/10971	35	S.BHOWRA	4.42	1.35	23.62	38.89	36.14	4713
28-Sep-24	30-Sep-24	QSS/DHN/I/10972	36	S.BHOWRA	4.36	1.30	22.20	41.79	34.71	4342

ANNEXURE-VI

DRAIN ALONG THE UNLOADING-SECTION OF THE 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





ईंधन, खनिज एवं धातुकर्म अभियांत्रिकी विभाग,
भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद ८२६००४
Department of Fuel, Minerals and Metallurgical Engineering,
Indian Institute of Technology (Indian School of Mines), Dhanbad 826004

Date: 25/11/2024

No. FMME/PKJ/BCCL/NLW PCW /HMA/2024/01

To,

Project Officer

5.0 MTPA Patherdih NLW Washery

BCCL Dhanbad

Your Ref: BCCL/WD/ NLW-PCW/2024-25/929 Dated 23.07.2024 and

PO No: 5700348500 Dated 12.09.2024

This is in reference to your letter reference as mentioned. Please find below the results of heavy metal analysis.

Sl. No.	Sample Code	Cr (%)	Mn (%)	Fe (%)	Ni (%)	Cu (%)	Zn (%)	Cd (%)	Pb (%)	As (%)	Hg (%)
1	Washed Coal	0.0019	0.011	0.71	0.00051	0.0129	0.00461	0.00012	0.0012	0.0012	ND
2	Raw coal	0.0032	0.034	1.98	0.00062	0.0059	0.00830	0.00020	0.0027	0.0011	ND
3	Washed Power coal	0.0041	0.042	2.57	0.00073	0.0051	0.00950	0.00025	0.0029	0.0026	ND

* Not Detected

Best Regards

(Dr. Pankaj Kumar Jain)

Assistant Professor

Fuel Minerals and Metallurgical Engineering

IIT (ISM) Dhanbad

STRICTLY RESTRICTED
FOR COMPANY USE ONLY RESTRICTED

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, JUNE, 2024)**



CMPDI

ISO 9001 Company
Regional Institute-II
Dhanbad, Jharkhand

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 : **2024-25.**

PERIOD: **HALF YEAR ENDING June. 24**

HEAVY METAL ANALYSIS REPORT OF AMBIENT AIR QUALITY

SAMPLE CODE	Station Name	Date	Cd CONC. IN µg/m ³	Hg CONC. IN µg/m ³	As CONC. IN ng/m ³	Cr CONC. IN µg/m ³	Ni CONC. IN ng/m ³	Pb CONC. IN µg/m ³
A1	Karmatand Village	20.06.2024	<0.001	<0.001	<1.0	<0.01	2.02	0.005
A2	Damoda	19.06.2024	<0.001	<0.001	<1.0	<0.01	1.33	<0.005
A3	Madhuband Washery	18.06.2024	<0.001	<0.001	<1.0	<0.01	1.96	0.008
A4	Block-II	19.06.2024	<0.001	<0.001	<1.0	<0.01	2.45	0.015
A5	Muraidih	17.06.2024	<0.001	<0.001	<1.0	<0.01	3.08	<0.005
A6	Block-IV	28.06.2024	<0.001	<0.001	<1.0	<0.01	1.00	<0.005
A7	Govindpur/Ramkanali	27.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.021
A8	Nichitpur	29.06.2024	<0.001	0.002	<1.0	<0.01	<1.0	<0.005
A9	East Basseriya	29.06.2024	<0.001	<0.001	<1.0	<0.01	1.40	0.005
A10	Dhansar/Kusunda	28.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A11	Dobari	21.06.2024	<0.001	<0.001	<1.0	<0.01	1.05	0.008
A12	Kusmatand Village	20.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A13	Jeenagora	20.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.006
A14	Bhowrah North	27.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A15	Sudamdih Washery	25.06.2024	<0.001	<0.001	<1.0	<0.01	1.70	0.024
A16	Pootki	29.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.009
A17	Moonidih UGP	22.06.2024	<0.001	<0.001	<1.0	<0.01	1.02	<0.005
A18	Rudih Basti	22.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.012
A19	Murlidih 20/21	24.06.2024	<0.001	<0.001	<1.0	<0.01	1.00	0.005
A20	Lohapatti	21.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A21	Kharkharee	25.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005

SAMPLE CODE	Station Name	Date	Cd CONC. IN $\mu\text{g}/\text{m}^3$	Hg CONC. IN $\mu\text{g}/\text{m}^3$	As CONC. IN ng/m^3	Cr CONC. IN $\mu\text{g}/\text{m}^3$	Ni CONC. IN ng/m^3	Pb CONC. IN $\mu\text{g}/\text{m}^3$
A22	Dahibari	18.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.028
A23	Basantimata	19.06.2024	<0.001	<0.001	<1.0	<0.01	1.06	<0.005
A24	Gopinathpur	18.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A25	Guliardih	19.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.007
A26	Begunia	17.06.2024	<0.001	<0.001	<1.0	<0.01	4.50	0.014
A27	Damagoria	17.06.2024	<0.001	<0.001	<1.0	<0.01	3.32	0.022
A28	Huriladih	27.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.005
A29	Moonidih Washery	22.06.2024	<0.001	0.001	<1.0	<0.01	2.93	<0.005
A30	Sitanala	25.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.028
A31	Dumarda	24.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.006
A32	Telmacho Bridge	21.06.2024	<0.001	<0.001	<1.0	<0.01	2.11	<0.005
A33	Madhuband UGP	25.06.2024	<0.001	0.003	<1.0	<0.01	<1.0	0.005
A34	Bhojudih Washery	24.06.2024	<0.001	0.018	<1.0	<0.01	1.07	0.038
A35	Dugda Washery	20.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.006
A36	Mahuda	22.06.2024	<0.001	0.001	<1.0	<0.01	<1.0	<0.005
A37	Katras Choitudih	26.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A38	Sinidih Workshop	28.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.005
A39	Patherdih	26.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A40	Koyla Nagar	20.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A41	Sudamdih Shaft	26.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.017
A42	RHB	17.06.2024	<0.001	<0.001	<1.0	<0.01	3.90	0.009
A43	Pandwabhitia	18.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	<0.005
A44	Sadariadih	19.06.2024	<0.001	<0.001	<1.0	<0.01	<1.0	0.005
A45	Bhojudih Buffer	24.06.2024	<0.001	<0.001	<1.0	<0.01	2.80	<0.005
A46	Cental hospital dhanbad	17.06.2024	<0.001	<0.001	<1.0	<0.01	1.00	<0.005

<i>Metal (Unit)</i>	<i>LDL</i>	<i>Standard as per NAAQS</i>
Hg ($\mu\text{g}/\text{m}^3$)	0.001	*Standard Not defined
Cr($\mu\text{g}/\text{m}^3$)	0.01	*Standard Not defined
As (ng/m^3)	1	6
Pb ($\mu\text{g}/\text{m}^3$)	0.005	0.5
Ni (ng/m^3)	2	20
Cd ($\mu\text{g}/\text{m}^3$)	0.001	*Standard Not defined

