



A Maharatna company

एनटीपीसी लिमिटेड

(भारत सरकार का उद्यम)

**NTPC Limited**

(A Govt. of India Enterprise)

चट्टी बरियातु कोयला खनन परियोजना  
Chatti Bariatu Coal Mining Project

Ref. No. Ref: 1079/CBCMP/EMG/2023/Dec/02

Date: 09.12.2023

To,  
The Deputy Director General of Forests (C)  
MoEF & CC, Integrated Regional Office,  
2<sup>nd</sup> Floor, Headquarter Jharkhand State Housing Board  
Harmu Chowk, Ranchi (Jharkhand)-834002

Dear Sir,

**Sub: Six-monthly progress report on compliance of conditions stipulated in the Environmental Clearance (EC) by MoEF & CC and monitoring report for the period April 2023 to September 2023 for NTPC Ltd.- Chatti Bariatu Coal Mining Project (7 MTPA): Reg.**

Ref1: EC letter No. J-11015/133/2007-IA.II(M) dated 19.04.2010

Ref2: EC Amendment letter No. J-11015/133/2007-IA.II(M) dated 01.12.2020

\*\*\*

With reference to the above subject please find enclosed herewith the six-monthly status report on compliance of various conditions in the Environment Clearance accorded to **NTPC Ltd.- Chatti Bariatu Coal Mining Project (7 MTPA)** for the period **April 2023 to September 2023**. The monitoring reports on fugitive emission, effluent quality, ambient air quality, ground and surface water quality, noise monitoring data etc. are also enclosed with the report.

This is for your kind information please.

Thanking you.

Yours Faithfully,

अनिल कुमार सोनी / ANIL KUMAR SONI  
अपर महासंचयक (उत्कृष्टी सेवा) / AGM(TS)  
एनटीपीसी लिमिटेड / NTPC Limited  
चट्टी बरियातु कोयला खनन परियोजना / CBCMP  
हजारीबाग / Hazaribag

*Anil Kumar Soni*

[Anil Kumar Soni]  
AGM, P&S  
CBCMP, NTPC Ltd.

Encl: A/a

Copy to:

1. **Sc. E & Regional Director, Kolkata**, Central Pollution Control Board, Southern Conclave, Block 502, 5<sup>th</sup> & 6<sup>th</sup> Floors, Rajdhanga Main Road, **Kolkata-700107 (W.B.)**. E-mail: [mkbiswas.cpcb@nic.in](mailto:mkbiswas.cpcb@nic.in)
2. **Regional Officer**, Jharkhand State Pollution Control Board, PTC Chowk, Hazaribagh, Jharkhand. E-mail: [jspcb.hazaribagh@rediffmail.com](mailto:jspcb.hazaribagh@rediffmail.com)
3. **Member Secretary**, Jharkhand State Pollution Control Board, Ranchi-834004 (Jharkhand). E-mail: [ranchijspcb@gmail.com](mailto:ranchijspcb@gmail.com)

चट्टी बरियातु कोयला खनन परियोजना, सिकरी साइट कार्यालय, बड़कागाँव, हजारीबाग - 825311 (झारखण्ड)

Chatti Bariatu Coal Mining Projects, Sikri Site Office, Barkagaon, Hazaribag-825311 (Jharkhand)

पंजीकृत कार्यालय: एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7 इन्स्टीट्यूशनल एरिया, लोधी रोड न्यू दिल्ली - 110 003, टेलीफोन नं० Tel: 011-24387333, फैक्स : / Fax : 011-24361018  
Registered Office: NTPC, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003, E-mail : [ntpc@ntpc.co.in](mailto:ntpc@ntpc.co.in), Web: [www.ntpc.co.in](http://www.ntpc.co.in)

*Pavi Kumar*



Report Period:  
April 2023- September  
2023

## Six-Monthly EC Compliance Report

**NTPC Ltd.**

**Chatti Bariatu Coal Mining Project**



**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

---

**COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE (EC) CONDITIONS**

**Period: April 2023 to September 2023**

EC Ltr. No.: J-11015/133/2007-IA. II (M) Dated 19.04.2010

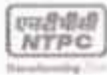
EC Ltr. No.: J-11015/133/2007-IA. II (M) Dated 03.03.2016 (Revalidation)

EC Amendment Ltr. No.: J-11015/133/2007-IA. II (M) Dated 01.12.2020



**Transforming lives**

**Chatti Bariatu Coal Mining Project, NTPC Limited,  
Hazaribagh Jharkhand.**



**N T P C Limited**  
**Chatti Bariatu Coal Mining Project (7 MTPA)**

**SIX-MONTHLY COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE**  
(PERIOD APRIL 2023 TO SEPTEMBER 2023)

**CHATTI BARIATU COAL MINING PROJECT (7 MTPA)**

MOEF & CC File No. J-11015/133/2007-1A. II (M) Dated 19.04.2010

EC Amendment Ltr. No.: J-11015/133/2007-1A. II (M) Dated 01.12.2020

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
<b>A.</b>	<b>Specific Conditions</b>	
(i).	Mining shall not be carried out in 63 ha of forestland until prior forestry clearance is obtained.	<b>Agreed and complied.</b>  Stage-II Forest Clearance for diversion of <b>128.92 ha</b> forest land involved in ML has been accorded by MoEF&CC vide letter F.No. <b>8-42/2010-FC</b> dated <b>25.11.2011</b> and revalidated by MoEF&CC vide letter dated <b>13.04.2017</b> . The copy of the Forest clearance and its revalidation letter is enclosed as <b>Annexure-01</b> .
(ii).	Topsoil of 3.07 Mm <sup>3</sup> shall be stacked properly within the earmarked area with proper slope at earmarked site(s) and shall be used concurrently for reclamation and development of green belt of its generation.	<b>Being Complied.</b>  Mining activity in Chatti Bariatu Coal Mining Project started from <b>25.04.2022</b> and topsoil is being stacked properly at earmarked separately at site within the lease area with proper protective measures. The current height of the topsoil dump is <b>11 m</b> . Photographs are enclosed as <b>Annexure-02</b> .  The topsoil shall be used concurrently for reclamation and development of green belt.
(iii).	OB shall be stacked at earmarked external OB dumpsite of an area of 38.34 ha for the initial 5 years only and shall be a maximum height of 90 m only. The ultimate slope of the dump shall not exceed 28°. Reclamation of the dumps shall be done using native species and species of economic importance. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneswar on a yearly basis.	<b>Being Complied.</b>  The mining activity in CBCMP started on <b>25.04.2022</b> and till 30.09.2023, <b>4.21</b> mill. m <sup>3</sup> of OB has been excavated. Overburden (OB) is being stacked at earmarked external OB dump site in accordance with the approved Mine plan. The current height of the OB dump is <b>25 m</b> only which will be restricted to <b>60 m</b> only as per Central Institute of Mining and Fuel Research (CIMFR) study recommendations and the slope is less than that of the <b>28°</b> .  Reclamation of the dump will be done using native species and other species of economic importance after attaining the stipulated dump height/completion of dumping activities/ finalization of dump faces.

*Pari Kumar*





**N T P C Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		The work for study of the OB dump slope stability has been awarded to M/s CSIR-CIMFR, Dhanbad, Jharkhand, which is under progress. The copy of work order and payment details enclosed as <b>Annexure-03</b> .
(iv).	A thick 3-tier plantation shall be developed between the external OB dump and habitation in the SW corner of the ML using native species and species of economic importance.	<b>Being Complied.</b>  Currently, OB is being dumped at extreme North within the mining lease. A three-tier plantation has been developed between the OB dump and habitation in the NW corner of the ML using native species and species of economic importance. Photographs have been attached as <b>Annexure-04</b> .
(v).	<p>Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB, and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.</p> <p>Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.</p>	<p><b>Being Complied.</b></p> <p>Garland drains and siltation ponds of appropriate size have been constructed to arrest silt with adequate water retention. The water so collected is being used for water sprinkling in the mine area, roads etc. The catch drains and siltation ponds are regularly desilted and maintained properly. The total length of garland drains is <b>2506 m (1161.38 m around OB dump)</b> with a width and depth of <b>1 m</b>. A total of <b>16 nos.</b> of siltation ponds have been constructed within the mine lease area.</p> <p>Garland drains have been constructed around the quarry area, dump area. The drains are ultimately connected to the siltation pond to arrest silt. The main sump is planned in the de-coaled area at dip most side of mine pit keeping in view 50% safety margin over and above peak sudden rainfall and to provide adequate retention period to allow proper settling of silt material. Water collected in the quarry area is being utilized for water sprinkling for dust suppression in the mine area roads, green belt development etc. The drains are being regularly desilted and maintained properly. Photographs enclosed as <b>Annexure-05</b>.</p>
(vi).	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.	<p><b>Agreed to comply.</b></p> <p>OB dump is in active stage and presently, the height of OB dump is <b>25 m</b> in single bench. The retaining wall at the toe of the dumps and OB benches shall be constructed having</p>

*Ravi Kumar*

**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		adequate dimensions based on the rainfall data. However, a total of <b>16</b> nos. of siltation ponds have been constructed within the mine lease area to check run-off and settling of silt.
(vii).	Drills shall be wet operated.	<b>Being Complied.</b>  Drills are provided with a water injection system and wet cutting arrangements for wet drilling operation. Also, regular water spraying is being carried out in the drilling area for minimization of fugitive dust emissions. Photographs of the same has been enclosed as <b>Annexure-06</b> .
(viii).	Controlled blasting shall be practiced only during daytime with the use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	<b>Being Complied.</b>  Blasting is being carried out as per the blast design report prepared by M/s CIMFR, a GoI CSIR unit, and blasting is being done as per the recommendations. Controlled blasting techniques using delay detonators is being done during daytime to reduce the blast vibration and the fly rocks, the charge delay per hole is optimized. Blast vibration monitored data is enclosed as <b>Annexure-07</b>
(ix).	Raw coal from CHP shall be transported by closed conveyors to the railway siding and from there to linked Barh STPS by rail. There shall be no road transportation of coal.	<b>Agreed to comply.</b>  Raw coal from CHP is proposed to be transported by closed conveyors to the railway siding and from there to linked Barh STPS by rail for which dedicated conveyor system to the railway siding is under construction.  In view of delay in completion of conveyor system, amendment in Environmental Clearance has been accorded from MoEF&CC vide letter dated <b>01.12.2020</b> for transportation of coal by road from mine end as an interim arrangement for three years by adopting all mitigation measures like covering the dispatch trucks with tarpaulin. Presently the coal is being transported by covered trucks. Photographs of the same is enclosed as <b>Annexure-08</b> .
	Amendment vide letter no. <b>J-11015/133/2007-IA, II (M)</b> Dated <b>01.12.2020</b>  Width of the road shall be at least 7 mts before the start of the transportation and necessary permission shall be taken from state PWD.	The coal is being transported through State Highway to railway sidings and North Karanpura Super Thermal Power Plant (NKSTPP) complying with the conditions.

*Paul Kumar*





**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		NTPC has carried out required strengthening and broadening of the existing village road from mine boundary to State highway. NTPC is taking up construction of alternate dedicated road corridor (2.2 Km length) from mine boundary to State Highway alignment of which is passing through GM land (5.452 acres) and Private land (~5 acres). Application for transfer of GM land is in advance stages of approval in State Administration. The expected timeline for completion of construction of alternate road is June, 2024.
	PP shall use high axle truck/dumpers (30-40 tonne capacity only) to reduce the number of fleet on road.	The trucks used for transportation of coal at NTPC- CBCMP are high axle trucks (16-wheeler with approx. 33 tonne capacity).
	Hon'ble Supreme Court in an writ Petition(s) Civil No. 114/2014. Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have disturbed due to their mining activities and restore the land to a condition fit for growth of fodder, flora, fauna, etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent".	Mine closing activities shall be done as per approved mine closure plan.  As envisaged in the mine closure plan of CBCMP, it is agreed to undertake re-grassing of the mining area and any other area which may have disturbed due to CBCMP mining activities and restore the land to a condition fit for growth of fodder, flora, fauna, etc.
	Project proponent to plant 100,000 nos. of the native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer	Approx. 4,500 plants have already been planted along coal transportation route along the boundary of mines.  Based on the NTPC request the state forest department have agreed to take up the plantation work along the coal transportation route and demand have been raised for the same vide DFO Ltr No. 3464 dated 24.06.2023. Subsequently, an amount of 4.61 Cr has been deposited with the Office of DFO on 04.09.2023 for plantation of 33,000 trees.  Further, a request has been submitted to Divisional Forest Officer (DFO) on 11.10.2023 for plantation of additional 62,500 no. of trees. Proposal from forest

*Ravi Kumar*

**NTPC Limited**  
**Chaffi Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		department is being expedited. Copy of the letters is enclosed as <b>Annexure-09</b>
(x).	<p>Crushers at the CHP shall be operated with high efficiency bag filters, water sprinkling systems shall be provided to check fugitive emissions from crushing operation conveyor system, haulage roads, transfer points, etc.</p> <p>Hoppers of the coal crushing 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 and from transportation road and at Railway Siding.</p>	<p><b>Being Complied.</b></p> <p>Crushers at CHP in the mine have been designed with effective fugitive dust control measures.</p> <p>Dust suppression, dust extraction and water sprinkling system has been installed at the mine crusher area. Photographs of crushers installed with dust mitigative measures have been attached as <b>Annexure-10</b>.</p> <p>Further, to minimize the dust generation along the coal transportation road the coal is being transported in covered trucks. Also, regular water sprinkling along the transportation route as well as Railway Siding is being done through <b>07</b> nos. of mobile water tanker. Photographs attached as <b>Annexure- 11</b>.</p>
(xi).	<p>Company's Railway Siding shall be established within 3 years from date of grant of Environmental Clearance.</p> <p>Amendment vide letter no. <b>J-11015/133/2007-IA. II (M)</b> Dated <b>01.12.2020</b></p>	<p><b>Agreed to comply.</b></p> <p>DPR for the Railway line from Urda/Khadamdari village to the linked Barh/Tanda STPP via Kharika station had been approved by Railways in 2008 and NTPC had applied for forest clearance and proceeded with land acquisition. Kharika Station was in the proposed ECR railway line from Shivpur - Hazaribagh which was later dropped as MOEF had rejected the Forest clearance for the said line.</p> <p>The alternate railway alignment for the Shivpur - Hazaribagh line viz Shivpur - Kathautia was finalized subsequently, and work started by Railways only in 2022. Accordingly, NTPC has requested Railways to connect common conveyor system from Urda village to revised alignment (Shivpur - Kathutia). The alignment and DPR is under finalization by Railways.</p> <p>Amendment in Environmental Clearance has been obtained from MoEF&amp;CC vide letter dated 01.12.2020 for transportation of coal from the mine for three years by road as an</p>

*Ravi Kumar*





**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		interim arrangement by adopting all mitigation measures.
(xii).	All approach roads shall be black topped and 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 mine and at Railway Siding. Green belt shall be developed using local species all along the periphery of the site, along the areas such as infrastructure, and at Railway Siding.	<b>Partially Complied.</b>  The permanent approach road to the mine and the internal roads within the office premises are black topped/concreted. Regular housekeeping and maintenance of the road is being done to avoid fugitive dust emissions.  Green belt using local species developed along the Northern & Western part of periphery by planting a total of <b>4750</b> nos. of trees. Apart from the above we have planted more than <b>9870</b> nos. of plants in the township and R&R Colony. Photographs enclosed as <b>Annexure-12</b> .
(xiii).	Any additional water requirement envisaged shall be obtained by recycling/reuse to the maximum extent and from rainwater harvesting measures. Recycled water shall be used for development and maintenance of green belt and in the Plant Operation.	<b>Agreed to comply.</b>  As per the NOC issued to CBCMP by CGWA the groundwater abstraction permission is <b>1412 m<sup>3</sup>/day</b> . Out of which <b>658 m<sup>3</sup>/day</b> is for freshwater and <b>754 m<sup>3</sup>/day</b> for dewatering from mine pit. However, the current consumption (from April 2023 to September 2023) of fresh groundwater is <b>19.85 m<sup>3</sup>/day</b> and consumption of dewatered mine pit water is <b>309.62 m<sup>3</sup>/day</b> ( <b>Overall including freshwater and dewatered water from mine pit- 329.47 m<sup>3</sup>/day</b> ).  Recycle and Reuse of water will be done to the maximum extent possible by establishing an ETP. The rainwater harvesting measures will be implemented at the project site.  Recycled water will be used for sprinkling, green belt development and during other mining operations.
(xiv).	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed for treatment of workshop effluents.	<b>Agreed to Comply.</b>  The industrial wastewater will be collected, analyzed, and treated conforming to the stipulated standards before final discharge on generation of industrial wastewater.  Dedicated ETP will be installed for effective treatment of the industrial effluents conforming to the prescribed statutory standards before final discharge.