सुमान रंजन राय

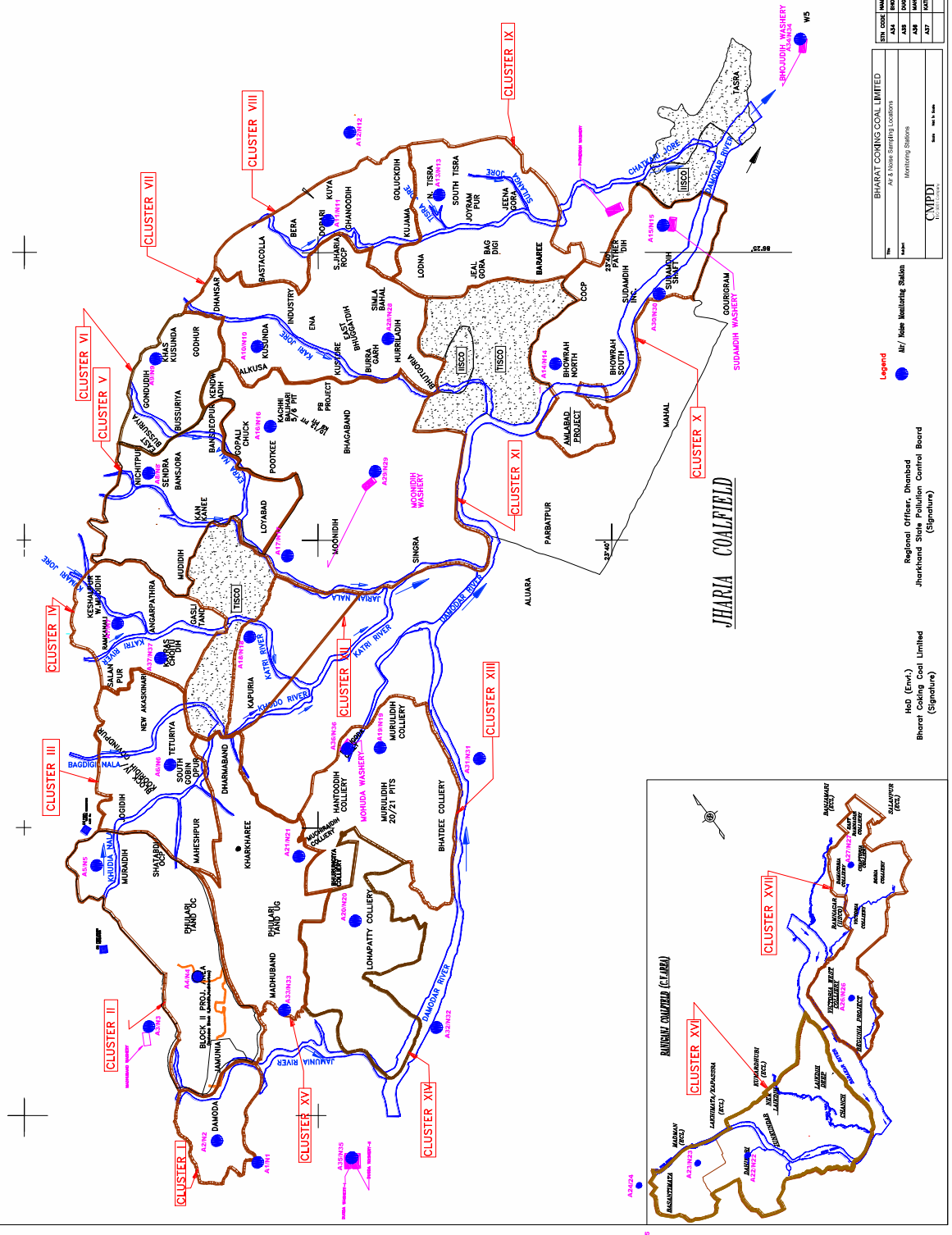
Analysed By
JSA/SA/SSA

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

अमित

Approved By
HOD(In-charge) Environment
RI-2, CMPDI, Dhanbad

Location of Air & Noise Monitoring Stations in BCCL



STN CODE	NAME OF STATION (AND POINT)
A1	ATENTH
A2	ATENTH
A3	ATENTH
A4	ATENTH
A5	ATENTH
A6	ATENTH
A7	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A8	ATENTH
A9	ATENTH
A10	ATENTH
A11	ATENTH
A12	ATENTH
A13	ATENTH
A14	ATENTH
A15	ATENTH
A16	ATENTH
A17	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A18	ATENTH
A19	ATENTH
A20	ATENTH
A21	ATENTH
A22	ATENTH
A23	ATENTH
A24	ATENTH
A25	ATENTH
A26	ATENTH
A27	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A28	ATENTH
A29	ATENTH
A30	ATENTH
A31	ATENTH
A32	ATENTH
A33	ATENTH
A34	ATENTH
A35	ATENTH
A36	ATENTH
A37	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A38	ATENTH
A39	ATENTH
A40	ATENTH
A41	ATENTH
A42	ATENTH
A43	ATENTH
A44	ATENTH
A45	ATENTH
A46	ATENTH
A47	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A48	ATENTH
A49	ATENTH
A50	ATENTH
A51	ATENTH
A52	ATENTH
A53	ATENTH
A54	ATENTH
A55	ATENTH
A56	ATENTH
A57	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A58	ATENTH
A59	ATENTH
A60	ATENTH
A61	ATENTH
A62	ATENTH
A63	ATENTH
A64	ATENTH
A65	ATENTH
A66	ATENTH
A67	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A68	ATENTH
A69	ATENTH
A70	ATENTH
A71	ATENTH
A72	ATENTH
A73	ATENTH
A74	ATENTH
A75	ATENTH
A76	ATENTH
A77	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A78	ATENTH
A79	ATENTH
A80	ATENTH
A81	ATENTH
A82	ATENTH
A83	ATENTH
A84	ATENTH
A85	ATENTH
A86	ATENTH
A87	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A88	ATENTH
A89	ATENTH
A90	ATENTH
A91	ATENTH
A92	ATENTH
A93	ATENTH
A94	ATENTH
A95	ATENTH
A96	ATENTH
A97	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A98	ATENTH
A99	ATENTH
A100	ATENTH
A101	ATENTH
A102	ATENTH
A103	ATENTH
A104	ATENTH
A105	ATENTH
A106	ATENTH
A107	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A108	ATENTH
A109	ATENTH
A110	ATENTH
A111	ATENTH
A112	ATENTH
A113	ATENTH
A114	ATENTH
A115	ATENTH
A116	ATENTH
A117	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A118	ATENTH
A119	ATENTH
A120	ATENTH
A121	ATENTH
A122	ATENTH
A123	ATENTH
A124	ATENTH
A125	ATENTH
A126	ATENTH
A127	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A128	ATENTH
A129	ATENTH
A130	ATENTH
A131	ATENTH
A132	ATENTH
A133	ATENTH
A134	ATENTH
A135	ATENTH
A136	ATENTH
A137	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A138	ATENTH
A139	ATENTH
A140	ATENTH
A141	ATENTH
A142	ATENTH
A143	ATENTH
A144	ATENTH
A145	ATENTH
A146	ATENTH
A147	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A148	ATENTH
A149	ATENTH
A150	ATENTH
A151	ATENTH
A152	ATENTH
A153	ATENTH
A154	ATENTH
A155	ATENTH
A156	ATENTH
A157	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A158	ATENTH
A159	ATENTH
A160	ATENTH
A161	ATENTH
A162	ATENTH
A163	ATENTH
A164	ATENTH
A165	ATENTH
A166	ATENTH
A167	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A168	ATENTH
A169	ATENTH
A170	ATENTH
A171	ATENTH
A172	ATENTH
A173	ATENTH
A174	ATENTH
A175	ATENTH
A176	ATENTH
A177	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A178	ATENTH
A179	ATENTH
A180	ATENTH
A181	ATENTH
A182	ATENTH
A183	ATENTH
A184	ATENTH
A185	ATENTH
A186	ATENTH
A187	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A188	ATENTH
A189	ATENTH
A190	ATENTH
A191	ATENTH
A192	ATENTH
A193	ATENTH
A194	ATENTH
A195	ATENTH
A196	ATENTH
A197	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A198	ATENTH
A199	ATENTH
A200	ATENTH
A201	ATENTH
A202	ATENTH
A203	ATENTH
A204	ATENTH
A205	ATENTH
A206	ATENTH
A207	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A208	ATENTH
A209	ATENTH
A210	ATENTH
A211	ATENTH
A212	ATENTH
A213	ATENTH
A214	ATENTH
A215	ATENTH
A216	ATENTH
A217	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A218	ATENTH
A219	ATENTH
A220	ATENTH
A221	ATENTH
A222	ATENTH
A223	ATENTH
A224	ATENTH
A225	ATENTH
A226	ATENTH
A227	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A228	ATENTH
A229	ATENTH
A230	ATENTH
A231	ATENTH
A232	ATENTH
A233	ATENTH
A234	ATENTH
A235	ATENTH
A236	ATENTH
A237	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A238	ATENTH
A239	ATENTH
A240	ATENTH
A241	ATENTH
A242	ATENTH
A243	ATENTH
A244	ATENTH
A245	ATENTH
A246	ATENTH
A247	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A248	ATENTH
A249	ATENTH
A250	ATENTH
A251	ATENTH
A252	ATENTH
A253	ATENTH
A254	ATENTH
A255	ATENTH
A256	ATENTH
A257	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A258	ATENTH
A259	ATENTH
A260	ATENTH
A261	ATENTH
A262	ATENTH
A263	ATENTH
A264	ATENTH
A265	ATENTH
A266	ATENTH
A267	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A268	ATENTH
A269	ATENTH
A270	ATENTH
A271	ATENTH
A272	ATENTH
A273	ATENTH
A274	ATENTH
A275	ATENTH
A276	ATENTH
A277	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A278	ATENTH
A279	ATENTH
A280	ATENTH
A281	ATENTH
A282	ATENTH
A283	ATENTH
A284	ATENTH
A285	ATENTH
A286	ATENTH
A287	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A288	ATENTH
A289	ATENTH
A290	ATENTH
A291	ATENTH
A292	ATENTH
A293	ATENTH
A294	ATENTH
A295	ATENTH
A296	ATENTH
A297	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A298	ATENTH
A299	ATENTH
A300	ATENTH
A301	ATENTH
A302	ATENTH
A303	ATENTH
A304	ATENTH
A305	ATENTH
A306	ATENTH
A307	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A308	ATENTH
A309	ATENTH
A310	ATENTH
A311	ATENTH
A312	ATENTH
A313	ATENTH
A314	ATENTH
A315	ATENTH
A316	ATENTH