*Pari Kumar*

**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
(xv).	Area brought under afforestation shall not be less than 473.44 ha which includes reclaimed external OB dump (38.34 ha), backfilled area (422.59 ha), along ML boundary (7.90 ha), along roads, infrastructure (13.07 ha), in undisturbed areas (3.11 ha), infrastructure and in colony by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.	<b>Agreed to Comply.</b>  Afforestation will be done to an extent of 473.44 ha in all the stipulated ML areas in consultation with the local DFO/State Forest Department for effective implementation. The tree density of about around 2500 plants/ha will be maintained.  A total of <b>4153</b> and <b>5717</b> plants have been planted at the R&R colony and township respectively. Photographs attached as <b>Annexure-12.</b>
(xvi).	A Progressive Closure Plan shall be implemented by reclamation of quarry area of 511.15 ha of which 422.29 ha shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. The balance 88.56 ha of decoaled area being converted into a water reservoir and gently along the upper benches and stabilized and reclaimed with plantation.	<b>Agreed to Comply.</b>  The mining operations at the project started from <b>25.04.2022</b> . An approved progressive mine closure plan is under implementation to meet specified stipulations. As per the approved mine closure plan, the reclamation of the mined-out area will be done from 4 <sup>th</sup> year and then planted with trees over it.  Also, efforts will be made to undertake adequate afforestation in the mine lease area in consultation with the local DFO/ State Forest Department.  Yearly progress report on the mine closure activity of the mine is regularly being submitted to CCO. The last report of the progressive mine closure activity report is submitted to CCO through email on <b>28.08.2023</b> . Copy of the mail attached as <b>Annexure-13.</b>
(xvii).	No fly ash from the TPP shall be used in backfilling of the void without undertaking an environmental feasibility study and without prior approval of this Ministry.	<b>Agreed to comply.</b>  No fly ash from the TPP shall be used for the purpose of backfilling of void without undertaking an environmental feasibility study and without prior approval of MoEF&CC.
(xviii).	A Conservation Plan (in-situ and ex-situ) for endangered Schedule-I and II faunal species reported in the study area and for the medicinal plants found in and around the project area shall be prepared and implemented in consultation with the State Forest and Wildlife Departments. The implementation of the various activities there under and the status thereof shall be	<b>Being Complied.</b>  For conservation of the flora and fauna found in the study area. A Wildlife conservation plan has been prepared which has been approved by Chief Wildlife Warden, GoJH vide letter ref. no. <b>34</b> Dated <b>03.08.2023</b> . Copy of approval attached as <b>Annexure-14.</b>

*Fais kumar*

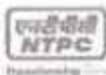




**N T P C Limited**  
**Chaffi Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
	regularly reported to this Ministry and the MOEF Regional Office, Bhubaneswar and uploaded on the company's website. The proponent shall also participate in the Regional Wildlife Conservation Plan to be prepared by the State Wildlife Department and shall also contribute financially for implementation of the RAP.	<p>For implementation of site-specific wildlife management plan prepared in line with IWLMP a total amount Rs. <b>24,46,62,678.00</b> has been deposited in Ad-hoc CAMPA account vide ref. No. <b>NC03R/2020247588/23.03.2021</b>. Copy attached as <b>Annexure -15</b>.</p> <p>Further, DFO vide letter no. 4700 dated <b>23.08.2023</b> demanded for deposition of differential amount of <b>Rs 21,78,58,322.00</b> in ad-hoc CAMPA account. The amount demanded has been deposited to the Ad-hoc CAMPA account. The payment proof has been enclosed as <b>Annexure-16</b>.</p>
(xix).	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May and in monsoon. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.	<p><b>Being Complied.</b></p> <p>Piezometer has been purchased and installed within the ML area for regular monitoring of groundwater level. Regular monitoring of groundwater level and quality is being carried out by establishing a network of existing wells at 4 nos. of locations in core and buffer zone of ML area as per stipulation. The monitored data are being submitted to Regional Office, MoEF&amp;CC at Ranchi &amp; CPCB.</p> <p>The monitoring data for the period from April 2023 to September 2023 is attached herewith as <b>Annexure-17</b>.</p>
(xx).	The levels of fluoride and TDS in drinking water shall be regularly monitored and records thereon maintained. In case the levels are found to be higher than the prescribed limits in the groundwater and mine discharge water, the project authorities shall provide drinking water to the affected villages in the impact zone.	<p><b>Being Complied.</b></p> <p>Regular monitoring of fluoride and TDS is being done in water samples collected to determine its concentration in drinking water. The records are being maintained and found to be within prescribed limits. Water test report has been enclosed as <b>Annexure-17</b>.</p> <p>Further, in case the levels are found to be higher than the prescribed limits in the groundwater and mine discharge water, the project authorities shall provide drinking water to the affected villages in the impact zone.</p>
(xxi).	The company shall put up artificial groundwater recharge measures including rainwater harvesting structures for augmentation of	<b>Agreed to Comply.</b>

*Ravi Kumar*



**NTPC Limited**  
**Chatli Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
	groundwater resource in case monitoring indicates decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	Rainwater Harvesting structures will be implemented for augmentation of ground water recharge. in the core and buffer zone. The water requirement of nearby village(s) will be met in case the village wells go dry due to dewatering of mine.
(xxii).	ETP shall also be provided for workshops, and CHP. Effluents shall be treated to conform to prescribed standards, particularly for pH and TSS in case of discharge into any watercourse within of outside the lease.	<b>Agreed to Comply.</b>  Effluents from workshop and CHP will be treated at ETP conforming to prescribed statutory standard before its final discharge into any watercourse.
(xxiii).	An STP shall be provided for the township /colony to treat the domestic effluents to prescribed standards and for their reuse in project activities.	<b>Being Complied.</b>  Sewage Treatment Plant (STP) of <b>1.5 MLD</b> capacities has been provided in R&R colony. The same is being operated and maintained as per the Standard Operating Procedure. Photographs attached as <b>Annexure-18</b> .
(xxiv).	An amount not less than Rs. 1484 lakhs as capital costs and Rs.466.88 lakhs (which shall be up scaled after adjusting for depreciation of the rupee) as revenue costs shall be provided for implementing environmental measures. The details of the activities and expenditure made thereon shall be displayed on the company's website and updated at least once in six months.	<b>Being Complied.</b>  A separate budget has been earmarked for implementing environmental measures. If needed, an additional amount shall be spent towards environmental measures implementation.  The details of activities with expenditure shall be displayed on the company's website and updated. The details of expenditure on environmental activities for <b>F.Y. 2022-23</b> have been attached as <b>Annexure-19</b> .
(xxv)	A detailed R&R plan shall be prepared and implemented in consultation with the stakeholders. R&R shall be based on norms laid down/approval by the state Government and shall not be inferior to that in the National R&R Policy and shall be completed within a specified timeframe. R&R shall include specific income generation schemes. A Corpus fund of Rs 5 crores shall be created for maintenance of the R&R colony. Annuities shall be provided for the vulnerable sections of the displaced population. Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment.	<b>Being Complied.</b>  The R&R plan has been prepared in line with Jharkhand & National R&R Policy and approved by the Govt of Jharkhand and company board. Compensation for landless project affected families is being paid as per the approved R&R policy. So far the amount has been paid for 682 acres out of 1071.90 acres. The plan which covers the stipulated conditions is under implementation.  A separate Corpus fund of Rs 5 crores will be created in future after displacement and settlement of the PAPs in R&R colony for maintenance of the R&R colony. However, till date no consent has been received from the villages for R&R colony. Annuity is already

*Pai Kumar*





**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		being provided as per the existing R&R policy to the affected persons as per their eligibility. Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment.
(xxvi)	The proponent shall provide a minimum Rs. 713 lakhs towards capital costs which includes the setting up of an ITI for Rs 600 lakhs and supporting revenue expenditure (which shall be upscaled after adjusting for depreciation of the rupee) towards activities undertaken under CSR. The details of the activities and expenditure made thereon shall be displayed on the company's website and updated at least once in six months.	<b>Being Complied.</b>  NTPC has established an Industrial Training Institute (ITI) in the name of NTPC-Mining and Industrial Training Institute (NTPC-MAITI). It is a Private Industrial Training Institute located at Dhenga village near Barkagaon Block in Hazaribagh District, Jharkhand for NTPC coal mining projects. It is registered by the Government under NCVT and has been operational since <b>2015</b> .  Under Corporate Social Responsibilities & Skill development programs NTPC want to prepare a bank of trained manpower to give employment to project affected people (PAP's), & unemployed youths from neighboring areas. This ITI has been offering three months, one year and two-year NCVT approved courses since <b>2015</b> in Fitter, Welder, and Electrician with 100% placement records. Till date <b>380</b> nos. of student get employed after passing from ITI Dhenga.
(xxvii)	For monitoring land use pattern and for post mining land use, a time series of land-use maps, based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneswar	<b>Being Complied.</b>  The project started on <b>25.04.2022</b> . The land use / land cover map based on satellite imagery before start of project activities during the month of April 2022 has been prepared and submitted on <b>01.12.2022</b> . The next study shall be conducted for the period <b>2023-25</b> .
(xxviii)	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval.	<b>Agreed to Comply.</b>  The Mine Closure Plan has been approved by the Ministry of Coal and submitted to Coal Controller, MoC. However, a final mine closure plan along with details of Corpus Fund shall be submitted to MOEF & CC for approval well in advance as per stipulation.  An <b>ESCROW</b> account has been opened and the amount is being deposited annually. <b>Rs 2.80</b> Crore have been deposited in the <b>FY</b>

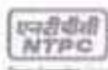
Pari Kumar

**NTPC Limited**  
**Chhatti Barlatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		2022-23 as 2 <sup>nd</sup> year Mine Closure cost. So far Rs. 5.72 Crore including interest has accrued as on 31.03.2023 in Escrow account as part of the Mine Closure cost. Details of the amount accumulated in <b>ESCROW</b> account are enclosed as <b>Annexure-20</b> .
<b>B.</b>	<b>General conditions</b>	
(i).	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	<b>Agreed to Comply.</b>  Permission from MOEF&CC will be taken in case of any change in technology and scope of work is proposed.
(ii).	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	<b>Being Complied.</b>  There will be no change in the calendar plan including quantum of mineral coal and waste generated. The peak rated coal production capacity of the mine has not yet been reached. Guidelines issued by MoEF&CC in this regard shall be strictly followed.
(iii).	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in particulates shall be carried out at least once in six months.	<b>Being Complied.</b>  Four ambient air quality monitoring stations have been established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations has been 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 particulates is being carried out once in six months. The data is being collected and analyzed by M/s. Sabz Care Env. Consultancy (P) Ltd, Madhupur, Dist.-Deoghar, Jharkhand, a laboratory having NABL accreditation and recognized by Govt of Jharkhand under EP rules, 1986. All the environmental quality parameters are found within the stipulated norms. The monitoring data report has been attached as <b>Annexure-21</b> .  Apart from the above One Continuous ambient air quality monitoring station (CAAQMS) has been installed to monitor Ambient Air Quality (AAQ) within the mining lease area near Pagar office. The data is continuously transmitted to CPCB and JSPCB

*Ravi Kumar*





**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		servers. The photographs of CAAQMS have been attached as <b>Annexure-22</b> . Link for server: <a href="https://jsac.jharkhand.gov.in/pollution/">https://jsac.jharkhand.gov.in/pollution/</a>
(iv).	Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> 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.	<b>Being Complied.</b>  Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> and heavy metals such as Hg, As, Ni, Cr, etc.) and other monitoring data is being submitted along with half yearly report to the concerned statutory authorities of MOEF&CC/ SPCB/ CPCB. Random verification of sample analysis shall be furnished.  Apart from this Ambient noise monitoring is also being done at 5 different locations in core and buffer zone. Monitoring reports enclosed as <b>Annexure-23</b> .
(v).	Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with ear plugs/muffs.	<b>Being Complied.</b>  Adequate measures are being taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. are provided with ear plugs/muffs.
(vi).	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	<b>Agreed to comply.</b>  The industrial wastewater will be collected, analyzed, and treated conforming to the stipulated standards before final discharge.
(vii).	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.	<b>Being Complied.</b>  All vehicles plying for the project are well maintained & in good working condition.  Regular pollution monitoring of all vehicles involved in mining projects is being done in order to practice controlling emission. Pollution under control certificate of a vehicle deployed in mine has been enclosed as <b>Annexure-24</b> .  Vehicles used for coal transportation are optimally loaded and covered with

Ravi Kumar

**NTPC Limited**  
**Chaffi Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
		tarpaulins. Photographs attached as <b>Annexure-07.</b>
(viii).	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.	<b>Being Complied.</b>  Monitoring of environmental quality parameters are being carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board. The data is being collected and analyzed by M/s. Sabz Care Env. Consultancy (P) Ltd, Madhupur, Dist.-Deoghar, Jharkhand, a laboratory having NABL accreditation and recognized by Govt of Jharkhand under EP rules, 1986. Copy of the monitoring data of all parameters enclosed as <b>Annexure-17, 21 &amp; 23.</b>
(ix).	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.  Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	<b>Being Complied.</b>  Initial medical examination (IME) of workers is done prior to joining the assigned task. IME of <b>424</b> workers has been done for the period from April 2023 to September 2023. Copy of one IME report has been attached as <b>Annexure-25.</b> Protective respiratory devices will be made available to personnel working in dusty areas & adequate training on safety & health will also be imparted.  A schedule will be prepared for implementation of Occupational health surveillance audit of the workers to determine the impact due to exposure to dust and take appropriate corrective action if required.
(x).	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.	<b>Complied.</b>  A Separate Environmental Management Cell (EMC) with suitable qualified personnel has been established and it is under supervision of senior executive directly reporting to Head of the Coal Mining Projects. The organizational structure chart has been enclosed as <b>Annexure-26.</b>
(xi).	The funds earmarked for environmental protection measures shall be kept in a separate account and shall not be diverted for other purposes. Year-wise expenditure shall be	<b>Agreed to comply.</b>  The requisite funds for environmental mitigation measures have been included in the project cost.

*Pavi Kumar*





**NTPC Limited**  
**Chatti Bariatu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
	reported to this Ministry and its Regional Office at Bhubaneswar.	<p>The financial provision stipulated towards environmental mitigative measures will not be diverted for other proposes.</p> <p>Also, year-wise expenses detail for environmental protection measure will be submitted to the Regional Office of MoEF &amp; CC at Ranchi on completion of the financial year. The details of expenditure on environmental activities for F.Y. 2022-23 have been attached as <b>Annexure-19</b>.</p>
(xii).	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.	<p><b>Complied.</b></p> <p>Advertisements of EC have been published in three local Papers widely circulated in Jharkhand namely.</p> <ol style="list-style-type: none"><li>1. Times of India, dt. <b>25.04.2010</b>, Ranchi.</li><li>2. The Hindustan (Hindi), <b>25.04.2010</b>, Ranchi.</li><li>3. Prabhat Khabar (Hindi), <b>24.04.2010</b>, Ranchi.</li></ol>
(xiii).	A copy of the Environmental Clearance letter shall be marked to concerned Panchayat /Zila Parishad, Municipal Corporation or Urban Local Body and 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.	<p><b>Complied.</b></p> <p>A copy of the EC letter has been sent to the office of Zila Parishad, Municipal Corporation and other concerned local authorities.</p> <p>The EC letter has also been uploaded on the company's website.</p>
(xiv).	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.	<p><b>Complied.</b></p> <p>Copy of EC letter was sent to office of District Industry Centre (DIC), District Collector for display.</p> <p>A copy of the EC had also been forwarded to JSPCB and the Regional office for display.</p>
(xv).	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, PM2.5, SO2 and NOx (ambient and stack if any) and critical sectoral parameters shall also be displayed at	<p>The environmental clearance letter has been uploaded on the NTPC website. The compliance status of the stipulated EC conditions shall also be uploaded on NTPC's website.</p> <p>The monitored data of environmental quality will be displayed at the entrance of the mine office and on the company website during the operation phase of the mine block.</p>

Ravi Kumar

**NTPC Limited**  
**Chhatti Bariafu Coal Mining Project (7MTPA)**

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 30.09.2023
	the entrance of the project premises and mines office and in corporate office and on the company's website.	
(xvi).	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.	<b>Being Complied.</b>  The six-monthly compliance report is submitted regularly to the concerned statutory authority. The last EC compliance report was submitted on <b>20.06.2023</b> vide letter reference no. <b>1079/CBCMP/EMG/2022/F-12/326.</b>
(xvii).	The regional office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the office(s) of the Regional Office by furnishing the requisite data /information /monitoring reports.	<b>Agreed to comply.</b>  Full co-operation shall be extended by the project authorities to the officers of the Ministry/Regional Office during their inspection/ visit.
(xviii).	The environmental statement for each financial year ending 31 <sup>st</sup> 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.	<b>Being Complied.</b>  The environmental statement for each financial year is being submitted to the Jharkhand State Pollution Control Board and Regional office of MOEF in the prescribed Form V and the same shall also be uploaded on NTPC website along with the status of compliance of EC conditions. The last Environment Statement in Form-V was submitted on <b>27.09.2023</b> vide letter reference no. <b>NTPC/1079/CBCMP/ENV/MIN/193.</b> Copy of the mail attached as <b>Annexure-27.</b>

*Fari kumar*



F. No. 8-42/2010-FC  
Government of India  
Ministry of Environment and Forests  
(FC Division)

Paryavaran Bhawan, CGO Complex,  
Lodhi Road, New Delhi - 110510  
Dated: 2<sup>nd</sup> February, 2011

To

The Principal Secretary (Forests),  
Government of Jharkhand,  
Ranchi.

**Sub: Diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in favour M/s NTPC in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand.**

Sir,

I am directed to refer to the State Government's letter no. 3 / VanBhumi - 33 / 2010 / 2154 / VP dated 17.06.2010 on the subject mentioned above seeking prior approval of the Central Government under section-2 of the Forest (Conservation) Act, 1980 and to say that the proposal has been examined by the Forest Advisory Committee constituted by the Central Government under section-3 of the said Act.

After careful examination of the proposal of the State Government, the Central Government hereby conveys the recommendations of the Forest Advisory Committee for diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in favour M/s NTPC in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand subject to fulfillment of the following conditions:

1. (i) The Compensatory Afforestation (CA) will be raised and maintained over double the degraded forest land i.e.  $128.92 \times 2 = 258$  ha at the cost of User Agency.  
(ii) The User Agency will submit the details of area identified for Compensatory Afforestation on SOI toposheet of 1:50,000 scale.  
(iii) The User Agency shall transfer the cost (incorporating the current wage structure) of raising and maintaining Compensatory Afforestation to the Adhoc CAMPA through State Forest Department.
2. Fencing, protection and regeneration of the safety zone area (7.5 metre strip all along the outer boundary of the mining lease area), wherever feasible, shall be done at the project cost. Besides this, afforestation on degraded forest land, to be selected elsewhere, measuring one and a half times the area under safety zone shall also be done at the project cost.
3. The following activities shall be undertaken by the User Agency under supervision of the State Forest Department at the project cost:
  - (i) Proper mitigative measures to minimize soil erosion and choking of streams shall be prepared and implemented.
  - (ii) Planting of adequate drought hardy plant species and sowing of seeds to arrest soil erosion.
  - (iii) Construction of check dams, retention/toe walls to arrest sliding down of the

*For*

excavated material along the contour.

(iv) The top soil management plan should be strictly adhered to.

4. Wherever possible and technically feasible, the User Agency shall undertake by involving local community, the afforestation measures in the blanks within the lease area, as well as along the roads outside the lease area diverted under this approval, in consultation with the State Forest Department at the project cost.
5. The State Government shall charge the Net Present Value of the forest area diverted under this proposal from the User Agency as per the Judgement of the Hon'ble Supreme Court of India dated 28.03.2008 & 09.05.2008 in IA No. 566 in WP (C) No. 202/1995 and as per the guidelines issued by this Ministry vide letter No. 5-3/2007-FC dated 05.02.2009 in this regard.
6. The User Agency shall furnish an undertaking to pay the additional NPV, if so determined, as per the final decision of Hon'ble Supreme Court of India.
7. All the funds received from the User Agency under the project shall be transferred to Ad-hoc CAMPA in account number CA 1587 of Corporation Bank, Block-11, CGO Complex, Phase-I, Lodhi Road, New Delhi - 110 510.
8. The period of diversion under this approval shall be twenty (20) years or coterminous with the mining lease subject to possession of valid lease by User Agency under the MMDR Act, 1957.
9. Any tree felling shall be done only when it is unavoidable under strict supervision of the State Forest Department.
10. No damage to the flora and fauna of the area shall be caused.
11. No labour camps shall be set up inside the forest area.
12. The user agency shall provide fuel wood preferably alternate fuel to the labourers working at the site to avoid damage / felling of trees.
13. The user agency will obtain Environmental clearance and any other clearances required for such project.
14. The user agency will assist the State Government in conservation and preservation of flora and fauna of the area in accordance with the plan prepared by the Chief Wildlife Warden of the State.
15. The Project Proponent to give an undertaking to contribute proportionately for the regional wildlife management plan which is under preparation.
16. The forest land shall not be used for any purpose other than that specified in the proposal.
17. The User Agency will ensure the dumping of OB as per the plan and will submit the duly approved phased Reclamation plan along with the compliance report.
18. The Project Proponent shall explore the possibility of setting up of Vocational Training Institutes in the area for training the local youths and employing them in

Raw



their operations for some minimum time period as part of its CSR.

19. The Project Proponent shall earmark 1% of the market price of total coal produced deposit with the State Forest Department for the protection and development of forest and wildlife of the area as part of the CSR.
20. The Project Proponent shall also bear the cost of depredation of crops by wild elephants, if any, and if required, shall make arrangement for water and food for the migrating elephants at an alternate area.
21. The Project Proponent shall explore the possibility of sparing 100-150 m wide strip from diverted forest land on the northern side of its mines in the region for Rail line project, if geologically & geographically feasible and envisaged by the Railways.
22. The user agency will obtain the clearance under the provisions of ST&OTFD (Recognition of Forest Rights) Act, 2006 before the final approval and will submit certificate towards the settlement of all claims and rights over the proposed forest land under the Act along with the as per the advisory dated 03.08.2009 issued by MoEF.
23. The user agency shall set up a full fledged Social Welfare Division to track and monitor the future conditions of all the project displaced, affected persons including landless persons and report on the social & economic condition of these people & the impact of the project, as well as take all possible measures to compensate them for any loss in economic and social well-being and livelihood sustainability.
24. The user agency will provide permanent vehicular mobility to the Regional Office, Bhubaneswar for periodic monitoring of the projects already existing and those are coming up in the area.
25. The User agency will reclaim and surrender all areas which were handed over to them 20 years back.
26. Any other condition that the CCF (Central), Regional Office, Bhubaneswar, may impose from time to time for protection and improvement of flora and fauna in the forest area, shall also be applicable.

After receipt of the compliance report on fulfillment of the conditions mentioned above, the Central Government shall consider the handing over of forest land for non-forest purposes under section-2 of the Forest (Conservation) Act, 1980.

Yours faithfully,

(C.D. Singh)

Deputy Inspector General of Forests

Copy to:-

1. The Principal Chief Conservator of Forests, Government of Jharkhand, Ranchi.
2. The Nodal Officer (FCA), O/o the PCCF, Government of Jharkhand, Ranchi.
3. The Chief conservator of Forest (Central), Eastern Regional Office, Bhubaneswar.
4. User Agency for information.
5. Monitoring cell.
6. Guard File.

(C.D. Singh)

Deputy Inspector General of Forests

*Raw*

**F. No. 8-42/2010-FC**  
**Government of India**  
**Ministry of Environment and Forests**  
**(FC Division)**

Paryavaran Bhawan, CGO Complex,  
Lodhi Road, New Delhi - 110510

Dated: 21<sup>st</sup> November, 2011

*26/K*

To

The Principal Secretary (Forests),  
Government of Jharkhand,  
Ranchi.

**Sub: Diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in favour M/s NTPC in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand.**

Sir,

I am directed to refer to the State Government's letter no. 3 / VanBhumi - 33 / 2010 / 2154 / VP dated 17.06.2010 on the subject mentioned above seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under section-3 of the said Act, in-principle approval was granted vide this Ministry's letter of even number dated 2.02.2011 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the in-principle approval and has requested the Central Government to grant final approval.

In this connection, I am directed to say that on the basis of the compliance report furnished by the State Government vide letter no. 3/Vanbhumi-33/2010-3069 dated 11.08.2011, approval of the Central Government is hereby granted under section-2 of the Forest (Conservation) Act, 1980 for diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in favour M/s NTPC in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand subject to fulfillment of the following conditions:

1. Legal status of forest land shall remain unchanged.
2. a. Compensatory afforestation shall be raised and maintained by the State Forest Department at the project cost.  
b. Fencing, protection and regeneration of the safety zone area shall be done at the project cost. Besides this, afforestation on degraded forest land, to be selected elsewhere, measuring one and a half times the area under safety zone, shall also be done at the project cost.
3. The following activities shall be undertaken by the User Agency under supervision of the State Forest Department at the project cost:
  - (i) Proper mitigative measures to minimize soil erosion and choking of streams shall be prepared and implemented.
  - (ii) Planting of adequate drought hardy plant species and sowing of seeds to arrest soil erosion.

*Faw*



- (iii) Construction of check dams, retention/toe walls to arrest sliding down of the excavated material along the contour.
  - (iv) The top soil management plan should be strictly adhered to.
4. Wherever possible and technically feasible, the User Agency shall undertake by involving local community, the afforestation measures in the blanks within the lease area, as well as along the roads outside the lease area diverted under this approval, in consultation with the State Forest Department at the project cost.
  5. The User Agency shall furnish an undertaking to pay the additional NPV, if so determined, as per the final decision of Hon'ble Supreme Court of India.
  6. The approval under the Forest (Conservation) Act, 1980 is subject to the clearance under the Environment (Protection) Act, 1986 and any other Acts/Regulation/Rules.
  7. The period of diversion under this approval shall be twenty (20) years or coterminous with the mining lease subject to possession of valid lease by User Agency under the MMDR Act, 1957.
  8. Any tree felling shall be done only when it is unavoidable under strict supervision of the State Forest Department.
  9. No damage to the flora and fauna of the area shall be caused.
  10. No labour camps shall be set up inside the forest area.
  11. The user agency shall provide fuel wood preferably alternate fuel to the labourers working at the site to avoid damage / felling of trees.
  12. Demarcation of mining lease area will be done on the ground at project cost using four feet high reinforced cement concrete pillars with serial numbers, forward & back bearings and distance from pillar to pillar.
  13. The user agency will assist the State Government in conservation and preservation of flora and fauna of the area in accordance with the plan prepared by the Chief Wildlife Warden of the State.
  14. The forest land shall not be used for any purpose other than that specified in the proposal.
  15. The User Agency will ensure the dumping of OB as per the approved phased Reclamation plan.
  16. The Project Proponent shall explore the possibility of setting up of Vocational Training Institutes in the area for training the local youths and employing them in their operations for some minimum time period as part of its CSR.

*Fauz*

17. The Project Proponent shall earmark 1% of the market price of total coal produced deposit with the State Forest Department for the protection and development of forest and wildlife of the area as part of the CSR.
18. The Project Proponent shall also bear the cost of depredation of crops by wild elephants, if any, and if required, shall make arrangement for water and food for the migrating elephants at an alternate area.
19. The Project Proponent shall explore the possibility of sparing 100-150 m wide strip from diverted forest land on the northern side of its mines in the region for Rail line project, if geologically & geographically feasible and envisaged by the Railways.
20. The user agency shall set up a full fledged Social Welfare Division to track and monitor the future conditions of all the project displaced, affected persons including landless persons and report on the social & economic condition of these people & the impact of the project, as well as take all possible measures to compensate them for any loss in economic and social well-being and livelihood sustainability.
21. The user agency will provide permanent vehicular mobility to the Regional Office, Bhubaneswar for periodic monitoring of the projects already existing and those are coming up in the area.
22. The User agency will reclaim and surrender all areas which were handed over to them 20 years back.
23. Any other condition that the CCF (Central), Regional Office, Bhubaneswar, may impose from time to time for protection and improvement of flora and fauna in the forest area, shall also be applicable.
24. The user agency shall submit the annual compliance report in respect of the above conditions to the State Government and to the Regional Office, Bhubaneswar regularly.

Yours faithfully,

*Sd/-*

(S.P. Singh)

Assistant Inspector General of Forests

Copy to:-

1. The Principal Chief Conservator of Forests Government of Jharkhand, Ranchi.
2. The Nodal Officer, Office of the PCCF, Government of Jharkhand, Ranchi.
3. The Chief Conservator of Forest (Central), Regional Office, Bhubaneswar.
- ✓ 4. User Agency.
5. Monitoring cell of the FC section
6. Guard file.

*Sh...*  
(S.P. Singh)

Assistant Inspector General of Forests

*Pani*



**F. No. 8-42/2010-FC**  
Govt. of India  
Ministry of Environment, Forests and Climate Change  
(Forest Conservation)

Indira Paryavarn Bhawan,  
Aliganj, Jor Bagh, Road  
New Delhi - 110003

Dated: 13<sup>th</sup> April, 2017

To

The Principal Secretary (Forest)  
Government of Jharkhand,  
Ranchi.

Sub: **Transfer of lease in respect of diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand, from the original user agency i.e. M/s NTPC in whose favour forest land was diverted to M/s NTPC in whose favour the coal block was auctioned/re-allotted by the Ministry of Coal.**

Sir,

I am directed to refer to the Ministry of Coal's letters no. 13016/38/2015-CA-III dated 18th September, 2015 and 103/26/2015/NA dated 22.12.2016 on the above subject requesting this Ministry to transfer its approval granted under the Forest (Conservation) Act, 1980 for diversion of 128.92 ha of forest land for Chattibariatu Coal Mining Project in Hazaribagh West Forest Division in Hazaribagh District of Jharkhand from the original user agency i.e. M/s NTPC in whose favour forest land was diverted to M/s NTPC in whose favour the coal block was auctioned/re-allotted by the Ministry of Coal.

After careful examination of the proposal in accordance with para 2.8 of the Guidelines read with the Guidelines dated 03.05.2010, 03.05.2013 and 31.03.2015 under the Forest (Conservation) Act, 1980 for transfer of approval granted by the Central Government and on the basis of recommendations of the Ministry of Coal, **the Central Government hereby conveys its approval for lease transfer subject to following condition:**

- (i) Lease transfer charges @ 10% of the NPV or Rs.1,00,000/- (1 Lakh) whichever is less will be realized from the new user agency and will be deposited in the account of Ad-hoc CAMPA before execution of lease in favour of the new user agency.
- (ii) Reimbursement of amount paid by the original user agency shall be dealt with in the manner, as provided in the Coal Mines (Special Provisions) Second Ordinance, 2014 and Rules framed there under.
- (iii) The new user agency shall pay the NPV as per the approval granted under FC Act if not paid earlier. The new user agency shall also furnish an undertaking to pay the additional NPV, if so determined by the Hon'ble Supreme Court of India.
- (iv) **The new user agency shall also abide the conditions :**
  1. Legal status of the diverted forest land shall remain unchanged;
  2. Compensatory afforestation over the degraded forest land, twice in extent to the area of forest land proposed to be diverted shall be raised **within two years from the issue of this letter, if already not done;** and maintained thereafter as per approved plan by the State Forest Department at the cost of the User Agency;

3

Ravi

3. At the time of payment of the Net Present Value (NPV) at the then prevailing rate, the User Agency shall furnish an undertaking to pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;
4. The State Govt. shall ensure the following activities by the User Agency under the supervision of the State Forest Department:
  - (a) Mitigative measures to minimize soil erosion and choking of stream shall be implemented within a period of three year with effect from the issue of Stage-II clearance in accordance with the approved Plan in consultation with the State Forest Department.
  - (b) Planting of adequate drought hardy plant species and sowing of seeds, in the appropriate area within the mining lease to arrest soil erosion in accordance with the approved scheme;
  - (c) Construction of check dams, retention / toe walls to arrest sliding down of the excavated material along the contour in accordance with the approved scheme, and ;
  - (d) No damage shall be caused to the top-soil and the user agency will follow the top soil management plan.
5. Fencing, protection and regeneration of the safety zone area [7.5 meters strip all along the outer boundary of the mining lease area as recommended by the state govt.] shall be done within three year at the project cost from the issue of Stage-II Clearance. Besides this afforestation on degraded forest land to be selected elsewhere measuring one & a half times the area under safety zone shall also be done at the project cost; The degraded forest land (DFL) so selected will be informed to the MoEF & CC with shape files and afforestation will be done within three years , **if not already done**, from the date of Stage-II clearance;
6. Wherever possible and technically feasible, the User Agency shall undertake by involving local community, the afforestation measures in the blanks within the lease area, as well as along the roads outside the lease area diverted under this approval, in consultation with the State Forest Department at the project cost.
7. Period of diversion of the said forest land under this approval shall be for a period co-terminus with the period of the mining lease proposed to be granted under the Mines and Minerals (Development and Regulation) Act, 1957, as amended and the Rules framed there-under;
8. The User Agency will ensure the dumping of OB as per the approved phased Reclamation plan.
9. The State Govt. make efforts to explore the possibility of setting up of Vocational Training Institutes at the cost of the user agency in the area for training the local youths and employing them in their operations for some minimum time period as part of its CSR.
10. The Project Proponent shall also bear the cost of depredation of crops by wild elephants, if any, and if required, shall make arrangement for water and food for the migrating elephants at an alternate area.
11. The Project Proponent shall explore the possibility of sparing 100-150 m wide strip from diverted forest land on the northern side of its mines in the region for Rail line project, if geologically & geographically feasible and envisaged by the Railways
12. The user agency shall set up a full -fledged Social Welfare Division to track and monitor the future conditions of all the project displaced, affected persons including landless persons and report on the social & economic condition of these people & the impact of the project, as well as take all possible measures to compensate them for any loss in economic and social well-being and livelihood sustainability.
13. The user agency will provide permanent vehicular mobility to the Regional Office, Bhubaneswar for periodic monitoring of the projects already existing and those are coming up in the area.
14. The approval under the Forest (Conservation) Act, 1980 is subject to the clearance under the Environment (Protection) Act, 1986 and any other Acts/Regulation/Rules.
15. The user agency will assist the State Government in conservation and preservation of flora and fauna of the area in accordance with the plan prepared by the Chief Wildlife Warden of the State.
16. No labour camp shall be established on the forest land;
17. The User Agency shall provide fuels preferably alternate fuels to the labourers and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas;

*Ravi*



18. The boundary of the diverted forest land, mining lease and safety zone, as applicable, shall be demarcated on ground at the project cost, by erecting four feet high reinforced cement concrete pillars, each inscribed with its serial number, distance from pillar to pillar and GPS co-ordinates;
19. The User Agency shall undertake mining in a phased manner after taking due care for reclamation of the mined over area. The concurrent reclamation plan as per the approved mining plan shall be executed by the User Agency from the very first year, and an annual report on implementation thereof shall be submitted to the Nodal Officer, Forest (Conservation) Act, 1980, in the concerned State Government and the concerned Regional Office of the Ministry. If it is found from the annual report that the activities indicated in the concurrent reclamation plan are not being executed by the User Agency, the Nodal Officer or the Chief Conservator of Forests (Central) may direct that the mining activities shall remain suspended till such time, such reclamation activities area satisfactorily executed;
20. The layout plan of the mining plan/ proposal shall not be changed without the prior approval of the Central Government;
21. The forest land shall not be used for any purpose other than that specified in the proposal;
22. The forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government;
23. No damage to the flora and fauna of the adjoining area shall be caused;
24. Any tree felling shall be done only in a phased manner to coincide with the phasing of area to be put to mining with a view to minimizing clear felling. The felling will always be carried out under strict supervision of State Forest Department; when it is unavoidable and that too under strict supervision of the State Forest Department;
25. The Project Proponent shall earmark 1% of the market price of total coal produced deposit with the State Forest Department for the protection and development of forest and wildlife of the area as part of the CSR.
26. The User Agency shall submit the annual self compliance report in respect of the above stated conditions to the State Government, concerned Regional Office and to this Ministry by the end of March every year;
27. Any other condition that the concerned Regional Office of this Ministry may stipulate, from time to time, in the interest of conservation, protection and development of forests & wildlife; and
28. The user agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines & Hon'ble Court Order (s) pertaining to this project, if any, for the time being in force, as applicable to the project.

Yours faithfully,

(Nishceeth Saxena)

Sr. Assistant inspector General of Forests (FC)

**Copy to:**

1. The Principal Chief Conservator of Forests Government of Jharkhand, Ranchi.
2. The Nodal Officer (FCA), Office of the PCCF, Government of Jharkhand, Ranchi.
3. The Addl. Principle Chief Conservator of Forest (Central), Regional Office, Ranchi.
4. User Agency.
5. Monitoring Cell of the FC section MoEF&CC New Delhi
6. Guard file.