A317	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A318	ATENTH
A319	ATENTH
A320	ATENTH
A321	ATENTH
A322	ATENTH
A323	ATENTH
A324	ATENTH
A325	ATENTH
A326	ATENTH
A327	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A328	ATENTH
A329	ATENTH
A330	ATENTH
A331	ATENTH
A332	ATENTH
A333	ATENTH
A334	ATENTH
A335	ATENTH
A336	ATENTH
A337	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A338	ATENTH
A339	ATENTH
A340	ATENTH
A341	ATENTH
A342	ATENTH
A343	ATENTH
A344	ATENTH
A345	ATENTH
A346	ATENTH
A347	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A348	ATENTH
A349	ATENTH
A350	ATENTH
A351	ATENTH
A352	ATENTH
A353	ATENTH
A354	ATENTH
A355	ATENTH
A356	ATENTH
A357	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A358	ATENTH
A359	ATENTH
A360	ATENTH
A361	ATENTH
A362	ATENTH
A363	ATENTH
A364	ATENTH
A365	ATENTH
A366	ATENTH
A367	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A368	ATENTH
A369	ATENTH
A370	ATENTH
A371	ATENTH
A372	ATENTH
A373	ATENTH
A374	ATENTH
A375	ATENTH
A376	ATENTH
A377	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A378	ATENTH
A379	ATENTH
A380	ATENTH
A381	ATENTH
A382	ATENTH
A383	ATENTH
A384	ATENTH
A385	ATENTH
A386	ATENTH
A387	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A388	ATENTH
A389	ATENTH
A390	ATENTH
A391	ATENTH
A392	ATENTH
A393	ATENTH
A394	ATENTH
A395	ATENTH
A396	ATENTH
A397	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A398	ATENTH
A399	ATENTH
A400	ATENTH
A401	ATENTH
A402	ATENTH
A403	ATENTH
A404	ATENTH
A405	ATENTH
A406	ATENTH
A407	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A408	ATENTH
A409	ATENTH
A410	ATENTH
A411	ATENTH
A412	ATENTH
A413	ATENTH
A414	ATENTH
A415	ATENTH
A416	ATENTH
A417	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A418	ATENTH
A419	ATENTH
A420	ATENTH
A421	ATENTH
A422	ATENTH
A423	ATENTH
A424	ATENTH
A425	ATENTH
A426	ATENTH
A427	ATENTH

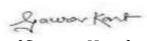
STN CODE	NAME OF STATION (AND POINT)
A428	ATENTH
A429	ATENTH
A430	ATENTH
A431	ATENTH
A432	ATENTH
A433	ATENTH
A434	ATENTH
A435	ATENTH
A436	ATENTH
A437	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A438	ATENTH
A439	ATENTH
A440	ATENTH
A441	ATENTH
A442	ATENTH
A443	ATENTH
A444	ATENTH
A445	ATENTH
A446	ATENTH
A447	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A448	ATENTH
A449	ATENTH
A450	ATENTH
A451	ATENTH
A452	ATENTH
A453	ATENTH
A454	ATENTH
A455	ATENTH
A456	ATENTH
A457	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A458	ATENTH
A459	ATENTH
A460	ATENTH
A461	ATENTH
A462	ATENTH
A463	ATENTH
A464	ATENTH
A465	ATENTH
A466	ATENTH
A467	ATENTH

STN CODE	NAME OF STATION (AND POINT)
A468	ATENTH
A469	ATENTH
A470	ATENTH
A471	ATENTH

 TC-10122  cmpdi A Mini Ratna Company CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in									
Test Report for Ambient Air Samples									
Month & Year		09/2024		Cluster		Misc.		ULR No.	
								TC1012224000001163 F	
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue	
								13.11.2024	
Project		Patherdih Washery :Industrial Area		Sample Ref. No.		REM/BCCL/2024 /09		Sampling Method	
								CMPDI/RI-II/LPM 11 , (IS 5182)	
Date of Sampling		13.09.2024		27.09.2024		Period of Analysis		13.09.2024 25.10.2024	
								Zone of Station: CORE ZONE	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009	
			1st FN A2676	2nd FN A2752					
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	116	111	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100	
2	PM _{2.5}	IS -5182(Part 24):2019	56	60	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60	
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss	80	
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	30	28	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80	
**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,									
 ANALYSED BY			 (Gaurav Kant) REVIEWED BY			 (Amit Raj Mishra) 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									

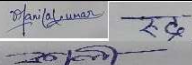
  CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD - 826005 Phone: 0326-223-850 email: rdri2cmpdi@coalindia.in									
Month & Year	09/2024	Cluster	Misc.	ULR No.	TC1012224000001197F				
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)			Date of Issue	13.11.2024				
Project		Sample Ref. No.	REM/BCCL/2024/09		Sampling Method	CMPDI/RI-II/LPM 22			
Sampling Stations	i	Pathardih Washery	Date of Sampling	13.09.2024	27.09.2024	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	45.2	45.6	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	47.6	52					
3		08:00 - 09:00	48.8	53.2					
4		09:00 - 10:00	49.5	48					
5		10:00 - 11:00	50.3	53.1					
6		11:00 - 12:00	53.8	53.7					
7		12:00 - 13:00	53.8	53.8					
8		13:00 - 14:00	53.2	53.8					
9		14:00 - 15:00	53.3	53.2					
10		15:00 - 16:00	52.7	51.4					
11		16:00 - 17:00	51.7	50.1					
12		17:00 - 18:00	51.4	47.3					
13		18:00 - 19:00	51	49.9					
14		19:00 - 20:00	50.7	50.2					
15		20:00 - 21:00	49.5	50.9					
16		21:00 - 22:00	49.6	50.7					
		Leq Day	51.3	51.6					
1	Noise Level dB(A)Leq -Night	22:00-23:00	49.4	49.5	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	48.1	48.4					
3		00:00- 01:00	47.7	48.4					
4		01:00-02:00	47.5	47.7					
5		02:00-03:00	47.2	48.4					
6		03:00-04:00	46.9	47.1					
7		04:00-05:00	46.5	47.1					
8		05:00-06:00	47.4	47.7					
		Leq Night	47.7	48.1					

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

Sampling Assistants
ANALYSED BY
 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.


 (Gaurav Kant)
REVIEWED BY
 ---- End of Report ----
 Page -1 of 1


 (Amit Raj Mishra)
Authorised Signatory

  cmpdi CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report										CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in											
Test Report for Ambient Air Samples																					
Month & Year		08/2024		Cluster		Misc.						ULR No.				TC1012224000001111F					
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)														Date of Issue				16.10.2024	
Project		Patherdih Washery :Industrial Area		Sample Ref. No.		REM/BCCL/2024/08		Sampling Method						CMPDI/RI-II/LPM 11 , (IS 5182)							
Date of Sampling		09.08.2024		26.08.2024		Period of Analysis		09.08.2024		14.10.2024		Zone of Station:				CORE ZONE					
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)				NAAQS, 2009										
			1st FN A2496	2nd FN A2574																	
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	118	98	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300				100										
2	PM _{2.5}	IS-5182(Part 24):2019	62	44	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified				60										
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss				80										
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	30	29	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120				80										
**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,																					
 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																					

 TC-10122  cmpdi A Min. Rules Company 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	08/2024	Cluster	Misc.				ULR No.	TC1012224000001145F	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue	16.10.2024	
Project			Sample Ref. No.	REM/BCCL/2024/08		Sampling Method	CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery		Date of Sampling	09.08.2024	26.08.2024	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	45.8	46.3	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	48.4	52.7					
3		08:00 - 09:00	49.3	54					
4		09:00 - 10:00	50.2	48.8					
5		10:00 - 11:00	51	53.9					
6		11:00 - 12:00	54.6	54.5					
7		12:00 - 13:00	54.6	54.6					
8		13:00 - 14:00	54	54.6					
9		14:00 - 15:00	54.1	54					
10		15:00 - 16:00	53.5	52.2					
11		16:00 - 17:00	52.4	50.8					
12		17:00 - 18:00	52.2	48.2					
13		18:00 - 19:00	51.8	50.6					
14		19:00 - 20:00	51.5	50.9					
15		20:00 - 21:00	50.2	51.8					
16		21:00 - 22:00	50.3	51.5					
		Leq Day	52.1	52.4					
1	Noise Level dB(A)Leq -Night	22:00-23:00	51.2	51.4	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	49.9	50.2					
3		00:00- 01:00	49.7	50.2					
4		01:00-02:00	49.4	49.7					
5		02:00-03:00	49.1	50.2					
6		03:00-04:00	48.7	49					
7		04:00-05:00	48.3	49					
8		05:00-06:00	49.3	49.7					
		Leq Night	49.5	50.0					
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit									
Sampling Assistants		 (Gaurav Kant) ANALYSED BY REVIEWED BY				 (Amit Raj Mishra) 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									



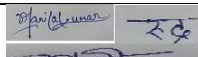
CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Air Quality Test Report

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

Test Report for Ambient Air Samples

Month & Year		07/2024	Cluster	Misc.				ULR No.		TC1012224000001059F	
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue		23.09.2024	
Project		Patherdih Washery :Industrial Area		Sample Ref. No.	REM/BCCL/2024/07	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)			
Date of Sampling		15.07.2024		30.07.2024	Period of Analysis	15.07.2024	20.09.2024	Zone of Station:		CORE ZONE	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009			
			1st FN	2nd FN							
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	99	141	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100			
2	PM _{2.5}	IS -5182(Part 24):2019	43	72	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60			
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss	80			
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	30	28	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80			

**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,


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

 CMPDI <i>A Mine Related Company</i> 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	07/2024	Cluster	Misc.	Customer				Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)	ULR No.	TC1012224000001093F
Project			Sample Ref. No.	REM/BCCL/2024/07		Sampling Method	CMPDI/RI-II/LPM 22			
Sampling Stations	i	Pathardih Washery			Date of Sampling	15.07.2024	30.07.2024	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	48.3	48.8	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	50.9	55.6						
3		08:00 - 09:00	52.1	56.9						
4		09:00 - 10:00	52.9	51.3						
5		10:00 - 11:00	53.8	56.7						
6		11:00 - 12:00	57.5	57.4						
7		12:00 - 13:00	57.5	57.5						
8		13:00 - 14:00	56.9	57.5						
9		14:00 - 15:00	57	56.9						
10		15:00 - 16:00	56.3	55.1						
11		16:00 - 17:00	55.3	53.6						
12		17:00 - 18:00	55.1	50.7						
13		18:00 - 19:00	54.6	53.4						
14		19:00 - 20:00	54.2	53.7						
15		20:00 - 21:00	52.9	54.5						
16		21:00 - 22:00	53	54.2						
		Leq Day	54.9	55.3						
1	Noise Level dB(A)Leq -Night	22:00-23:00	47.9	50.1	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	42.1	42.3						
3		00:00- 01:00	41.8	42.3						
4		01:00-02:00	41.5	41.8						
5		02:00-03:00	41.3	42.3						
6		03:00-04:00	45.6	45.8						
7		04:00-05:00	45.3	45.8						
8		05:00-06:00	45.1	45.5						
		Leq Night	42.6	43.0						

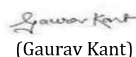
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit

Sampling Assistants ANALYSED BY  (Gaurav Kant) REVIEWED BY	 (Amit Raj Mishra) 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

 cmpdi <i>A Mini Ratna Company</i>		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in	
Test Report for Ambient Air Samples							
Month & Year	06/2024	Cluster	Misc.			ULR No.	TC101222400000867F
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	22.08.2024
Project	Patherdih Washery :Industrial Area	Sample Ref. No.	REM/BCCL/20 24/06	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)	
Date of Sampling	12.06.2024	26.06.2024	Period of Analysis	12.06.2024	25.07.2024	Zone of Station:	CORE ZONE
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)
			1st FN A2226	2nd FN A2274			NAAQS, 2009
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	95	135	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300
2	PM _{2.5}	IS -5182(Part 24):2019	56	72	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	29	30	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120
<i>**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,</i>							
 ANALYSED BY		 (Gaurav Kant) REVIEWED BY		 (Amit Raj Mishra) 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							