(Nishceeth Saxena)

Sr. Assistant inspector General of Forests (FC)

*For*

**Photographs of Topsoil stacked properly within the Mining  
Lease area**



*Faw*





# सीएसआईआर- केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान CSIR-Central Institute of Mining and Fuel Research

( वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद / Council of Scientific & Industrial Research )

( अंतर्गत वैज्ञानिक तथा औद्योगिक अनुसंधान विभाग, विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार )

( Under the Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India )

बरवा रोड, धनबाद - 826015, झारखण्ड, भारत / Barwa Road, Dhanbad - 826015, Jharkhand, India

( आई एस ओ 9001 प्रमाणित संस्थान / ISO 9001 Certified Institute )



## TAX INVOICE

Reverse Charge: Yes/No	Original/Duplicate/Triplicate						
TAX INVOICE NO. 2023-24/TAX-1932	Date: 15/09/2023						
Reference No. & Date: Project Proposal dated 07.06.2023 from Dr. S.K.Roy							
Work Order No. & Date: Service Order No- 47000171 dated 18.08.2023							
Service Provider's Name & Address	Client's Name & Address						
CSIR-CENTRAL INSTITUTE OF MINING & FUEL RESEARCH (Council of Scientific & Industrial Research) Barwa Road, Dhanbad-826015, Jharkhand (India)	CHATTI BARIATU COAL MINING PRIVATE LIMITED CBCMPL, Shiv Nandan Estate 2, Flat No- 501, Fifth Floor, Haranganj Rd, Hazaribag, Jharkhand, 825301 District: HAZARIBAG Pin: 825301						
CSIR GSTIN:	20AAATC2716R1ZT						
CSIR PAN NO:	AAATC2716R						
State:	JHARKHAND						
State Code:	20						
GSTIN:	20AAJCC9353L1ZG						
PAN NO:	AAJCC9353L						
State:	JHARKHAND						
State Code:	20						
Sl. No.	Description of Services	SAC	Quantity	UOM	Rate	Amount	
1.	100 % Payment of Rs. 2360000/- received on 13.09.2023 for Scientific Study & Advance on Slope Stability study of pit, internal dump and external dump of Chatti Bariatu Coal Mining Project.	980293	1	UNITS	2000000/-	2000000/-	
						CGST @9%	180000/-
						SGST @9%	180000/-
						IGST @10%	0/-
Total Amount						2360000/-	
Advance Amount						2360000/-	
Net Amount						0/-	
Amount in Words						Rupees Only	
Bank Details							
Mode of Payment : 1. For SBI i-Collect please use our link <a href="https://www.onlinesbi.com/prelogin/collecthome.htm?corpID=377003">https://www.onlinesbi.com/prelogin/collecthome.htm?corpID=377003</a> 2. For RTGS/NEFT our Bank details are : Beneficiary Name: Central Institute of Mining & Fuel Research Bank Name: State Bank of India, Hirapur (Code-1670), Dhanbad Bank a/c No. 30256736754 MICR Code: 820002007 IFS Code/NEFT Code: SBIN001670 e-mail id: <a href="mailto:director@cimfr.nic.in">director@cimfr.nic.in</a> The amount may be paid by an a/c payee Demand Draft Only drawn in favour of Central Institute of Mining & Fuel Research, Dhanbad and payable at State Bank of India, Hirapur (Code-1670), Dhanbad or through e-payment using "state bank Collect" option in the link <a href="https://www.onlinesbi.com/prelogin/collecthome.htm?corpID=377003">https://www.onlinesbi.com/prelogin/collecthome.htm?corpID=377003</a>							
Declaration		For Central Institute of Mining and Fuel Research, Dhanbad					
Certified that all particulars shown in the above invoice are true and correct in all respects.							
Project Leader / SIC		OIC / SIC					

HQ : Dhanbad - ☎: +91-326-2296023, 2296006 (O) ✉: +91-326-2296025 EPABX : +91-326-2296012/6013/6027/6028

E-mail : [director@cimfr.nic.in](mailto:director@cimfr.nic.in), Digwadih Campus : ☎: +91-326-2381111

Research Centres : Bilaspur : ☎: +91-775-2271450, Nagpur : Unit - I - ☎: +91-712-2510604, Unit - II - ☎: 2510390

Ranchi : ☎: +91-651-2461392, Roorkee : ☎: +91-1332-275998

Website : [www.cimfr.nic.in](http://www.cimfr.nic.in)

20AAATC2716R1ZT

CSIR-CENTRAL INSTITUTE OF MINING AND FUEL  
RESEARCH



1.e-Invoice Details

IRN : 8c7b2a28ca0241d278aca8e5bf035885f Ack No. : 142313416972421  
dfef1098d90466a9e80c2c42a4efd69

Ack Date : 19-09-2023 11:11:00

2.Transaction Details

Supply type Code : B2B

Document No. : 2023-24/TAX-1932

IGST applicable despite Supplier and  
Recipient located in same State : No

Place of Supply : JHARKHAND

Document Type : Tax Invoice

Document Date : 18-09-2023

3.Party Details

Supplier :

GSTIN : 20AAATC2716R1ZT

CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH

BARWA ROAD

DHANBAD 826015 JHARKHAND

03262296023 director@cimfr.nic.in

Recipient :

GSTIN : 20AAJCC9353L1ZG

CHATTI BARIATU COAL MINING PRIVATE LIMITED

Shiv Nandan Estate 2 , Flat No- 501, Fifth Floor, Haranganj Rd,

HAZARIBAG Place of Supply: JHARKHAND

825301 JHARKHAND

4.Details of Goods / Services

SlNo	Item Description	HSN Code	Quantity	Unit	Unit Price(Rs)	Discount(Rs)	Taxable Amount(Rs)	Tax Rate(GST + Cess   State Cess + Cess Non.Advol	Other charges	Total
1	100 % Payment of Rs. 2360000/- received on 13.09.2023 for Scientific Study & Advance on Slope Stability study of pit, Internal dump and external dump of Chatti Bariatu Coal Mining Project .	998393	1	UNT	2000000	0	2000000	18.00 + 0.00   0.00 + 0	0	2360000

Tax'ble Amt	CGST Amt	SGST Amt	IGST Amt	CESS Amt	State CESS	Discount	Other Charges	Round off Amt	Tot Inv. Amt
2000000.00	180000.00	180000.00	0.00	0.00	0.00	0.00	0.00	0.00	2360000.00

Generated By : 20AAATC2716R1ZT

Print Date : 19-09-2023 11:10:36



142313416972421

eSign

Digitally Signed by NIC-IRP  
on : 2023-09-19 11:11:00

*Handwritten signature*



## Service Order: 470000171

Page: 1/2

**Vendor Code : 4000829**  
**CENTRAL INSTITUTE OF MINING AND FUEL RES**  
**CENTRAL INSTITUTE OF MINING AND FUEL AND**  
**826001 BARWA ROAD, Dhanbad, Jharkhand**

Service Order No: 470000171  
 Created On: 18-Aug-23  
 PR No: 0022000254  
 PR Date: 18-Aug-23  
 Quotation No:  
 Quotation Date:

Mobile No : 9939698433  
 Email ID : director@cimfr.nic.in  
 GSTIN : 20AAATC2716R1ZT

Site Name: CB Coal Mine

With Reference to your offer and subsequent discussion held, we are pleased to place the Service Order for the Material with terms and conditions as mentioned below :

Item No	Material Code & Description	HSN Code	Quantity	UOM	Unit Price	GST%	Net Amount
00010	Scientific Study & Advice on Slope Stability study of pit, internal dump and external dump of Chatti Bariatu Coal Mining Project.		1	EA	20,00,000.0	18	20,00,000.00
Total Base Value							20,00,000.00
Total Amount							2000000.00
CGST							1,80,000.00
SGST							1,80,000.00
Total Value Including Tax							23,60,000.00
Amount in Words : Twenty Three Lakh Sixty Thousand and paise							

### Terms & Conditions

Scope of Work	Scientific study and advice on slope stability study of pit, internal dump and external dump of CBCMP, NTPC Ltd. Scope of work covers slope stability study of (i) Pit – 1 nos. (ii) Internal dump – 1 no. (iii) External dump – 1 no.
Taxes	Extra as shown above





Corporate Office: CHATTI BARIATU COAL MINING PVT. LTD., PLOT NO.37 & 39, NAVODAYA COLONY, ROAD NO.2, BANJARA HILLS,  
 HYDERABAD, TELANGANA - 500034,  
 E-mail : info@cbcmpl.com; Tel: 040 - 49113333, CIN: U10300TG2021PTC157303

Test Copy

## Service Order: 470000171

Terms & Conditions	Slope stability study should be completed in three months from the date of receiving Work order with advance, necessary cross-sections with related data and receiving of samples at CIMFR, whichever is later.  Following will be the scope of CBCMPL 1. Provision of tools/tackles and required manpower for sample collection. 2. Transportation of coal samples to CSIR-CIMFR 3. Accommodation and local hospitality for CIMFR officials.
Payment Terms	100% advance along with Work Order
Contact Person	Mr.Krishna Kumar - 7024101480
BILLING ADDRESS:	CHATTI BARIATU COAL MINING PVT LTD., Shiv Nandan Estate 2, Flat No: 501, Fifth Floor, Haranganj Road, Collage More, Sadar Hazaribagh, Jharkhand - 825301, GST No : 20AAJCC9353L1ZG.
DELIVERY ADDRESS:	Chatti Baraitu Coal Mining Pvt Ltd, C/O N.T.P.C., SISF CAMP, KEREDARI(MANDAL), BLOCK-BADKAGAON, VILL-PAGAR 825321 HAZARIBAGH.
The duplicate copy of this Service order should be signed by you with seal in token of your acceptance, Here acknowledgement of goods received shall not be constructed as accepted. The same is subject to inspection and approval by us, any rejection due to not meeting of the requisite quality, shortage in quantity, damage etc., should be replaced by you at your cost.	
Prepared By : Venkata Krtishna Kapisetti Date : 18-Aug-23	Yours faithfully, Chatti Bariatu Coal Mines Pvt Ltd   Authorized Signatory 
We do hereby agree to the terms and condition on this Service Order	
Accepted By CENTRAL INSTITUTE OF MINING AND FUEL RES	
*This Service Order has been Digitally Approved.	

*cleared*  
*[Signature]*  
*27/8/23*

*Ravi*

Test Copy



**Photographs of Plantation work in safety zone of mine lease area, CBCMP**



*Handwritten signature*



**Photographs of Garland Drain & Siltation Pond around the  
OB dump and mining area**



GPS Map  
Camera Lite

Unnamed Road, Pagar, Jharkhand 825311, India

Latitude  
23° 53' 32.69346" N

Longitude  
85° 4' 50.32988" E

Local 12:43:21 PM  
GMT 07:13:21 AM

Altitude 459 meters  
Saturday, 16.09.2023

*Paul*



**Photographs of Drilling Work, CBCMP**



*Paul*

Date/Time: Vert at 14:21:15 September 2, 2023  
 Trigger Source: Geo: 0.500 mm/s  
 Range: Geo: 254.0 mm/s  
 Record Time: 3.0 sec at 2048 sps  
 Operator/Setup: Operator/CBCMP.MMB

Serial Number: UM20033 V 10-90GC Micromate ISEE  
 Battery Level: 3.5 Volts  
 Unit Calibration: July 6, 2022 by UES New Delhi  
 File Name: \_TEMP.EVT

## Notes

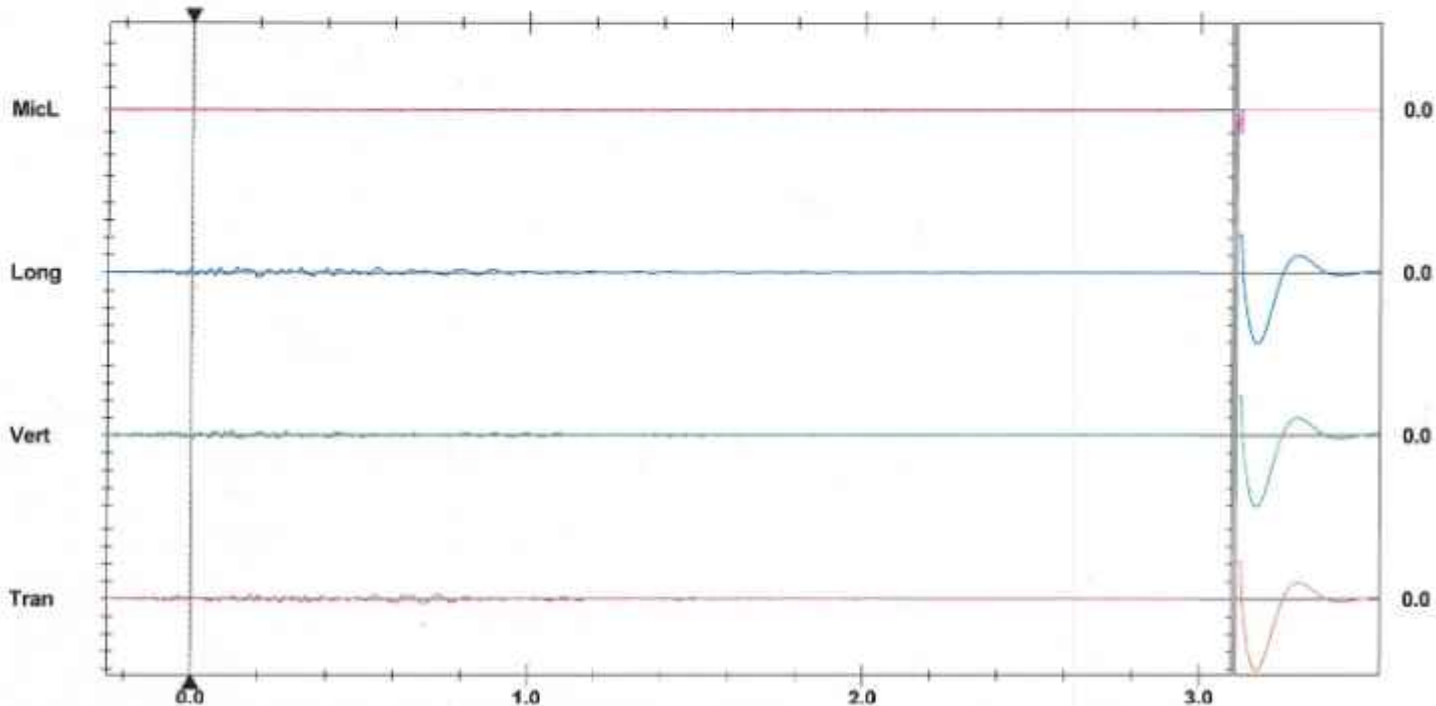
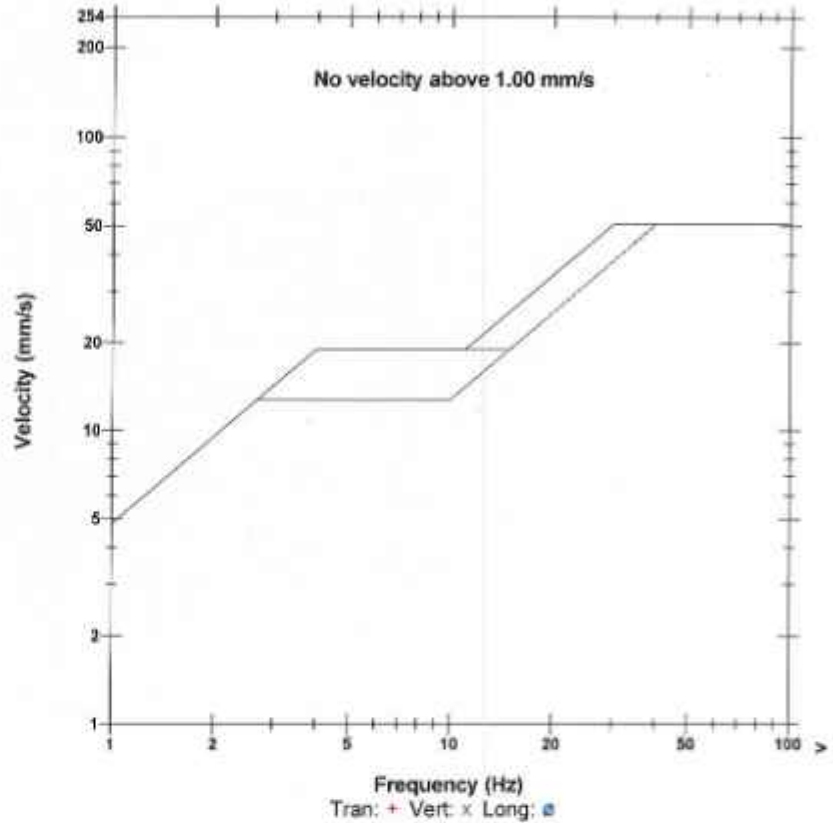
Location: 1- Bottom seam  
 Client: NTPC  
 User Name: CBCMPL  
 General: COAL MINES

Microphone: Linear Weighting  
 PSPL: <0.500 pa.(L)  
 ZC Freq: >200 Hz  
 Channel Test: Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	0.528	0.536	0.591	mm/s
ZC Freq	11.0	45	15.8	Hz
Time (Rel. to Trig)	0.687	0.117	0.192	sec
Peak Acceleration	0.015	0.020	0.015	g
Peak Displacement	0.008	0.005	0.006	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	4.4	4.2	4.3	

Peak Vector Sum: 0.658 mm/s at 0.194 sec  
 N/A: Not Applicable

## USBM RI8507 And OSMRE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger = 

Sensor Check

*Handwritten signature*



**Photographs of trucks covered with tarpaulin at CBCMP**



*Handwritten signature*



A Maharatna Company

एन टी पी सी लिमिटेड  
(भारत सरकार का उद्यम)

**NTPC Limited**  
(A Govt. of India Enterprise)

चट्टी बारियातु कोयला खनन परियोजना  
Chatti Bariatu Coal Mining Project

Ref: CBCMP/CD/2023/98

Dated 15.06.2023

To,  
Divisional Forest Officer  
Hazaribagh (West)  
Hazaribagh

Sub: Regarding Demand note for plantation of 33,000 trees through Forest Department,  
Hazaribagh

Ref: NTPC-CBCMP letter No 96(R1) Dated 14.06.2023.