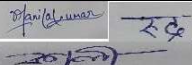
 cmpdi A Miniratna Company CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in									
Month & Year	06/2024	Cluster	Misc.				ULR No.	TC101222400000901F	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue	22.08.2024	
Project			Sample Ref. No.	REM/BCCL/2024/06		Sampling Method	CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery		Date of Sampling	12.06.2024	26.06.2024	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	42.9	43.4	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	45.3	49.4					
3		08:00 - 09:00	46.3	50.6					
4		09:00 - 10:00	47.1	45.6					
5		10:00 - 11:00	47.8	50.5					
6		11:00 - 12:00	51.1	51					
7		12:00 - 13:00	51.1	51.1					
8		13:00 - 14:00	50.6	51.1					
9		14:00 - 15:00	50.7	50.6					
10		15:00 - 16:00	50	48.9					
11		16:00 - 17:00	49.1	47.6					
12		17:00 - 18:00	48.9	45.1					
13		18:00 - 19:00	48.6	47.4					
14		19:00 - 20:00	48.1	47.7					
15		20:00 - 21:00	47.1	48.5					
16		21:00 - 22:00	47.1	48.1					
		Leq Day	48.7	49.1					
1	Noise Level dB(A)Leq -Night	22:00-23:00	49.9	50.1	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	48.8	49.1					
3		00:00- 01:00	48.5	49.1					
4		01:00-02:00	48.2	48.5					
5		02:00-03:00	47.9	49.1					
6		03:00-04:00	47.6	47.8					
7		04:00-05:00	47.2	47.8					
8		05:00-06:00	48.1	48.5					
		Leq Night	48.3	48.8					
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit									
Sampling Assistants ANALYSED BY			 (Gaurav Kant) REVIEWED BY			 (Amit Raj Mishra) 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									

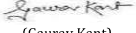


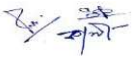
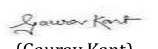
CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
Environment Laboratory, Regional Institute-II
Ambient Air Quality Test Report

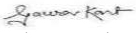
CMPDI, RI-II
 KOYLA BHAWAN COMPLEX
 DHANBAD. -826005
 Phone:0326-223-850
 email: rdri2cmpdi@coalindia.in

Test Report for Ambient Air Samples

Month & Year		05/2024	Cluster	Misc.			ULR No.	TC101222400000811F
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	10.07.2024
Project		Patherdih Washery :Industrial Area	Sample Ref. No.	REM/BCCL/20 24/05	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)	
Date of Sampling		04.05.2024	18.05.2024	Period of Analysis	04.05.2024	24.06.2024	Zone of Station:	CORE ZONE
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009
			1st FN A2090	2nd FN A2142				
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	109	99	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100
2	PM _{2.5}	IS -5182(Part 24):2019	52	37	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss	80
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	30	31	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80
<i>**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,</i>								
 ANALYSED BY		 (Gaurav Kant) REVIEWED BY		 (Amit Raj Mishra) 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								

 cmpdi A Minis Ratna Company 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	05/2024	Cluster	Misc.					ULR No.	TC101222400000845F
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)							Date of Issue	10.07.2024
Project		Sample Ref. No.	REM/BCCL/2024/05			Sampling Method	CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery	Date of Sampling		04.05.2024	18.05.2024	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	48.9	49.4	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	51.5	56.2					
3		08:00 - 09:00	52.8	57.6					
4		09:00 - 10:00	53.6	51.9					
5		10:00 - 11:00	54.4	57.5					
6		11:00 - 12:00	58.2	58.1					
7		12:00 - 13:00	58.2	58.2					
8		13:00 - 14:00	57.6	58.2					
9		14:00 - 15:00	57.7	57.6					
10		15:00 - 16:00	57	55.7					
11		16:00 - 17:00	55.9	54.2					
12		17:00 - 18:00	55.7	51.3					
13		18:00 - 19:00	55.3	54					
14		19:00 - 20:00	54.8	54.3					
15		20:00 - 21:00	53.6	55.2					
16		21:00 - 22:00	53.7	54.8					
		Leq Day	55.6	55.9					
1	Noise Level dB(A)Leq -Night	22:00-23:00	50.2	50.4	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	49.3					
3		00:00- 01:00	48.7	49.3					
4		01:00-02:00	48.4	48.7					
5		02:00-03:00	48.1	49.3					
6		03:00-04:00	47.8	48					
7		04:00-05:00	47.4	48					
8		05:00-06:00	48.3	48.7					
		Leq Night	48.5	49.0					
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit									
Sampling Assistants ANALYSED BY  (Gaurav Kant) REVIEWED BY  (Amit Raj Mishra) 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									

 cmpdi <i>A Mini Ratna Company</i>		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in		
Test Report for Ambient Air Samples								
Month & Year	04/2024	Cluster	Misc.			ULR No.		
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)				Date of Issue	10.06.2024		
Project	Patherdih Washery :Industrial Area	Sample Ref. No.	REM/BCCL/20 24/04	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)		
Date of Sampling	03.04.2024	18.04.2024	Period of Analysis	03.04.2024	21.05.2024	Zone of Station:	CORE ZONE	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009
			1st FN A1986	2nd FN A2038				
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	103	94	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100
2	PM _{2.5}	IS -5182(Part 24):2019	49	35	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	12	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss	80
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	32	34	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80
**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,								
 ANALYSED BY		 REVIEWED BY (Gaurav Kant)		 Authorised Signatory (Amit Raj Mishra)				
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								

 cmpdi A Mine Rules Company CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD, -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in										
Month & Year	04/2024	Cluster	Misc.					ULR No.		
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)								Date of Issue	10.06.2024
Project		Sample Ref. No.	REM/BCCL/2024/04			Sampling Method	CMPDI/RI-II/LPM 22			
Sampling Stations	i	Pathardih Washery	Date of Sampling	03.04.2024	18.04.2024	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	47.7	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	50.3	54.9						
3		08:00 - 09:00	51.5	56.2						
4		09:00 - 10:00	52.3	50.7						
5		10:00 - 11:00	53.1	56.1						
6		11:00 - 12:00	56.8	56.7						
7		12:00 - 13:00	56.8	56.8						
8		13:00 - 14:00	56.2	56.8						
9		14:00 - 15:00	56.3	56.2						
10		15:00 - 16:00	55.6	54.4						
11		16:00 - 17:00	54.6	52.9						
12		17:00 - 18:00	54.4	50.1						
13		18:00 - 19:00	54	52.7						
14		19:00 - 20:00	53.5	53						
15		20:00 - 21:00	52.3	53.9						
16		21:00 - 22:00	52.4	53.5						
		Leq Day	54.2	54.6						
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	48.5	48.9						
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit										
Sampling Assistants ANALYSED BY			 (Gaurav Kant) REVIEWED BY			 (Amit Raj Mishra) 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										



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

(Dae Singh) 10.10.2022

Project Officer

5.0 MTPA Patherdih NLW Washery

Receipt

Babeta Goin
श्रीमति बाबेता गारादे 10.10.2022
पार्षद
गार्ड संख्या-49
धनबाद नगर निगम

Ministry of Environment & Forests

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

No. J-11015/240/2010-1A.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 from 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 rejects 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 (PM₁₀ 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 desilted.

(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, Bhubaneswar.

(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 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.

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} , $PM_{2.5}$, SO_2 and NO_x . 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} , $PM_{2.5}$, 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 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 HFMM, 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 Bhubaneswar.

(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 PM₁₀, PM_{2.5}, SO₂ 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 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 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.

(xiv) 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 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, Bhubaneswar – 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

0
EJ3234105711N IVR:6974323410571

CP 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,5.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

तिथि-SEPTEMBER 23 डिस्प्ले बोर्ड

इकाई का नाम तथा पता-5.0 MTPA PATHERDIH NLW COAL WASHERY

उत्पादन क्षमता-5.0 MTPA (PEAK-6.5 MTPA) वर्तमान में उत्पादन 1.42 MTPA (2022-23)

संचालन सहमति आदेश की अवधि 31-12-2025

उत्पादन अपशिष्ट की विवरणी				निपटान (disposal) की विवरणी		शेष अपशिष्ट	परिवेशीय वायु गुणवत्ता स्तर की विवरणी		
क्र.सं.	प्रकार / नाम	मात्रा	प्रदूषण की व्यवस्था	विधि	मात्रा	की मात्रा	PM ₁₀ /PM _{2.5}	SO ₂	NO _x
							93/51/49/2002	13/43/2002	97/43/2002

जल गुणवत्ता स्तर की विवरणी					
pH	TSS	DO	COD	BOD	oil & Grease



Serving coking coal to the nation



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

Ref: BCCL/ NLW PCW/2024-25/1188

Date: 28.09.2024

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 2023-24.

Respected Sir/ Ma'am,

Please find enclosed herewith the copy of the _____ of Environmental Statement/ Form-V in respect of 5.0 MTPA Patherdih NLW Coal Washery for FY 2023-24.

This is for your kind reference.

Thanking You,

Encl: - As above.

Yours faithfully

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 (Ws), Washery Division.
4. General Manager (Mining/Environment), Koyla Bhawan.
5. Nodal Officer (Environment), Washery Division.

ENVIRONMENTAL STATEMENT (FORM-V)

Environmental Statement of 5.0 MTPA Patherdih NLW Coal Washery for the financial year 2023-24 ended on 31st March 2024.)

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-** 27.09.2023

PART –B

Water and Raw Material Consumption

I (A) Water Consumption (In m³/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 (2022-23)	During the current financial year (2023-24)
Washed Coal	0.012 m ³ /Tonne	0.0950 m ³ /Tonne
Washed Power Coal	0.077 m ³ /Tonne	0.0902 m ³ /Tonne
Rejects	0.031 m ³ /Tonne	0.1206 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	9.69 Tonnes/Te
Raw Coal	Washed Power Coal	1.50 Tonnes/Te	1.50 Tonnes/Te
Raw Coal	Rejects	3.72 Tonnes/Te	3.72 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 (2022-23)	During the current financial year (2023-24)
1. From Process:		
Burnt Oil (Used/Spent Oil)	800 ltr.	1000 ltr.
2. From Pollution Control Facilities	NIL	NIL

PART-E
SOLID WASTES

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year (2022-23)	During the current financial year (2023-24)
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, 1974 will be regularly done and Conditions laid down in Consent to Operate granted by JSPCB will be strictly followed.
- Continuous Monitoring online PM₁₀ analyzer has been installed in the washery and also linked to the JSPCB Servers-
https://jsac.jharkhand.gov.in/pm10/Inlisted_Child.aspx?XqIeZnkvql=sRKxzpLjMjScCWHYj/rdvQVv5zjx3q4KA6WzxBJWP8NEvF3HC+ooJsAC76u8w9lwS7gVPgKC R4AtEdFj2clEU9YE3pM/itMF2wgB/+iWOEEcBto/VhRk4nTabG2IIHcWduILGfW Mig8z+upfD4GYxirKp2CNZPVVfT90unNvmY9WMGpYHeFjnpwlajEH3is34uYw SMBIYms2PqG64gWMcZO9acWyhex7QPbzyCa7H5WeoagRB2uUIFmDG/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.


28/09/24
Project Officer
5.0 MTPA Patherdih NLW Washery




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

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

Test Report for Ambient Air Samples

Month & Year		03/2024	Cluster	Misc.				ULR No.		TC1012224000000648F	
Customer		Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue		14.05.2024	
Project		Patherdih Washery :Industrial Area		Sample Ref. No.	REM/BCCL/2024/03	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)			
Date of Sampling		06.03.2024		29.03.2024	Period of Analysis	06.03.202415.04.2024		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		
			1st FN	2nd FN							
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	51	38	10 µg/m³ - 1000 µg/m³	10 µg/m³	300		100		
2	PM _{2.5}	IS -5182(Part 24):2019	108	96	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	21	06 µg/m³ - 420 µg/m³	06 µg/m³	120		80		

**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,


ANALYSED BY


 (Gaurav Kant)
REVIEWED BY


 (Amit Raj Mishra)
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

 CMPDI A Mini Ratna Company CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in									
Month & Year	03/2024	Cluster	Misc.					ULR No.	TC101222400000682F
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)							Date of Issue	14.05.2024
Project			Sample Ref. No.	REM/BCCL/2024/03		Sampling Method	CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery		Date of Sampling		06.03.2024	29.03.2024	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	47.7	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	50.3	54.9					
3		08:00 - 09:00	51.5	56.2					
4		09:00 - 10:00	52.3	50.7					
5		10:00 - 11:00	53.1	56.1					
6		11:00 - 12:00	56.8	56.7					
7		12:00 - 13:00	56.8	56.8					
8		13:00 - 14:00	56.2	56.8					
9		14:00 - 15:00	56.3	56.2					
10		15:00 - 16:00	55.6	54.4					
11		16:00 - 17:00	54.6	52.9					
12		17:00 - 18:00	54.4	50.1					
13		18:00 - 19:00	54	52.7					
14		19:00 - 20:00	53.5	53					
15		20:00 - 21:00	52.3	53.9					
16		21:00 - 22:00	52.4	53.5					
		Leq Day	54.2	54.6					
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	48.5	48.9					
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit									
Sampling Assistants ANALYSED BY  (Gaurav Kant) REVIEWED BY  (Amit Raj Mishra) 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									

 cmpdi <i>A Mini Ratna Company</i>		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in		
Test Report for Ambient Air Samples								
Month & Year	01/2024	Cluster	Misc.			ULR No.		
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)				Date of Issue	11.03.2024		
Project	Patherdih Washery :Industrial Area	Sample Ref. No.	REM/BCCL/2024/01	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)		
Date of Sampling	04.01.2024	18.01.2024	Period of Analysis	04.01.2024	29.02.2024	Zone of Station:	CORE ZONE	
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)	NAAQS, 2009
			1st FN A1678	2nd FN A1726				
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	137	92	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300	100
2	PM _{2.5}	IS -5182(Part 24):2019	75	57	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified	60
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss	80
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	19	13	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120	80
<i>**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,</i>								
 ANALYSED BY		 REVIEWED BY (Gaurav Kant)		 Authorised Signatory (Amit Raj Mishra)				
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								

 cmpdi A Mini Ratna Company 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	01/2024	Cluster	Misc.					ULR No.		
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)								Date of Issue	11.03.2024
Project		Sample Ref. No.	REM/BCCL/2024/01			Sampling Method		CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery		Date of Sampling		04.01.2024	18.01.2024	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	48.8	49.3	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	51.5	56.2						
3		08:00 - 09:00	52.7	57.5						
4		09:00 - 10:00	53.5	51.9						
5		10:00 - 11:00	54.3	57.4						
6		11:00 - 12:00	58.1	58						
7		12:00 - 13:00	58.1	58.1						
8		13:00 - 14:00	57.5	58.1						
9		14:00 - 15:00	57.6	57.5						
10		15:00 - 16:00	57	55.6						
11		16:00 - 17:00	55.9	54.1						
12		17:00 - 18:00	55.6	51.2						
13		18:00 - 19:00	55.2	53.9						
14		19:00 - 20:00	54.8	54.2						
15		20:00 - 21:00	53.5	55.1						
16		21:00 - 22:00	53.6	54.8						
		Leq Day	55.5	55.8						
1	Noise Level dB(A)Leq -Night	22:00-23:00	52.8	52.9	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	51.5	51.8						
3		00:00- 01:00	51.1	51.8						
4		01:00-02:00	50.8	51.1						
5		02:00-03:00	50.5	51.8						
6		03:00-04:00	50.2	50.4						
7		04:00-05:00	49.7	50.4						
8		05:00-06:00	50.7	51.1						
		Leq Night	51.0	51.5						
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit										
Sampling Assistants		 (Gaurav Kant) ANALYSED BY REVIEWED BY		 (Amit Raj Mishra) 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										