Dear Sir,

This is with reference to NTPC letter no 96(R1) Dated 14.06.2023 wherein NTPC-CBCMP has agreed to deposit the funds to the forest department, for plantation of 33,000 plants in the upcoming monsoon period for complying with EC conditions.

In this regard, it is requested to provide the Demand note for the said work along with scope of work, details of the scheme etc and other relevant details so as to enable NTPC-CBCMP to take internal approval and deposit the amount to forest department.

Yours Sincerely

*(Signature)*  
15/6/2023

(Pawan Kumar Rawat)

AGM (Coal Dispatch & Billing)

पवन कुमार रावत

Pawan Kumar Rawat

अपर महाप्रबंधक (कोयला प्रेषण एवं बिलिंग)

Addl. General Manager (Coal Dispatch & Billing)

एनटीपीसी लिमिटेड/चट्टी बारियातु कोयला खनन परियोजना, सिक्री  
NTPC Limited / Chatti Bariatu Coal Mining Project, Sikri, Hazaribagh

01/

*(Signature)*

चट्टी बारियातु कोयला खनन परियोजना, सिक्री साईट कार्यालय, पी.ओ.-बड़कागाँव, जिला-हजारीबाग-825311 (झारखण्ड)  
Chatti Bariatu Coal Mining Project, Sikri Site Office, P.O.-Barkagaon, Dist- Hazaribag - 825311 (Jharkhand)  
पंजीकृत कार्यालय : एन. टी. पी. सी. भवनस्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली - 110003  
Registered Office : NTPC Bhawan Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi - 110 003  
टेलीफोन नं०/Tel : 011-24387333, फैक्स/Fax: 011-24361018, Email : ntpccc@ntpc.co.in, web: www.ntpc.co.in





कार्यालय – वन प्रमंडल पदाधिकारी,  
हजारीबाग पश्चिमी वन प्रमंडल, वन भवन, हजारीबाग

☎ 06546-222339. Email- [dfo.hazaribaghw@rediffmail.com](mailto:dfo.hazaribaghw@rediffmail.com) & [dfo-hazaribaghw@gov.in](mailto:dfo-hazaribaghw@gov.in)

पत्रांक : 3464

दिनांक: 24/06/2023

सेवा में,

Addl. General Manager (Coal Dispath and Billing)  
Chattibariatu Coal Mining Project,  
NTPC Limited,  
Sikri Site Office,  
Barkagaon, Hazaribag

विषय:- एन० टी० पी० सी०, चट्टीबरियातु कोल खनन परियोजना हेतु 128.92 हे० वननुमि  
अपयोजन के प्रस्ताव के संबंध में।

प्रसंग :- आपका पत्रांक CBCMP/CD/2023/98 दिनांक 14.06.2023

महाशय,

उपर्युक्त विषय के संदर्भ में सूचित करना है कि विषयगत परियोजना में भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली के पत्रांक J-11015/133/2007-1A.II(M) dated 01.12.2020 द्वारा पर्यावरणीय स्वीकृति में लगाये गये बिन्दु संख्या 6 की कड़िका संख्या 4 के अनुपालन के क्रम में आपके प्रासंगिक पत्र द्वारा इस मानसून वर्ष में 33000 पौधों का रोपण हेतु प्राक्कलन सहित राशि की जमा करने हेतु Demand Note की मांग की गई है, जिसके आलोक में 33000 बांस गैबियन वृक्षारोपण हेतु कुल राशि 10,27,95,700 (दस करोड़ सत्ताईस लाख पंचान्वे हजार सात सौ) ₹० का प्राक्कलन इस पत्र के साथ संलग्न कर अग्रेतर कार्रवाई हेतु भेजा जा रहा है।

अतः अनुरोध है कि प्राक्कलन के अनुसार कुल राशि 10,27,95,700 (दस करोड़ सत्ताईस लाख पंचान्वे हजार सात सौ) ₹० वन प्रमंडल पदाधिकारी, हजारीबाग पश्चिमी वन प्रमंडल के पक्ष में हजारीबाग कोषागार के वन प्रेषण लोक लेखा (प्राप्तियों) शीर्ष-8782 में राशि जमा करते हुए पावती रसीद यथाशीघ्र इस कार्यालय में समर्पित की जाय, ताकि वनरोपण कार्य यथाशीघ्र प्रारंभ किया जा सके।

अनुलग्नक – यथोक्त।

विश्वासभाजन,

वन प्रमंडल पदाधिकारी,  
हजारीबाग पश्चिमी प्रमंडल  
24/06/23

Water sprinkling system installed within the crusher unit



Paw



Dust Suppression at Katkamsandi Railway Siding using mobile water sprinklers



*Ravi*

## Photographs of Plantation in township by NTPC



*Revi*



**Photographs of Plantation in R&R colony by NTPC**



*Bani*

**Photographs of Plantation in Safety Zone of CBCMP**



Rai



Annual Mine Closure Activity Report of Chatti Bariatu Coal Mining Project, NTPC Ltd. for FY 2022-23.

EMG\_CBCMP <emg\_cbcmp@ntpc.co.in>

Mon 8/28/2023 8:24 AM

To: coalcont-wb@nic.in <coalcont-wb@nic.in>

Cc: ccoranchi@gmail.com <ccoranchi@gmail.com>; ANIMESH JAIN <AJAIN@NTPC.CO.IN>; Pavan Vasantrao

<PAVANKHANDWE@NTPC.CO.IN>; Birendra Kumar <BIRENDRAKUMARD1@NTPC.CO.IN>; AK SONI <AKSONI01@NTPC.CO.IN>;

Ravi Kumar <RKUMAR10@NTPC.CO.IN>

1 attachments (5 MB)

D. No. 384 Dated 28.08.2023 (ANNUAL MINE CLOSURE ACTIVITY REPORT).PDF;

Dear Sir,

Please find herewith the attachment of Annual Mine Closure Activity Report of Chatti Bariatu Coal Mining Project, NTPC Ltd. for FY 2022-23.

This is for kind information please.

Thanking you

With regard

Pavan V. Khandwe

AGM/Mine Agent

CBCMP, NTPC Ltd.

Mob: 9650991918

Sent from Outlook for Android

*Ravi*

V-5  
e-mail  
05-08-2023  
VH



Office of the Principal Chief Conservator of Forests,  
Wildlife & Chief Wildlife Warden, Jharkhand.  
Van Bhawan, Doranda, Ranchi-834002  
Email : pccf-wildlife@gov.in, Phone No. 0651-2481744



Office Order No. 34.....

Date. 3/8/2023

FCA  
05/8/23

Sanction Order of the Site-Specific Wildlife Management Plan with reference to diversion of 128.92 ha of forest land Chattibariatu Coal Mining Project in favour of M/s. NTPC Ltd in Hazaribagh district of Jharkhand.

The instant Site-Specific Wildlife Management Plan (referred to as "the Plan" here in after) has been prepared by Ecos Offset Private Ltd on behalf of M/s. NTPC Ltd in Hazaribagh. (referred to as "the User Agency or M/s NTPC Ltd") in pursuance of the following conditions/ Terms of Reference laid by MoEF&CC under item no 13 of Stage-II vide letter no F.No. 8-42/2010-FC dated 25.11.2011 for diversion of 128.92 Ha of forest land under Chattibariatu Coal Mining Project in Hazaribag district of Jharkhand:

The aforesaid Term of Reference laid by the Central Government reads as follows:

*Condition no 13- "The User Agency will assist the State Government in conservation and preservation of flora and fauna of the area in accordance with the plan prepared by the Chief Wildlife Warden of the State."*

The SSWMP is prepared in line with IWMP, NKCB at present rate according to the item no 8, letter no 8-56/2009-FC (Vol) dated 26.05.2023 of MoEF&CC, Gov of India, New Delhi.

*Condition no 8- "The cost estimate of Integrated Wildlife Management Plan (IWMP) submitted is based on the rate of 2010, while approval is being considered in 2023, hence rate revision has to be done based on the present rate."*

In the above stated background, the Regional Chief Conservator of Forests, Hazaribag (RCCF, Hazaribag) vide his letter no. 1742 dated 14.07.2023 has submitted the Plan to the office of the undersigned for its due sanction.

In order to examine the plan prescriptions a communication was issued to the Regional Chief Conservator of Forests, Hazaribag, vide this office letter no. 903 dated 21.07.2023, to arrange a Power-Point Presentation on 25-07-2023 in the Office chamber of the undersigned. The presentation was made by the PP in the presence of RCCF, Hazaribag, DFO, Hazaribag West, Sri H.S Gupta (Ex PCCF, Wildlife, Jharkhand), Sri Pavan Khandwe, AGM (Mining), Chatti Bariyatu Coal Mining Project, NTPC Ltd and Sri Kislay Kumar (Consultant) Ecos Offset Private Ltd.

The cost of the Plan with respect to the activities to be carried out by DFO, Hazaribag West has been estimated to be Rs. 4625.21 lakh. The summary of the proposed interventions (component wise) under the Plan with the objective of conservation of forest and wildlife resources as also to mitigate the impacts of mining on forests and wildlife is as follows:

Ravi



S.N.	Work Component	Cost estimates (Rs. In Lakh) To be implemented by the DFO Hazaribag West
1	Biodiversity Enhancement	2069.74
2	Measures for forest protection, anti-depredation and wildlife protection	256.46
3	Capacity building and procurement of anti-depredation items	98.45
4	Fire prevention and protection of habitat	284.21
5	Livelihood improvement and capacity building to local people	301.00
6	Capacity building of forest department for implementing, monitoring and supervision of plan	373.37
7	GIS and remote sensing for implementation and monitoring	139.00
8	Awareness promotion about Medicinal Plants and protection of endangered species.	262.11
9	Corpus Fund	10.00
10	Contingency amount	60.00
	<b>Total:-</b>	<b>3854.34</b>
	Cost Escalation @20%	770.87
	<b>Grand Total:-</b>	<b>4625.21</b>

The Plan with a total financial outlay of Rs. 4625.21 Lakh extends over a period of 10 years (Year 2023-24 to 2032-33; tentatively) shall be utilized by the Forest Department through the DFO, Hazaribag West in accordance with the Plan prescriptions. Amount Rs 2446.62678 Lakhs of SSWMP has been submitted in CAMPA Account vide ref no. NC03R/2020247588/23.03.2021 dated 24.03.2021. Remaining amount Rs 2178.58322 shall be deposited by the User Agency.

Considering the proposals under the plan, sanction is hereby accorded to the instant Plan subject to the following conditions:

- (i) That the User Agency shall ensure that its officials/contractors and the work force engaged into mining and allied operations under the Project shall not commit or abet any forest/wildlife offence in their area of operation. They will also promptly report any forest/wildlife offence in the area to the nearest forest office/official. Further, they will extend their full cooperation to the forest officials in control/mitigation of any incident, natural or man-made, detrimental to forest and wildlife in their area of operation.
- (ii) That the total amount of Rs. 4625.21 lakh shall be deposited by the User Agency into CAMPA account under the relevant head/sub-head and shall be utilized by the State Forest Department through the DFO, Hazaribag West, as delineated under the Plan, strictly in accordance with the prevailing norms under the Jharkhand Forest Department.

*Raw*



- (iii) That the User Agency shall implement the activities mentioned under Chapter 4 of the Plan. The implementation shall be under the direction and strict supervision of DFO, Hazaribag West Division.
- (iv) That as regards the funds earmarked against activities to be undertaken by the State Forest Department, DFO, Hazaribag West Division shall prepare a detailed Annual Plan of Operations (APO) in the beginning of every financial year in respect of the instant Plan following all the rules, regulations, Schedule of Rates etc. issued from time to time by the State Government/ Forest Department. Regional Chief Conservator of Forests, Hazaribag shall accord sanction to the said APO following due process and he/she will closely monitor the progress of the activities undertaken by Divisional Forest Officer, Hazaribag West.
- (v) That the Conservator of Forests, Hazaribag shall supervise all the activities as per directions issued by the Forest Department from time to time.
- (vi) That the DFO, Hazaribag West shall carry out the activities under the Plan strictly as per the duly sanctioned APO.
- (vii) That the DFO, Hazaribag West shall ensure that no violation of duly sanctioned Working Plan of Hazaribag West Forest Division takes place during implementation of any of the activities involved in this plan over notified and demarcated forest land.
- (viii) That at least one year before the expiry of the instant Plan the User Agency shall formulate and submit to the Forest Department another plan in continuation of the instant plan for next 10 years. The impact of implementation of this Plan shall be evaluated by the competent authority.
- (ix) That the instant Plan is dynamic and may be revisited after every 2 years and a revised plan may be formulated as per need of the project impacted area and convenience of the implementing agencies. The revised plan, if any, shall be put up before the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, Jharkhand for its due approval.
- (x) That though adequate provisions have been made towards cost escalation in the plan viz. increase in wage rate/ material cost etc., yet the User Agency shall submit an undertaking to the Divisional Forest Officer, Hazaribag West to the effect that they will deposit extra cost of the plan beyond the cost escalation provision owing to increase in wage rate etc. in due course of time as well as consequent upon revision in the plan, if any, as and when given effect to by the competent authority.

Sd/-  
Principal Chief Conservator of Forests  
Wildlife and Chief Wildlife Warden, Jharkhand

*Paul*



Memo No.

Dated:

Copy forwarded to Deputy Director General of Forests (Central), Ministry of Environment, Forests and Climate Change, Integrated Regional Office, Harmu Housing Colony, Ranchi [E-mail: ro.ranchi-mef@gov.in] for information and necessary action.

Sd/-

Principal Chief Conservator of Forests  
Wildlife and Chief Wildlife Warden, Jharkhand

Memo No.

Dated:

Copy forwarded to Additional Chief Secretary, Department of Forests, Environment and Climate Change, Govt. of Jharkhand Ranchi/ Principal Chief Conservator of Forests, Jharkhand, Ranchi/ Principal Chief Conservator of Forests-cum-Executive Director, Wasteland Development Board, Jharkhand, Ranchi for information.

Sd/-

Principal Chief Conservator of Forests  
Wildlife and Chief Wildlife Warden, Jharkhand

Memo No.

Dated:

Copy forwarded to Additional Principal Chief Conservator of Forests, CAMPA, Jharkhand, Ranchi with a copy of plan for information and necessary action.

Sd/-

Principal Chief Conservator of Forests  
Wildlife and Chief Wildlife Warden, Jharkhand

Memo No. 1007

Dated: 3/08/2023

Copy forwarded to Regional Chief Conservator of Forests, Hazaribag/Conservator of Forests, Hazaribag/ Divisional Forest Officer, Hazaribag West Forest Division for information and necessary action.

Principal Chief Conservator of Forests  
Wildlife and Chief Wildlife Warden, Jharkhand

कार्यालय , वन प्रमंडल पदाधिकारी, हजारीबाग पश्चिमी वन प्रमंडल

ज्ञापांक:

दिनांक:

प्रतिलिपि General Manager (Mining), Chhattibariatu Coal Mining Project, NTPC Limited, Sikri Site Office, Barkagaon, Hazaribag को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

ह0/-

वन प्रमंडल पदाधिकारी,  
हजारीबाग पश्चिमी प्रमंडल

ज्ञापांक: 4443

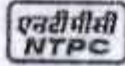
दिनांक: 10/8/23

प्रेषित।

प्रतिलिपि वन क्षेत्र पदाधिकारी, बड़कागांव प्रक्षेत्र/को सूचनार्थ एवं आवश्यक कार्रवाई हेतु

वन प्रमंडल पदाधिकारी,  
हजारीबाग पश्चिमी प्रमंडल





Transforming lives

Name of the Company: NTPC Limited  
Registered Office: NTPC Bhawan, SCOPE Complex, 1, Institutional Area  
Lodi Road, New Delhi - 110003  
CIN: L40101DL1975GOI007986  
PAN: AAACN0255D  
Telephone No.:  
Fax No.:  
e-Mail:  
Website: www.ntpc.co.in

## NTPC Limited

Chhatti-Bariatu Coal Mining Project  
Sikri Site Office, P.O. Barkagaon  
Hazaribag - JHARKHAND 825311

Ref No. / संदर्भ संख्या: NC03R/2020247588/23.03.2021

To / सेवा में,  
Ad-hoc CAMPA Account No. CA 1587  
CORPORATION BANK  
DG FOREST & SPECIAL SECRETARY,  
GOI, MOEF, PARYAVARAN BHAVAN  
CGO COMPLEX LODHI ROAD  
NEW DELHI 110003  
Email:

Date / दिनांक: 24.03.2021

Dear Sir / Madam,  
आदरणीय महोदय/महोदया,

We are pleased to inform you that the company has arranged to remit the amount as per the following details, directly to your bank CORPORATION BANK, LODHI COMPLEX BRANCH account number 150725890400696 with Payment Ref No. CMS1871699464.

हमें आपको यह सूचित करने में प्रसन्नता हो रही है कि कंपनी ने निम्नलिखित विवरण के अनुसार राशि को सीधे आपके बैंक

CORPORATION BANK, LODHI COMPLEX BRANCH  
पर प्रेषित करने की व्यवस्था की है।

खाता संख्या 150725890400696

S.N.	PO Ref. No.	Bill Ref. No.	Details	Amount (Rs.)
1	8200317480	5890400696	Invoiced Value	244,662,678.00
Total Amount Paid				244,662,678.00

Amount (in words) / राशि: Rupees Twenty-Four Crore Forty-Six Lakh Sixty-Two Thousand

The amount has been credited to your bank account as indicated above through Electronic Clearing Service (ECS) and therefore, no service charge is deductible by your bank.