  		CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Air Quality Test Report				CMPDIL, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in	
Test Report for Ambient Air Samples							
Month & Year	02/2024	Cluster	Misc.			ULR No.	TC1012224000000594F
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)					Date of Issue	30.03.2024
Project	Patherdih Washery :Industrial Area	Sample Ref. No.	REM/BCCL/2024/02	Sampling Method		CMPDI/RI-II/LPM 11 , (IS 5182)	
Date of Sampling	10.02.2024	21.02.2024	Period of Analysis	10.02.2024	15.03.2024	Zone of Station:	CORE ZONE
Sl. No.	Parameter	Method of Analysis	Observed Values (in $\mu\text{g}/\text{m}^3$)		Range Of Testing	LDL	MoEF Standards Notification dated 25th September,2000 (GSR 742 E)
			1st FN	2nd FN			NAAQS, 2009
1	PM ₁₀	IS -5182(Part 23):2006, R-2017	137	144	10 $\mu\text{g}/\text{m}^3$ - 1000 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	300
2	PM _{2.5}	IS -5182(Part 24):2019	66	68	10 $\mu\text{g}/\text{m}^3$ - 400 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	Not Specified
3	SO ₂	IS-5182(Part-2): 2001 , R-2017	<10	<10	10 $\mu\text{g}/\text{m}^3$ - 1050 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$	120sss
4	NO ₂	IS-5182 (Part-6): 2006 , R-2017	20	21	06 $\mu\text{g}/\text{m}^3$ - 420 $\mu\text{g}/\text{m}^3$	06 $\mu\text{g}/\text{m}^3$	120
**All units are in $\mu\text{g}/\text{m}^3$, 24 hourly Average, * LDL indicates Lower Detection Limit,							
 ANALYSED BY		 (Gaurav Kant) REVIEWED BY		 (Amit Raj Mishra) 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							

  cmpdi <i>A Min. Rules Company</i> CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED Environment Laboratory, Regional Institute-II Ambient Noise Level Test Report CMPDI, RI-II KOYLA BHAWAN COMPLEX DHANBAD. -826005 Phone:0326-223-850 email: rdri2cmpdi@coalindia.in									
Month & Year	02/2024	Cluster	Misc.				ULR No.	TC1012224000000628F	
Customer	Environment Department, Bharat Coking Coal Limited (BCCL), Koyla Bhawan, Dhanbad (E-mail: gmenv.bccl@coalindia.in)						Date of Issue	30.03.2024	
Project			Sample Ref. No.	REM/BCCL/2024/02		Sampling Method	CMPDI/RI-II/LPM 22		
Sampling Stations	i	Pathardih Washery		Date of Sampling		10.02.2024	21.02.2024	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	47.7	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	50.3	54.9					
3		08:00 - 09:00	51.5	56.2					
4		09:00 - 10:00	52.3	50.7					
5		10:00 - 11:00	53.1	56.1					
6		11:00 - 12:00	56.8	56.7					
7		12:00 - 13:00	56.8	56.8					
8		13:00 - 14:00	56.2	56.8					
9		14:00 - 15:00	56.3	56.2					
10		15:00 - 16:00	55.7	54.3					
11		16:00 - 17:00	54.6	52.9					
12		17:00 - 18:00	54.3	50					
13		18:00 - 19:00	53.9	52.7					
14		19:00 - 20:00	53.5	53					
15		20:00 - 21:00	52.3	53.8					
16		21:00 - 22:00	52.4	53.5					
		Leq Day	54.2	54.6					
1	Noise Level dB(A)Leq -Night	22:00-23:00	51.6	51.7	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	50.3	50.6					
3		00:00- 01:00	49.9	50.6					
4		01:00-02:00	49.6	49.9					
5		02:00-03:00	49.3	50.6					
6		03:00-04:00	49	49.2					
7		04:00-05:00	48.6	49.2					
8		05:00-06:00	49.5	49.9					
		Leq Night	49.8	50.3					
**All noise measurements are integrated for a 01 hour period, All units in dB(A) *LDL indicates Lower Detection Limit									
Sampling Assistants		 (Gaurav Kant) ANALYSED BY				 (Amit Raj Mishra) 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									

Modified Annual CSR Action Plan for FY 2024-25								
Approval status	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
Action plan	1	Skill Development Program by National Skill Development Council (NSDC) (Loader Operator (Mining), Mine Electrician, Multi Skill Technician (Electrical), Customer Service Associate (Financial Services), Food & Beverage Service – Associate, Solar & LED Technician (Electronics) & door to door survey for need assessment (next phase of work of FY 2023-24) (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	358.53	NSDC	1. Civil & Electrical jobs of the two training centres- Oct & Nov 2024 2.Training- Nov/2024 onwards	NSDC	Benefit to 660 students . Impact assessment not mandatory as minimum average CSR obligation of Rs. 10 crore or more in the immediately preceding 3 financial years does not apply.
Action plan	2	Skill Development Program for 75 candidates through MSME Toolroom, Kolkata (Ministry of MSME) on the trades Asst. Operator (CNC Turning), Jr. Technician (Welding), Technician CNC Machining (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	81.78	MSME Toolroom, Kolkata	1. Selection of candidates complete. 2.Six months training to start from Sept'2024 onwards.	MSME Toolroom, Kolkata	Benefit to 75 candidates
In principle	3	Skill Development Program through CIPET, Ranchi for 200 candidates (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	170.00	CIPET, Ranchi	1.Selection of candidate complete 2.Six months training to start from Sept'2024 onwards.	CIPET, Ranchi	Benefit to 200 students primarily PAPs . Impact assessment not mandatory as minimum average CSR obligation of Rs. 10 crore or more in the immediately preceding 3 financial years does not apply.
In principle	4	Skill Development training program on Medical Equipment Technician for 150 candidates (Skill training on health) (HQ)	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.	46.95	Implementing Agency	1.Selection of implementing agency- Sep'2024 2. Selection of candidate & onboarding- Oct'2024 3.Training completion- six months	Implementing Agency	Benefit to 150 candidates
Action plan	5	Development of Strategic Interventions through Innovative Techniques to Promote STEM Education among underprivileged students with special emphasis on PAP (Project Affected Person) students in Dhanbad (HQ)	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.	10.00	IIT-ISM	1. Signing of MoU- Complete 2.Project initiation- Sep'2024	IIT-ISM	Targetting 1500 students
Action plan	6	Construction of Auditorium at Law College, Dhanbad (work of FY 2023-24) (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	28.00	BCCL	1. Work order issued 2. Work completion- Feb'2024	BCCL	Benefit to approximately 500 students
New	7	Providing 200 wireless sets and 1000 barricades through depository mode to Dhanbad District Administration (HQ)	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.	227.00	BCCL	1. Deposition of amount with District administration: 3 days within approval 2. Work execution: 2 months	Dhanbad district administration	Benefit to populace of Dhanbad. Impact assessment not mandatory