उपरोक्त वर्णित एचईएस/ईएनएस सेवा (ईसीएस) के माध्यम से आपके बैंक खाते में जमा की गई है और इसलिए, आपके बैंक द्वारा इसके लिए कोई सेवा शुल्क नहीं लगाया जा सकता है।

If the amount is not received in your account kindly contact the EIC (Engineer In Charge) / Store Department, giving the above reference number.

यदि राशि आपके खाते में प्राप्त नहीं होती है तो कृपया ईआरसी (इंजीनियर इन चार्ज) / स्टोर विभाग से उपरोक्त संदर्भ संख्या के साथ संपर्क करें।

This is a computer generated communication and does not require any signature.

*[Signature]*





NTPC Limited

**Chatti-Bariatu Coal Mining Project**  
Sikri Site Office, P.O. Barkagaon  
Hazaribag - JHARKHAND 825311

Name of the Company **NTPC Limited**  
Registered Office NTPC Bhawan, SCOPE Complex, 7, Institutional Area  
Lodi Road, New Delhi - 110003  
CIN **L40101DL1975GOI007966**  
PAN **AAACN0255D**  
Telephone No.  
FAX No.  
e-Mail  
Website [www.ntpc.co.in](http://www.ntpc.co.in)

**Ref No. / सन्दर्भ संख्या: IN37R/2023263752/23.11.2023**

To / सेवा में,  
Ad-hoc CAMPA Account No CA 1587  
CORPORATION BANK  
DG FOREST & SPECIAL SECRETARY,  
GOI, MOEF, PARYAVARAN BHAVAN  
CGO COMPLEX LODHI ROAD  
NEW DELHI 110003  
Email :

**Date / दिनांक: 25.11.2023**

Dear Sir / Madam,  
आदरणीय महोदय/महोदया,

We are pleased to inform you that the company has arranged to remit the amount as per the following details, directly to your bank **Union Bank of India, FCS Centre, Bangalore** account number **150725890400524** with Payment Ref No : **SBINR12023112485846978**.

हमें आपको यह सूचित करने में प्रसन्नता हो रही है कि कंपनी ने निम्नलिखित विवरण के अनुसार राशि को सीधे आपके बैंक

**Union Bank of India, FCS Centre, Bangalore**

**खाता संख्या 150725890400524**

पर प्रेषित करने की व्यवस्था की है।

S.N.	PO Ref. No.	Bill Ref. No.	Details	Amount (Rs.)
1	8200394424	DFO LETTER 4700	Invoiced Value	217,858,322.00
<b>Total Amount Paid</b>				<b>217,858,322.00</b>

**Amount ( in words) / राशि :**

**Rupees Twenty-One Crore Seventy-Eight Lakh Fifty-Eight**

The amount has been credited to your bank account as indicated above through Electronic Clearing Service (ECS) and therefore, no service charge is deductible by your bank.

उपरोक्त वर्णित राशि इलेक्ट्रॉनिक क्लियरिंग सेवा (ईसीएस) के माध्यम से आपके बैंक खाते में जमा की गई है और इसलिए, आपके बैंक द्वारा इसके लिए कोई सेवा शुल्क नहीं लगाया जा सकता है।

If the amount is not received in your account kindly contact the EIC (Engineer In Charge) / Store Department, giving the above reference number.

यदि राशि आपके खाते में प्राप्त नहीं होती है तो कृपया ईआईसी (इंजीनियर प्रभारी) / स्टोर विभाग से उपरोक्त संदर्भ संख्या के साथ संपर्क करें।

This is a computer generated communication and does not require any signature.

यह संचार कंप्यूटर द्वारा निष्पादित है, तथा इसमें किसी भी हस्ताक्षर की आवश्यकता नहीं है



This is a computer generated communication, For any query please contact EIC.





# Sabz Care Environmental Consultancy Pvt. Ltd.



let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Water & Residues in Water	Sample Collected by	Ranjeet Yadav & Team
Date of Sampling	06.04.2023	Sample Condition	Sealed & Preserved
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/22-23/010	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kated Village: -23°53'27.752"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Sample ID	SCECPL/TR/23/126/WT-58/01-05	Report Release Date	11.04.2023
Period of Analysis	07.04.2023 to 10.04.2023		
Metrological Information	Average Ambient Temperature- 29.0 °C, Barometric Pressure-1016 mBar Relative Humidity-36%, Weather Condition- Clear		

## TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500 Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

### Checked By

Technical Manager  
(Hassan Ahmad Khan)

### Authorized Signatory

Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000660F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Industry	Coal Mines
		Work Order No.	CBCMPL/WO/22-23/010
Date of Sampling	06.04.2023	Sample Collected by	Ranjeet Yadav & Team
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/126/WT-58/01-05	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kated Village: -23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	07.04.2023 to 10.04.2023	Report Release Date	11.04.2023
Metrological Information	Average Ambient Temperature- 29.0 °C, Barometric Pressure-1016 mBar Relative Humidity-36%, Weather Condition- Clear		

**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1.	pH @ 25°C	—	IS:3025 P- 11	2.0	7.17	7.42	6.65	7.18	6.92	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	524	478	486	439	492	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.7	0.5	0.7	0.9	1	1
4.	Odour	—	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	316.0	301.0	302.0	279.0	323.0	500
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	184.0	189.8	186.1	191.8	188.2	200
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	197.4	190.4	189.1	188.5	186.8	200

Checked By

  
 Technical Manager  
 (Hassan Ahmad Khan)


  
 Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
8.	Calcium	mg/L	IS:3025 P- 40	1.0	51.3	43.6	51.9	28.1	53.6	75
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	23.8	25.8	19.1	21.8	21.6	30
10.	Chloride	mg/L	IS:3025 P- 32	1.0	31.8	29.2	30.0	27.1	29.8	250
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.19	0.21	0.17	0.19	0.23	1.0
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	20.9	23.2	23.9	19.8	21.9	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	10.5	8.9	8.4	10.1	13.8	45
14.	Phosphate	mg/L	IS:3025 P- 31	0.1	BDL	BDL	BDL	BDL	BDL	Not specified
15.	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	BDL	BDL	BDL	0.01
16.	Total Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	0.031	0.033	0.039	0.033	0.05
17.	Copper	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05
18.	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	0.088	0.082	BDL	0.095	0.3
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.025	0.032	0.030	0.030	0.038	0.1
20.	Nickel	mg/L	IS:3025 P- 54 a	0.03	BDL	BDL	BDL	BDL	BDL	0.02
21.	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	BDL	BDL	BDL	0.01
22.	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	BDL	BDL	BDL	5

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)

Page 2 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Residues in Water	Sample Collected by	Ranjeet Yadav & Team
Date of Sampling	06.04.2023	Sample Condition	Sealed & Preserved
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Surface Water (Barki River)	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/22-23/010	Location	Location: SW1 : Upstream of Barki River near Kishunpur SW2 : Downstream of Barki River near Pachanra Coordinate Upstream : 23°55'9.01"N to 85°1'50.64"E Coordinate Downstream: 23°53'43.39"N to 85°1'49.90"E
Sample ID	SCECPL/TR/23/126/WT-59/01-02	Report Release Date	11.04.2023
Period of Analysis	07.04.2023 to 10.04.2023	---	---
Metrological Information	Average Ambient Temperature- 29.0 °C, Barometric Pressure-1016 mBar Relative Humidity-36%, Weather Condition- Clear		

## TEST REPORT


Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

### Checked By

  
Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.***let's start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000661F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Type of Industry	Coal Mines
		Work Order No.	CBCMP/EO/22-23/010
Date of Sampling	06.04.2023	Sample Collected By	Ranjeet Yadav & Team
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/126/WT-59/01-02	Location:	
		SW1 : Upstream of Barki River near Kishunpur SW2 : Downstream of Barki River near Pachanra Coordinate Upstream : 23°55'8.20"N to 85°1'51.15"E Coordinate Downstream: 23°53'52.38"N to 85°1'17.38"E	
Period of Analysis	07.04.2023 to 10.04.2023	Report Release Date	11.04.2023
Metrological Information	Average Ambient Temperature- 29.0 °C, Barometric Pressure-1016 mBar Relative Humidity-36%, Weather Condition- Clear		

**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	pH@25°C	---	IS:3025 P- 11	2.0	7.84	7.51	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	391.0	632.0	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	10.6	12.4	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	17.2	21.8	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	5.0	6.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	4.2	4.8	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	83.6	87.2	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	28.1	27.1	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	15.5	16.1	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	23.5	25.1	600

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory

  
Quality Manager  
(Piyush Ranjan)

Page 1 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.73	0.79	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	24.3	26.1	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.71	5.60	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.54	0.63	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.11	0.18	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.078	0.084	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.031	0.035	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory



Quality Manager  
(Piyush Ranjan)

Page 2 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

C/C

Unique Lab Report No. (ULR No.)		TC994823000000662F		TEST REPORT	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical		
		Group	Pollution & Environment		
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Industry	Coal Mines		
Date of Sampling	06.04.2023	Sample Collected by	Ranjeet Yadav & Team		
Type of Sample	Effluent Water	Sample Condition	Sealed & Preserved		
Sample Details	Mine Discharge Water	Sample Drawn By	Sabz Care Lab		
		Sampling Method	IS 3025 : Part 1		
Sample ID	SCECPL/TR/23/126/WT-60/01-02	Location: EW1 : Effluent 1 (23°53'46.72"N to 85°3'57.30"E) EW2 : Effluent 2 (23°53'45.78"N to 85°3'57.21"E)			
Period of Analysis	07.04.2023 to 10.04.2023	Work Order No.	CBCMPL/WO/22-23/010		
Sampling Method	IS 3025 : Part 1	Report Release Date	11.04.2023		
Metrological Information	Average Ambient Temperature- 29.0 °C, Barometric Pressure-1016 mBar Relative Humidity-36%, Weather Condition- Clear				

**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Effluent 1 (EW1)	Effluent 2 (EW2)	Requirement/Specifications as per CPCB Guideline for Inland Surface Discharge (EPR 1986, Schedule VI)
1	pH@25°C	---	APHA-4500-H+ B: 23 <sup>rd</sup> Ed	2.0	7.40	7.46	5.5 to 9.0
2	Total Suspended Solids	mg/L	APHA 2540 D: 23 <sup>rd</sup> Ed	1.0	24.1	25.6	100
3	Total Dissolved Solids	mg/L	APHA 2540-C: 23 <sup>rd</sup> Ed	1.0	328.0	343.7	2100
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B: 23 <sup>rd</sup> Ed	5.0	23.8	20.7	250
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS 3025 Part-44:2019	2.0	6.0	5.0	30
6	Oil & Grease	mg/L	APHA 5520-B: 23 <sup>rd</sup> Ed	2.0	BDL	BDL	10
7	Iron as Fe	mg/L	IS 3025: Part 53a	0.075	BDL	BDL	3
8	Manganese as Mn	mg/L	IS 3025 Part-59b	0.01	0.08	0.10	2
9	Chloride as Cl	mg/L	APHA 4500 Cl- B	1.0	26.8	28.1	Not specified

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By****Technical Manager**

(Hassan Ahmad Khan)

Ravi

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB  
Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow


Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000924F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Industry	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018
Date of Sampling	18.05.2023	Sample Collected by	Vivek Kumar Malakar & Team
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/166/WT-73/01-05	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: -23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	18.05.2023 to 22.05.2023	Report Release Date	22.05.2023
Metrological Information	Average Ambient Temperature- 33.0 °C, Barometric Pressure-1009 mBar Relative Humidity-34%, Weather Condition- Clear		

**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1.	pH @ 25°C	—	IS:3025 P- 11	2.0	7.15	7.48	6.71	7.12	6.98	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	520	483	479	447	489	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.8	0.6	0.6	0.8	0.9	1
4.	Odour	—	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	320.0	308.0	311.0	282.0	318.0	500
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	181.0	191.0	186.8	190.1	189.4	200
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	196.2	190.8	188.5	189.4	187.1	200

Checked By

  
 Technical Manager  
 (Hassan Ahmad Khan)

Authorized Signatory

  
 (Mansoor Alam)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
8.	Calcium	mg/L	IS:3025 P- 40	1.0	51.9	44.1	52.3	36.2	51.4	75
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	22.4	26.1	21.2	22.4	22.8	30
10.	Chloride	mg/L	IS:3025 P- 32	1.0	31.2	30.8	30.6	27.8	30.1	250
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.18	0.20	0.19	0.18	0.22	1.0
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	21.2	22.9	24.2	20.1	21.4	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	10.1	9.1	8.9	9.9	12.6	45
14.	Phosphate	mg/L	IS:3025 P- 31	0.1	BDL	BDL	BDL	BDL	BDL	Not specified
15.	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	BDL	BDL	BDL	0.01
16.	Total Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	0.032	0.030	0.038	0.034	0.05
17.	Copper	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05
18.	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	0.084	0.086	BDL	0.091	0.3
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.023	0.031	0.032	0.030	0.036	0.1
20.	Nickel	mg/L	IS:3025 P- 54 a	0.03	BDL	BDL	BDL	BDL	BDL	0.02
21.	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	BDL	BDL	BDL	0.01
22.	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	BDL	BDL	BDL	5

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory

  
(Mansoor Alam)

Page 2 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Water & Residues in Water	Sample Collected by	Vivek Kumar Malakar & Team
Date of Sampling	18.05.2023	Sample Condition	Sealed & Preserved
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/23-24/018	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kated Village: -23°53'27.752"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Sample ID	SCECPL/TR/23/166/WT-73/01-05	Report Release Date	22.05.2023
Period of Analysis	18.05.2023 to 22.05.2023		
Metrological Information	Average Ambient Temperature- 33.0 °C, Barometric Pressure-1009 mBar Relative Humidity-34%, Weather Condition- Clear		

**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By**

**Technical Manager**  
(Hassan Ahmad Khan)

**Authorized Signatory**

(Mansoor Alam)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow


Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000925F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Group	Water & Residues in Water
		Type of Industry	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018
Date of Sampling	18.05.2023	Sample Collected By	Vivek Kumar Malakar & Team
Type of Sample	Water	Sample Condition	Scaled & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/166/WT-74/01-02	<b>Location:</b> SW1 : Upstream of Barki River near Kishunpur SW2 : Downstream of Barki River near Pachanra Coordinate Upstream : 23°55'8.20"N to 85°1'51.15"E Coordinate Downstream: 23°53'52.38"N to 85°1'17.38"E	
Period of Analysis	18.05.2023 to 22.05.2023	Report Release Date	22.05.2023
Metrological Information	Average Ambient Temperature- 33.0 °C, Barometric Pressure-1009 mBar Relative Humidity-34%, Weather Condition- Clear		

**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	pH@25°C	---	IS:3025 P- 11	2.0	7.80	7.58	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	395.0	622.0	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	11.8	14.1	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	17.8	21.2	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	4.0	6.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	4.6	5.2	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	82.4	86.4	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	28.4	26.8	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	14.8	16.4	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	22.8	25.4	600

Checked By

  
 Technical Manager  
 (Hassan Ahmad Khan)

Authorized Signatory

  
  
 (Mansoor Alam)

Page 1 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.71	0.80	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	24.1	26.8	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.52	5.69	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.53	0.64	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.12	0.18	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.077	0.081	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.031	0.034	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

**\*\*\* END OF REPORT \*\*\*****Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By****Technical Manager**  
(Hassan Ahmad Khan)**Authorized Signatory**

(Mansoor Alam)

Page 2 of 2

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow***TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Residues in Water	Sample Collected by	Vivek Kumar Malakar & Team
Date of Sampling	18.05.2023	Sample Condition	Sealed & Preserved
		Sample Drawn By	Sabz Care Lab
Type of Sample	Water	Sampling Method	IS 3025 : Part 1
Sample Details	Surface Water (Barki River)	Location	Location: SW1 : Upstream of Barki River near Kishunpur SW2 : Downstream of Barki River near Pachanra Coordinate Upstream : 23°55'9.01"N to 85°1'50.64"E Coordinate Downstream: 23°53'43.39"N to 85°1'49.90"E
Work Order No.	CBCMPL/WO/23-24/018		
Sample ID	SCECPL/TR/23/166/WT-74/01-02	Report Release Date	22.05.2023
Period of Analysis	18.05.2023 to 22.05.2023		
Metrological Information	Average Ambient Temperature- 33.0 °C, Barometric Pressure-1009 mBar Relative Humidity-34%, Weather Condition- Clear		

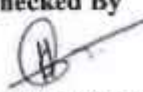
**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

**\*\*\* END OF REPORT \*\*\*****Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By**

  
**Technical Manager**  
 (Hassan Ahmad Khan)

**Authorized Signatory**

  
**(Mansoor Alam)**

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000000984F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Industry	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	16.06.2023	Sample Collected by	Md. Razaur Rahman & Team
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/195/WT-94/01-05	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: -23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	17.06.2023 to 20.06.2023	Report Release Date	21.06.2023
Meteorological Information	Ambient Temperature- 36.0 °C, Barometric Pressure-1007 mBar Relative Humidity-42%, Weather Condition- Clear		

## TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1.	pH @ 25°C	—	IS:3025 P- 11	2.0	7.04	7.53	6.85	7.47	7.05	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	763	1676	984.8	298.4	469	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.0	0.2	0.9	1.0	0.8	1
4.	Odour	—	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	422.0	989.2	576.0	187.0	293.0	500
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	192.3	201.3	194.1	185.9	195.8	200
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	191.1	186.3	182.9	188.2	185.3	200

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Page 1 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					TEST REPORT Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
8.	Calcium	mg/L	IS:3025 P- 40	1.0	49.8	42.5	54.7	39.2	47.4	75
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	22.1	25.2	20.1	21.4	20.9	30
10.	Chloride	mg/L	IS:3025 P- 32	1.0	29.9	30.3	33.1	25.3	31.4	250
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.19	0.19	0.20	0.17	0.21	1.0
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	23.4	25.6	28.1	21.7	23.9	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.7	8.8	9.1	9.6	12.3	45
14.	Phosphate	mg/L	IS:3025 P- 31	0.1	BDL	BDL	BDL	BDL	BDL	Not specified
15.	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	BDL	BDL	BDL	0.01
16.	Total Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	0.032	0.030	0.036	0.032	0.05
17.	Copper	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05
18.	Iron	mg/L	IS:3025 P- 53 a	0.075	0.079	0.087	0.091	0.078	0.096	0.3
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.024	0.032	0.030	0.029	0.034	0.1
20.	Nickel	mg/L	IS:3025 P- 54 a	0.03	BDL	BDL	BDL	BDL	BDL	0.02
21.	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	BDL	BDL	BDL	0.01
22.	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	BDL	BDL	BDL	5

\*\*\* END OF REPORT \*\*\*

## Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Checked By

Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory

Quality Manager  
(Piyush Ranjan)



**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Water & Residues in Water	Sample Collected by	Md. Razaur Rahman & Team
Date of Sampling	16.06.2023	Sample Condition	Sealed & Preserved
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Location With Coordinate- GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kated Village: -23°53'27.752"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)		
Sample ID	SCECPL/TR/23/195/WT-94/01-05	Report Release Date	21.06.2023
Period of Analysis	17.06.2023 to 20.06.2023	---	---
Meteorological Information	Ambient Temperature- 36.0 °C, Barometric Pressure-1007 mBar Relative Humidity-42%, Weather Condition- Clear		

**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By**

**Technical Manager**  
(Hassan Ahmad Khan)

**Authorized Signatory**

**Quality Manager**  
(Piyush Ranjan)

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000000985F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Group	Water & Residues in Water
Date of Sampling	16.06.2023	Type of Industry	Coal Mines
Type of Sample	Water	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Sample Details	Surface Water (Barki River)	Sample Collected By	Md. Razaaur Rahman
Sample ID	SCECPL/TR/23/195/WT-95/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	17.06.2023 to 20.06.2023	Sampling Method	IS 3025 : Part 1
Meteorological Information	Ambient Temperature- 36.0 °C, Barometric Pressure-1007 mBar Relative Humidity-42%, Weather Condition- Clear		
		Sample Drawn By	Sabz Care Lab
		Location:	SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
		Report Release Date	21.06.2023

**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	pH@25°C	—	IS:3025 P- 11	2.0	7.70	7.62	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	377.0	590.8	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	14.1	17.3	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	15.3	19.2	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	3.0	4.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	4.3	4.9	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	77.9	83.8	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	25.3	24.1	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	15.3	14.9	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	29.1	25.4	600

Checked By

  
Technical Manager  
(Hassan Ahmad Khan)

Authorized Signatory

  
Quality Manager  
(Piyush Ranjan)



**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.74	0.88	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	29.7	32.7	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.38	5.58	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.49	0.58	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.10	0.16	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.071	0.079	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.034	0.035	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Checked By**

**Technical Manager**  
**(Hassan Ahmad Khan)**

**Authorized Signatory**

**Quality Manager**  
**(Piyush Ranjan)**

Page 2 of 2

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Residues in Water	Sample Collected by	Md. Razaur Rahman
Date of Sampling	16.06.2023	Sample Condition	Sealed & Preserved
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Surface Water (Barki River)	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/VO/23-24/018 (Date- 02.05.2023)	Location	Location: SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E)  SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
Sample ID	SCECPL/TR/23/195/WT-95/01-02	Report Release Date	21.06.2023
Period of Analysis	17.06.2023 to 20.06.2023	---	---
Meteorological Information	Ambient Temperature- 36.0 °C, Barometric Pressure-1007 mBar Relative Humidity-42%, Weather Condition- Clear		

## TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

### Checked By

Technical Manager  
(Hassan Ahmad Khan)

*[Signature]*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000001196F	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	13.07.2023	Sample Collected by	Vivek K. Malakar & Team
Date of Sample Receiving	13.07.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/232/WT-116/01-05	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kaded Village: -23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	14.07.2023 to 17.07.2023	Report Release Date	18.07.2023
Meteorological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

**TEST REPORT**

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1.	pH @ 25°C	—	IS:3025 P- 11	4.0	7.12	7.44	6.93	7.38	6.9	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	756	1623	972.3	305.6	458.1	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.9	0.4	0.9	1.0	0.7	1
4.	Odour	—	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	418.2	983.5	571.2	191.2	297.0	500
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	189.3	194.7	191.3	189.8	191.2	200
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	189.2	183.1	178.2	183.1	182.1	200

Authorized Signatory

  
 Quality Manager  
 (Piyush Ranjan)

Page 1 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

 Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
 Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

## TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Water & Residues in Water	Sample Collected by	Vivek Kr. Malakar & Team
Date of Sampling	13.07.2023	Sample Condition	Sealed & Preserved
Date of Sample Receiving	13.07.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)	Location With Coordinate- GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kabeid Village: -23°53'27.752"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Sample ID	SCECPL/TR/23/232/WT-116/01-05	Report Release Date	18.07.2023
Period of Analysis	14.07.2023 to 17.07.2023	—	—
Meteorological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

## TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ravi*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.76	0.84	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	27.4	29.1	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.10	5.40	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.52	0.58	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.14	0.18	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.068	0.074	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.032	0.034	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Ran*





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001208F	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	13.07.2023	Sample Collected By	Vivek K. Malakar
Date of Sample Receiving	13.07.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/232/WT-117/01-02	Location:	
		SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)	
Period of Analysis	14.07.2023 to 17.07.2023	Report Release Date	18.07.2023
Meteorological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

## TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	pH@25°C	---	IS:3025 P- 11	4.0	7.59	7.53	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	391.0	594.3	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	19.1	26.9	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	18.4	22.9	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	3.0	3.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	4.7	5.2	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	81.1	87.2	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	27.1	26.4	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	17.1	16.3	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	27.1	23.9	600

Authorized Signatory



*Piyush*

Quality Manager  
(Piyush Ranjan)

*Ran*

Page 1 of 2

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.***let's start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

Unique Lab Report No. (ULR No.)		TC994823000001209F <b>TEST REPORT</b>	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Pollution & Environment
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Plant	Coal Mines
Date of Sampling	13.07.2023	Sample Collected by	Vivek Kumar Malakar
Date of Sample Receiving	13.07.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Effluent Water	Sample Condition	Sealed & Preserved
Sample Details	Mine Discharge Water	Sample Drawn By	Sabz Care Lab
		Sampling Method	IS 3025 : Part 1
Sample ID	SCECPL/TR/23/232/WT-120/01-02	Location: EW1 : Effluent 1 (23°53'46.72"N to 85°3'57.30"E) EW2 : Effluent 2 (23°53'45.78"N to 85°3'57.21"E)	
Period of Analysis	14.07.2023 to 17.07.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Sampling Method	IS 3025 : Part 1	Report Release Date	18.07.2023
Metrological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

**TEST REPORT**

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Effluent 1 (EW1)	Effluent 2 (EW2)	Requirement/Specifications as per CPCB Guideline for Inland Surface Discharge (EPR 1986, Schedule VI)
1	pH@25°C	—	APHA-4500-H+ B: 23 <sup>rd</sup> Ed	4.0	7.32	7.39	5.5 to 9.0
2	Total Suspended Solids	mg/L	APHA 2540 D: 23 <sup>rd</sup> Ed	1.0	25.3	26.1	100
3	Total Dissolved Solids	mg/L	APHA 2540-C: 23 <sup>rd</sup> Ed	1.0	339.0	352.4	2100
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B: 23 <sup>rd</sup> Ed	5.0	22.4	21.3	250
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS 3025 Part-44:2019	2.0	5.0	5.0	30
6	Oil & Grease	mg/L	APHA 5520-B: 23 <sup>rd</sup> Ed	2.0	BDL	BDL	10
7	Iron as Fe	mg/L	IS 3025: Part 53a	0.075	BDL	BDL	3
8	Manganese as Mn	mg/L	IS 3025 Part-59b	0.01	0.08	0.09	2
9	Chloride as Cl	mg/L	APHA 4500 Cl- B	1.0	28.1	29.7	Not specified

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ran*

Authorized Signatory

*Prakash Ranjan*

Quality Manager

(Prakash Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scacplmdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

## TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Residues in Water	Sample Collected by	Vivek K. Malakar
Date of Sampling	13.07.2023	Sample Condition	Sealed & Preserved
		Sample Drawn By	Sabz Care Lab
Date of Sample Receiving	13.07.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sampling Method	IS 3025 : Part 1
Sample Details	Surface Water (Barki River)	Location	Location: SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)		
Sample ID	SCECPL/TR/23/232/WT-117/01-02	Report Release Date	18.07.2023
Period of Analysis	14.07.2023 to 17.07.2023		
Meteorological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

## TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001313F	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	11.08.2023	Sample Collected by	Anup Dutta & Team
Date of Sample Receiving	11.08.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/258/WT-139/01-05	Location With Coordinate GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: -23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	12.08.2023 to 14.08.2023	Report Release Date	16.08.2023
Meteorological Information	Ambient Temperature- 29°C, Barometric Pressure-1010 mBar Relative Humidity-74%, Weather Condition- Clear		

### TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1.	pH @ 25°C	---	IS:3025 P- 11	4.0	6.62	7.34	6.69	6.72	7.16	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	273.1	1516	845.1	298.1	652.2	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.8	0.9	0.5	0.5	0.8	1
4.	Odour	---	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	167.8	907.1	510.9	184.3	376.1	500
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	187.0	191.7	192.4	188.2	190.4	200
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	190.0	185.0	177.5	182.6	182.8	200

Authorized Signatory

*Piyush*  
16/8/23  
Quality Manager  
(Piyush Ranjan)

Page 1 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

### TEST REPORT

S. N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
8.	Calcium	mg/L	IS:3025 P- 40	1.0	49.1	42.9	53.1	38.8	46.8	75
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	21.9	24.8	19.8	21.6	21.4	30
10.	Chloride	mg/L	IS:3025 P- 32	1.0	28.9	32.5	36.1	28.8	31.9	250
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.18	0.19	0.19	0.17	0.20	1.0
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	23.4	27.9	30.1	25.1	22.7	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.1	9.2	8.8	9.8	11.8	45
14.	Phosphate	mg/L	IS:3025 P- 31	0.1	BDL	BDL	BDL	BDL	BDL	Not specified
15.	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	BDL	BDL	BDL	0.01
16.	Total Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	0.032	0.032	0.035	0.031	0.05
17.	Copper	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05
18.	Iron	mg/L	IS:3025 P- 53 a	0.075	0.078	0.085	0.090	0.083	0.097	1.0
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.025	0.033	0.031	0.030	0.032	0.1
20.	Nickel	mg/L	IS:3025 P- 54 a	0.03	BDL	BDL	BDL	BDL	BDL	0.02
21.	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	BDL	BDL	BDL	0.01
22.	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	BDL	BDL	BDL	5

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

\*\*\* END OF REPORT \*\*\*

Authorized Signatory

Quality Manager  
(Priyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048360, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



# Sabz Care Environmental Consultancy Pvt. Ltd.

lets start thinking about nature for tomorrow

## TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Water & Residues in Water	Sample Collected by	Anup Dutta & Team
Date of Sampling	11.08.2023	Sample Condition	Sealed & Preserved
Date of Sample Receiving	11.08.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)	Location With Coordinate- GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: -23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: -23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: -23°53'27.752"N to 85°05'20.06"E GW5: NTPC Camp: -23°53'28.16"N to 85°04'57.53"E	
Sample ID	SCECPL/TR/23/258/WT-139/01-05	Report Release Date	16.08.2023
Period of Analysis	12.08.2023 to 14.08.2023	---	---
Meteorological Information	Ambient Temperature- 29°C, Barometric Pressure-1010 mBar Relative Humidity-74%, Weather Condition- Clear		

## TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

### Note-

- BDL = Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ravi*

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





# Sabz Care Environmental Consultancy Pvt. Ltd.

Let's start thinking about nature for tomorrow

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001314F		
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
Address	At- Chatti Bariatu, Jorag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Group	Water & Residues in Water
Date of Sampling	11.08.2023	Type of Plant	Coal Mines
Date of Sample Receiving	11.08.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Anup Dutta & Team
Sample Details	Surface Water (Barki River)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/258/WT-140/01-02	Sample Condition	Sealed & Preserved
		Sampling Method	IS 3025 : Part 1
		Sample Drawn By	Sabz Care Lab
Period of Analysis	12.08.2023 to 16.08.2023	Location:	
Meteorological Information	Ambient Temperature- 29°C, Barometric Pressure-1010 mBar Relative Humidity-74%, Weather Condition- Clear	SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)	
		Report Release Date	16.08.2023

## TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	pH@25°C	---	IS:3025 P- 11	4.0	6.59	6.45	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	274.3	242.6	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	19.8	27.3	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	19.1	23.7	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	3.0	3.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	4.9	5.8	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	81.8	86.9	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	27.9	28.2	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	16.5	16.8	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	27.4	24.5	600

Authorized Signatory

*[Signature]*  
Quality Manager  
(Piyush Ranjan)

*[Signature]*

Page 1 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.75	0.85	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	27.1	28.6	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.12	5.38	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.53	0.60	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.13	0.18	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.067	0.075	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.031	0.033	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

\*\*\* END OF REPORT \*\*\*

#### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
14/8/24  
Quality Manager  
(Piyush Ranjan)

*Ravi*

Page 2 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

### TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Discipline	Chemical
Group	Residues in Water	Sample Collected by	Anup Dutta & Team
Date of Sampling	11.08.2023	Sample Condition	Sealed & Preserved
Date of Sample Receiving	11.08.2023	Sample Drawn By	Sabz Care Lab
Type of Sample	Water	Sampling Plan	SCECPL/SOP/WA/01
Sample Details	Surface Water (Barki River)	Sampling Method	IS 3025 : Part 1
Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)	Location	Location: SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E)  SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
Sample ID	SCECPL/TR/23/258/WT-140/01-02	Report Release Date	16.08.2023
Period of Analysis	12.08.2023 to 16.08.2023		
Meteorological Information	Ambient Temperature- 29°C, Barometric Pressure-1010 mBar Relative Humidity-74%, Weather Condition- Clear		

### TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

\*\*\* END OF REPORT \*\*\*

#### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Pari*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001493F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Date of Sample Receiving	15.09.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/WT-165/01-05	Location With Coordinate-	
		GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: - 23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: - 23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: - 23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: - 23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	15.09.2023 to 18.09.2023	Report Release Date	19.09.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit	Result					Requirements (Acceptable Limit) as per IS 10500: 2012	Permissible Limit in the absence of Alternate Source as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5		
1.	pH @ 25°C	—	IS:3025 P- 11	4.0	6.82	6.79	6.56	7.40	6.62	6.5 to 8.5	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	1199	728	1239	840	1342	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.3	4.6	2.1	4.9	4.7	1	5
4.	Odour	—	IS:3025 P- 5	Qualitative	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids	mg/L	IS:3025 P- 16	2.0	678.3	407.6	718.6	487.2	751.5	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	182.5	194.9	188.7	183.8	196.1	200	600
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	194.1	189.0	183.8	187.2	194.1	200	600

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Page 1 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result					Requirements (Acceptable Limit) as per IS 10500: 2012	Permissible Limit in the absence of Alternate Source as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5		
8.	Calcium	mg/L	IS:3025 P- 40	1.0	49.8	42.5	53.6	39.2	47.0	75	200
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	21.6	25.1	19.5	21.9	21.2	30	100
10.	Chloride	mg/L	IS:3025 P- 32	1.0	33.2	36.5	41.3	34.6	36.5	250	1000
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.19	0.20	0.19	0.17	0.22	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	26.3	29.8	35.3	29.1	24.8	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.7	9.9	8.6	10.6	12.2	45	45
14.	Phosphate	mg/L	IS:3025 P- 31	0.1	BDL	BDL	BDL	BDL	BDL	Not specified	Not specified
15.	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	BDL	BDL	BDL	0.01	0.01
16.	Total Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	0.031	0.033	0.035	0.031	0.05	0.05
17.	Copper	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05	1.5
18.	Iron	mg/L	IS:3025 P- 53 a	0.075	0.081	0.088	0.095	0.088	0.099	1.0	1.0
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.027	0.032	0.033	0.029	0.032	0.1	0.3
20.	Nickel	mg/L	IS:3025 P- 54 a	0.03	BDL	BDL	BDL	BDL	BDL	0.02	0.02
21.	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	BDL	BDL	BDL	0.01	0.01
22.	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	BDL	BDL	BDL	5	15

\*\*\* END OF REPORT \*\*\*

#### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Pan*

Page 2 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Date of Sample Receiving	15.09.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
Sample Details	Ground Water	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/WT-165/01-05	Location With Coordinate- GW1: Kishunpur Village: -23°54'58.78"N to 85°01'0.19"E GW2: Keredari Village: - 23°51'34.99"N to 85°05'14.39"E GW3: Chatti Bariatu Village: - 23°53'18.32"N to 85°04'16.70"E GW4: Kabed Village: - 23°53'27.75"N to 85°05'20.06"E GW5: NTPC Camp: - 23°53'28.16"N to 85°04'57.53"E	
Period of Analysis	15.09.2023 to 18.09.2023	Report Release Date	19.09.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### TEST REPORT

S.N.	Parameter	Unit	Test Method	Minimum Detection Limit	Result					Requirements (Acceptable Limit) as per IS 10500: 2012
					GW1	GW2	GW3	GW4	GW5	
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	BDL	BDL	BDL	0.7
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	BDL	BDL	BDL	0.003
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	BDL	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	BDL	BDL	BDL	0.001