In principle	8	Installation of Smart Classrooms and Information and Communication Technology (ICT) Labs in Government schools of Dhanbad district (HQ)	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.	1069.48	EdCIL (India) Ltd.	1. MoU signed 2. Work execution: 3 months	EdCIL (India) Ltd.	Benefit to approximately 800 students of Dhanbad district. Impact assessment not mandatory
	9	Installation of smart classes in Schools of Giridih district (HQ)	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.	180.21	Implementing Agency	1. First Installment- Within 15 days of MoU 2. Work execution phase- 3 months	Implementing Agency	Benefit to approximately 5000 students. Impact assessment not mandatory
	10	Installation of statue of Bhagwan Birsa Munda (HQ)	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 arts and handicrafts	13.00	BCCL	1. Procurement: complete 2. Installation- Nov-2024	BCCL	Targetting residents of Dhanbad
	11	Construction of Multi Purpose Hall with kitchen & boring at Bhelatand (HQ)	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. Rural development	46.20	BCCL	1. Estimate preparation-prepared,technical vetting complete (civil part), vetting in progress for electrical part 2. Approval of estimate--within 1 month after approval of action plan 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion.	BCCL	Benefit to approximately 245 people
	12	Construction of 2 classrooms at Saraswati Vidya Mandir, Kurmidih, Govindpur (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	50.00	BCCL	1. Estimate preparation-prepared,technical vetting complete (civil part), vetting in progress for electrical part 2. Approval of estimate-within 1 month after approval of action plan 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion.	BCCL	Benefit to approximately 200 students
	13	Construction of 4 rooms, toilet and kitchen at Premiya Rishikesh Memorial Orphan School, Pokhariya, East Tundi (HQ)	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.	49.00	BCCL	1. Estimate preparation-prepared,technical vetting complete (civil part), vetting in progress for electrical part 2. Approval of estimate--within 1 month after approval of action plan 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion.	BCCL	Benefit to approximately 320 students

In principle	14	Construction of drain at kharnagadha (Sanitation) (Washery div.)	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.	25.48	BCCL	1. Tender call- under process 2. 25% Payment- 30 days after award. 3. 50% Payment- 60 days after award. 4. 100% Payment- 90 days after award. 5. Project may be handed over within 10 days after completion. 6. Work execution phase: 3 months	BCCL	Benefit to approximately 1000 persons
	15	Construction of ghat in Khodo river at Gram Panchayat Tundu (Jhajlitand and Sagriyadh) (Barora Area)	Rural development	29.01	BCCL	1. Estimate preparation-prepared 2. Approval of estimate-Under process 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. 9. Work execution phase: 3 months	BCCL	Benefit to approximately 3000 persons
Action plan	16	Financial assistance to Dhanbad district administration for depository mode procurement of wheelchairs (tricycles) (485 nos.) (HQ)	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.	48.99	BCCL	Complete	BCCL	Targetting elderly and PWDs during election and PWDs post election
Action plan	17	Financial assistance to Dhanbad District Administration for depository mode procurement for providing food and other necessary items to Polling teams/sector magistrate etc. during Lok Sabha Elections 2024. (HQ)	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.	12.00	BCCL	Complete	BCCL	Targetting a large number of beneficiaries and overall community
In principle	18	Making available food, water & other necessary items for general populace during visit of Dhanbad by Hon'ble Chief Minister, under CSR head of BCCL (HQ)	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.	15.00	BCCL	Complete	BCCL	Targetting a large number of beneficiaries and overall community
		Contingent head		100.00				
				2560.63				
In principle	1	Construction of community park at Barmasiya Mouja under AMP Colliery (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. 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	390.59	BCCL	1. Tender floated 2. Work execution phase: March/2024	BCCL	Benefit to approximately 10000 persons Impact assessment not mandatory
	2	Infrastructure upgradation work in Chungari Free Primary School, Barakar (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. Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	45.00	BCCL	1. Estimate preparation-prepared 2. Approval of estimate-under approval 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. 9. Work execution phase: 5 months	BCCL	Benefit to approximately 160 students

In principle	3	Upgradation of school building at Utkramit Madhya Vidyalaya, Laikdih, Chirkunda (CV Area)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	50.00	BCCL	1. Estimate preparation & approval- under process 2. Approval of estimate-within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. 9. Work execution phase: 5 months	BCCL	Benefit to approximately 191 students
	4	Upgradation of Blind School, Dhanbad (HQ)	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.	36.00	BCCL	1. Estimate preparation-prepared, under approval 2. Approval of estimate-within 1 month 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. Work execution phase: 3 months	BCCL	Targetting blind students of the School
	5	Desilting/deepening of Lal Bandh Pond and rehabilitation of adjoining embankment around it at Baliapur (Bastacolla 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	191.95	BCCL	1. Estimate preparation-prepared, under approval 2. Approval of estimate-within 1 month after approval of action plan and obtainment of NOC (as applicable) 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. 9. Work execution phase: 4 months	BCCL	Benefit to approximately 2000 persons Impact assessment not mandatory
	6	Infrastructure development works at Baghmara College, Baghmara, Dhanbad (Block II Area)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects. Rural development	75.00	BCCL	1. Estimate preparation-prepared 2. Approval of estimate-under process 3. Tender call-with in 5 days of estimate approval 4. Award of work-with in 60 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion. 9. Work execution phase: 2 months	BCCL	Benefit to approximately 1427 persons
	7	Providing Diagnostic BERA Machine and Solar Power installation at Pehela Kadam School (HQ)	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.	24.00	BCCL	1. Estimate preparation: prepared for solar 2. Procurement: 03 months 3. Installation & completion: 1 month	BCCL	Benefit to approximately 50 students per year
Action plan	8	Providing gas cylinders, utensils for kitchen and for storage at Carmel Bal Vihar Trust, Kagalnagar, Sonari, Jamshedpur (02 year project) (HQ)	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.	15.00	Implementing Agency	1. Estimate preparation: under preparation 2. Approval of estimate: within 1 month after approval of action plan 3. Procurement: 03 months 4. Supply: 1 month to 12 months Work execution phase: 24 months	Implementing Agency	Benefit to approximately 70 children

New	9	Providing three units water purifier and one generator for Saraswati Vidyamandir Sr. Sec. School Dugdha (Washery div.)	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.	16.00	BCCL	1. Estimate preparation:prepared 2. Approval of estimate: within 1 month after approval of action plan 3. Procurement: 03 months 4. Supply: 1 month to 12 months Work execution phase: 24 months	BCCL	Benefit to approximately 100 children
New	10	Construction of boundary wall at Shibu Soren degree college, East Tundi (HQ)	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	73.00	BCCL	1. Estimate preparation:prepared 2. Approval of estimate: within 1 month after approval of action plan 3. Procurement: 03 months 4. Supply: 1 month to 12 months Work execution phase: 24 months	BCCL	Benefit to approximately 500 children
Action plan	11	Medical Camps across Areas & HQ through Mobile Medical Vans (MMV) on a Hiring Basis (03 years project, estimate of 01 year) (HQ)	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.	137.70	BCCL	1. Estimate preparation-prepared, under approval 2. Medical camps: 2024-25 Work execution phase: 12 months	BCCL	Targetting villages around operational Areas. Imapct assessment not mandatory
In principle	12	Providing two electric busses for utilization of people of Belgaria (03 years project, estimate of 01 year) (HQ)	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.	350.00	Implementing Agency	1. Estimate preparation- under preparation 2. Medical camps: 2024-25 Work execution phase: 12 months	BCCL	Targetting residents primarily of Belgaria. Imapct assessment not mandatory
				1404.24				
				3964.87				
Action plan	13	Drinking water solution through utilization of mine water (HQ)	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.	500.00	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 5 days of estimate approval 4. Award of work-with in 45 days of tender opening 5. 25% Payment- 30 days after award. 6. 50% Payment- 60 days after award. 7. 100% Payment- 90 days after award. 8. Project may be handed over within 10 days after completion.	Implementing Agency/BCCL	Benefit to approximately 5000 people. Impact assessment not mandatory