\*\*\* END OF REPORT \*\*\*

#### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Ranjan*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001494F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	14.09.2023	Sample Collected By	Ranjeet Yadav & Team
Date of Sample Receiving	15.09.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/WT-166/01-02	Location: SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)	
Period of Analysis	15.09.2023 to 18.09.2023	Report Release Date	19.09.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1982) Class 'C' Prescribed Level
1	pH@25°C	---	IS:3025 P- 11	4.0	6.32	6.53	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	775.4	785.8	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	26.3	31.7	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	22.7	26.9	Not specified
5	Biological Oxygen Demand (BOD) for 3 days @ 27°C	mg/L	IS:3025 P- 44	2.0	3.0	3.0	3
6	Oil & Grease	mg/L	APHA 5520 B	3.0	5.4	5.9	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	76.2	83.8	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	29.1	31.8	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	16.8	17.2	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	31.4	27.8	600

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Page 1 of 2

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1982) Class 'C' Prescribed Level
11	Fluoride	mg/L	IS:3025 P- 60	0.05	0.77	0.83	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	31.7	34.3	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	5.9	5.4	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.52	0.57	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Chromium	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper	mg/L	IS:3025 P- 42 a	0.03	0.16	0.19	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.079	0.082	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.034	0.037	Not specified
21	Lead	mg/L	IS:3025 P- 47 iv	0.03	BDL	BDL	0.1
22	Zinc	mg/L	IS:3025 P- 49 i	0.02	BDL	BDL	15

\*\*\* END OF REPORT \*\*\*

**Note-**

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

Page 2 of 2

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
 Contact : 09334315731, 07563048389, e-mail : sceplmdp@gmail.com



**MSME**  
 सूक्ष्म, लघु एवं मध्यम उद्यम  
 MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

### TEST REPORT

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Type of Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	14.09.2023	Sample Collected By	Ranjeet Yadav & Team
Date of Sample Receiving	15.09.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Sealed & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/WT-166/01-02	Location:	SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'8.20"N to 85°1'51.15"E) SW2 : Downstream of Barki River near Pachanra (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
Period of Analysis	15.09.2023 to 18.09.2023	Report Release Date	19.09.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### TEST REPORT

Sl. No.	Parameter	Unit	Test Method	Minimum Detection Limit in mg/L	Result Upstream (SW1)	Result Downstream (SW2)	IS:2296 Inland Surface Water (1992) Class 'C' Prescribed Level
1	Sodium	mg/L	APHA 3500 Na B	1.0	BDL	BDL	Not specified
2	Potassium	mg/L	APHA 3500 K B	1.0	BDL	BDL	Not specified
3	Barium	mg/L	APHA 3500 Ba	1.0	BDL	BDL	Not specified
4	Cadmium	mg/L	APHA 3500Cd D	0.0005	BDL	BDL	0.01
5	Cobalt	mg/L	APHA 3500 Co	1.0	BDL	BDL	Not specified
6	Mercury	mg/L	APHA 3500 Hg	0.0003	BDL	BDL	Not specified

\*\*\* END OF REPORT \*\*\*

#### Note-

- BDL= Below Detection Limit
- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Ravi*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Ranjeet Yadav & Team
Date of Sampling	18.04.2023 to 19.04.2023	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water Level (Well Water)	Remarks	-----
Sample ID	SCECPL/TR/23/140/WL-10	Report Release Date	22.04.2022

### Static Well Water Level in April 2023

S. N.	Location	Coordinates	Depth in Meter
1	Kabed Village	23°53'27.752"N to 85°05'20.06"E	15.8
2	Chatibariatu Village	23°53'18.32"N to 85°04'16.70"E	23.7
3	Keredari P.S.	23°51'34.99"N to 85°05'14.39"E	19.3
4	Kishunpur P.S	23°54'58.78"N to 85°01'0.19"E	22.0

\*\*\* END OF REPORT \*\*\*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Ravi*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecplmdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



CC

lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Industry	Iron Ore Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Sample Collected by	Ranjeet Yadav
Date of Sampling	19.04.2023	Sampling done By	Sabz Care Lab
		Sampling Method	By DWLR (Digital Water Level Recorder) Machine
Sample Details	Piezometer Reading	Work order No.-	CC/4630/OT/MIOM/W-34/326 (Date-23.06.2022)
Sample ID	SCECPL/TR/23/140/WL-10	Location With Coordinate-	CBCMPL Site Office (23°53'26.15"N to 85°04'57.54"E)
Period of Analysis	April 2023	Report Release Date	22.04.2023
Meteorological Information	Ambient Temperature- 35 °C, Barometric Pressure-1010 mBar Relative Humidity-32%, Weather Condition- Clear		

### TEST REPORT

S.N.	Parameter	Unit	Test Method	Result	Requirements (Acceptable Limit) as per IS 10500: 2012
1	Piezometer Reading (CBCMPL Site Office)	Meter	By DWLR (Digital Water Level Recorder) Machine	17.63	Not Specified

\*\*\* END OF REPORT \*\*\*

#### Remark:

- The test report is not to be reproduced in JSPCB unless written permission obtained from Sabz Care Lab.

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)

Pani

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Type of Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kumar Malakar & Team
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	13.07.2023	Sample Drawn By	Sabz Care Lab
Sample Details	Ground Water Level (Well Water)	Remarks	-----
Sample ID	SCECPL/TR/23/232/WL-15	Report Release Date	18.07.2023
Meteorological Information	Ambient Temperature- 31.0°C, Barometric Pressure-1002 mBar Relative Humidity-64%, Weather Condition- Clear		

### Static Well Water Level in April 2023

S. N.	Location	Coordinates	Depth in Meter
1	Kabed Village	23°53'27.752"N to 85°05'20.06"E	12.2
2	Chatibariatu Village	23°53'18.32"N to 85°04'16.70"E	16.1
3	Keredari P.S.	23°51'34.99"N to 85°05'14.39"E	16.2
4	Kishunpur P.S	23°54'58.78"N to 85°01'0.19"E	19.0

\*\*\* END OF REPORT \*\*\*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Rani*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



Photograph# 1.5 MLD STP for treatment of Sewage with the latest technology of MBBR System



Raw



Paul





Raw



Raw



COST INCURRED TOWARDS ENVIRONMENT ASPECTS FOR FY 2022-23 CHATTI BARIATU COAL MINING PROJECT, NTPC LD					
Sl. No.	Description	Unit	Qty	value in Rs.	Remarks
1	CAAQMS (Continuous Ambient Air Quality Monitoring Station) installation	nos	1	4543000.00	
2	Platform & fencing construction for CAAQMS			131360.00	
3	Piezometer installed	nos	1	36037.00	
4	Safety wall & canopy for Piezometer	nos	1	7000.00	
5	Flowmeter	nos	3	64546.00	
6	Installation charges for Flowmeter	nos	2	5000.00	
7	Per months Environmental aspects monitoring cost	month	11	1430000.00	From May'22 onwards
8	Dust Screening at CHP	nos	1	850000.00	
9	Borewell	nos	3	390000.00	
10	Under ground RCC tank for Dust suppression water collection	nos	1	1155000.00	
11	DSS for CHP	nos	1	200000.00	
12	IAR preparation for CBCMP	nos	1	472000.00	
13	Top Soil (From April'22 to March'23)	cum	217459.4	17396752.00	
<b>Grand Total</b>				<b>25680695.00</b>	

*Ravi*

## Details of ESCROW capacity for the FY 2022-23

Paul

[illegible]



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

Let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000000655F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	04.04.2023 to 05.04.2023	Sample Collected by	Ranjeet Yadav & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/126/AA-118/01, 02 & 03	Report Release Date	11.04.2023
Period of Analysis	07.04.2023 to 08.04.2023		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)  
 Location-2: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
 Location-3: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)

**Duration of Sampling:** 24 hours Each Location

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 29.0
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1016
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	47.68	39.71	43.02	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	92.59	80.49	87.48	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	28.33	20.83	26.67	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	24.94	18.71	21.48	80 (µg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
 Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care**  
Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000656F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	05.04.2023 to 06.04.2023	Sample Collected by	Ranjeet Yadav & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/126/AA-119/01 & 02	Report Release Date	11.04.2023
Period of Analysis	07.04.2023 to 08.04.2023	-	-

### A. GENERAL INFORMATION

Location of Sampling: Location-4: Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)

Location-5: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

Duration of Sampling: 24 hours each location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 29.0
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1016
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	40.71	37.11	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	81.43	72.78	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	25.83	19.17	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	20.79	17.32	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

Remarks: The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Ranjeet Yadav & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	04.04.2023 to 05.04.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/22-23/010
Sample ID	SCECPL/TR/23/126/AA-118/04, 05 & 06	Report Release Date	11.04.2023
Period of Analysis	07.04.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-2: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-3: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 29.0
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1016
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.49	0.28	0.50	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Pari*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Ranjeet Yadav & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	05.04.2023 to 06.04.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/22-23/010
Sample ID	SCECPL/TR/23/126/AA-119/03 & 04	Report Release Date	11.04.2023
Period of Analysis	07.04.2023	Remarks	

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)  
Location-5: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 29.0
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1016
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.39	0.31	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
Quality Manager  
(Piyoshi Ranjan)

*Ravi*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000769F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	18.04.2023 to 19.04.2023	Sample Collected by	Ranjeet Yadav & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/140/AA-135/01, 02 & 03	Report Release Date	22.04.2023
Period of Analysis	20.04.2023 to 21.04.2023		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-2: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-3: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
**Duration of Sampling:** 24 hours Each Location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 32
3. Barometric Pressure (mBar) : 1010
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	55.64	48.07	41.82	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	94.73	89.59	82.35	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.67	29.17	21.67	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.64	31.87	26.33	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000770F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	19.04.2023 to 20.04.2023	Sample Collected by	Ranjeet Yadav & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/140/AA-136/01 & 02	Report Release Date	22.04.2023
Period of Analysis	20.04.2023 to 21.04.2023	-	-

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)  
Location-5: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)  
**Duration of Sampling:** 24 hours each location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 32
3. Barometric Pressure (mBar) : 1010
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Spe cifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	43.69	39.82	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	84.12	75.86	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	26.67	18.33	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	30.49	22.17	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ran*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Ranjeet Yadav & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	18.04.2023 to 19.04.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/22-23/010
Sample ID	SCECPL/TR/23/140/AA-135/04, 05 & 06	Report Release Date	22.04.2023
Period of Analysis	20.04.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-2: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-3: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 32
3. Barometric Pressure (mBar) : 1010
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.51	0.27	0.49	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory



*Ravi*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Ranjeet Yadav & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	19.04.2023 to 20.04.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/22-23/010
Sample ID	SCECPL/TR/23/140/AA-136/03 & 04	Report Release Date	22.04.2023
Period of Analysis	20.04.2023	Remarks	-----

### A. GENERAL INFORMATION

Location of Sampling: Location-4: Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)  
Location-5: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 32
3. Barometric Pressure (mBar) : 1010
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.42	0.30	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

Remarks: The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)



ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000000919F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	16.05.2023 to 17.05.2023	Sample Collected by	Vivek Kr. Malakar & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/166/AA-166/01, 02 & 03	Report Release Date	22.05.2023
Period of Analysis	18.05.2023 to 19.05.2023		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
 Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
 Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 33.0
2. Relative Humidity (%) : 34
3. Barometric Pressure (mBar) : 1009
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	47.50	42.73	38.59	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	83.03	80.81	75.31	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	28.33	27.50	24.17	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	31.18	30.49	27.72	80 (µg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ran*

Authorized Signatory  
  
 (Mansoor Alam)

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
 Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000920F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	17.05.2023 to 18.05.2023	Sample Collected by	Vivek Kr.Malakar & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/166/AA-167/01 & 02	Report Release Date	22.05.2023
Period of Analysis	18.05.2023 to 19.05.2023	-	-

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)

Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

Duration of Sampling: 24 hours each location

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 33.0
2. Relative Humidity (%) : 34
3. Barometric Pressure (mBar) : 1009
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	56.14	40.89	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	95.12	78.54	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	30.83	26.67	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	33.95	28.41	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

Remarks: The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

  
 (Mansoor Alam)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr. Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	16.05.2023 to 17.05.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018
Sample ID	SCECPL/TR/23/166/AA-166/04, 05 & 06	Report Release Date	22.05.2023
Period of Analysis	18.05.2023	Remarks	

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 33
2. Relative Humidity (%) : 34
3. Barometric Pressure (mBar) : 1009
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.29	0.43	0.31	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory



(Mansoor Alam)

*Ravi*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr.Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	17.05.2023 to 18.05.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018
Sample ID	SCECPL/TR/23/166/AA-167/03 & 04	Report Release Date	22.05.2023
Period of Analysis	18.05.2023	Remarks	-----

### A. GENERAL INFORMATION

Location of Sampling: Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 33
2. Relative Humidity (%) : 34
3. Barometric Pressure (mBar) : 1009
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.50	0.35	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

(Mansoor Alam)

Ravi

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000945F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.05.2023 to 30.05.2023	Sample Collected by	Vivek Kr. Malakar & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/180/AA-180/01, 02 & 03	Report Release Date	02.06.2023
Period of Analysis	31.05.2023 to 01.06.2023		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.5
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1008
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	49.54	43.89	37.41	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	89.26	81.34	77.95	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	29.17	28.33	23.33	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	33.26	31.18	26.33	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

CLC

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000946F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	30.05.2023 to 31.05.2023	Sample Collected by	Vivek Kr.Malakar & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/180/AA-181/01 & 02	Report Release Date	02.06.2023
Period of Analysis	31.05.2023 to 01.06.2023	-	-

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)

Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**Duration of Sampling:** 24 hours each location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.5
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1008
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	58.73	41.45	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	98.62	79.51	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.67	28.33	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.64	30.49	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ravi*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecplmdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



CK

lets start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr. Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.05.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018
Sample ID	SCECPL/TR/23/180/AA-180/04, 05 & 06	Report Release Date	02.06.2023
Period of Analysis	31.05.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.5
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1008
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.31	0.42	0.30	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

ck

lets start thinking about nature for tomorrow

**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr.Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	30.05.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018
Sample ID	SCECPL/TR/23/180/AA-181/03 & 04	Report Release Date	02.06.2023
Period of Analysis	31.05.2023	Remarks	

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)  
 Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 32.5
2. Relative Humidity (%) : 36
3. Barometric Pressure (mBar) : 1008
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.49	0.34	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Priyush*  
 Quality Manager  
 (Priyush Ranjan)

*Ranjan***ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000979F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	14.06.2023 to 15.06.2023	Sample Collected by	Md R. Rahman & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume I (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/195/AA-195/01, 02 & 03	Report Release Date	21.06.2023
Period of Analysis	16.06.2023 to 17.06.2023		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 41
3. Barometric Pressure (mBar) : 1006
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	50.91	42.61	36.69	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	88.74	80.54	75.33	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	28.14	29.90	27.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	32.81	31.25	28.12	80 (µg/m <sup>3</sup> )

#### \*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000980F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	15.06.2023 to 16.06.2023	Sample Collected by	Md R. Rahaman & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/195/AA-196/01 & 02	Report Release Date	21.06.2023
Period of Analysis	16.06.2023 to 17.06.2023	-	-

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Near New Coal Stock Yard, Coal Pice (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
**Duration of Sampling:** 24 hours each location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 41
3. Barometric Pressure (mBar) : 1006
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	59.86	39.65	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	94.15	78.62	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	32.81	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.59	29.32	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Raw*

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Md R. Rahman & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	14.06.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Sample ID	SCECPL/TR/23/195/AA-195/04, 05 & 06	Report Release Date	21.06.2023
Period of Analysis	16.06.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 41
3. Barometric Pressure (mBar) : 1006
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.30	0.41	0.26	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Piyush*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow***TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Md R. Rahman & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	15.06.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Sample ID	SCECPL/TR/23/195/AA-196/03 & 04	Report Release Date	21.06.2023
Period of Analysis	16.06.2023	Remarks	-----

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)  
 Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 35.0
2. Relative Humidity (%) : 41
3. Barometric Pressure (mBar) : 1006
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.45	0.31	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
 Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001094F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/VO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	22.06.2023 to 23.06.2023	Sample Collected by	Md R. Rahman & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/208/AA-205/01, 02 & 03	Report Release Date	27.06.2023
Period of Analysis	24.06.2023 to 26.06.2023		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.50
2. Relative Humidity (%) : 59
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	49.75	40.57	34.90	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	86.32	77.64	72.11	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	27.34	29.69	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	30.49	29.90	29.32	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ravi*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001095F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/VO/23-24/01 Date-02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	23.06.2023 to 24.06.2023	Sample Collected by	Md R. Rahaman & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/208/AA-206/01 & 02	Report Release Date	27.06.2023
Period of Analysis	24.06.2023 to 26.06.2023	-	-

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
**Duration of Sampling:** 24 hours each location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.50
2. Relative Humidity (%) : 59
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	55.76	40.32	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	91.57	79.23	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.25	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	32.25	30.49	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ran*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Md R. Rahman & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	22.06.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Sample ID	SCECPL/TR/23/208/AA-205/04, 05 & 06	Report Release Date	27.06.2023
Period of Analysis	24.06.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 32.50
2. Relative Humidity (%) : 59
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.29	0.42	0.28	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.



*Ranjan*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Md R. Rahman & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	23.06.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Sample ID	SCECPL/TR/23/208/AA-206/03 & 04	Report Release Date	27.06.2023
Period of Analysis	24.06.2023	Remarks	-----

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 32.50
2. Relative Humidity (%) : 59
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.48	0.32	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

*Paw*

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*lets start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001189F		
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	11.07.2023 to 12.07.2023	Sample Collected by	Vivek Kr. Malakar & Team
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/232/AA-226/01, 02 & 03	Report Release Date	18.07.2023
Period of Analysis	13.07.2023 to 14.07.2023		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishumpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 30.0
2. Relative Humidity (%) : 62
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	47.70	38.33	31.49	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	83.19	75.68	68.57	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	25.78	28.12	21.09	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	27.56	30.49	24.62	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Paw*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000001190F	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	12.07.2023 to 13.07.2023	Sample Collected by	Vivek Kr. Malakar & Team
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Type of Sample	Suspended Dust and Gases	Sample Condition	Sealed and Preserved
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/232/AA-227/01 & 02	Report Release Date	18.07.2023
Period of Analysis	13.07.2023 to 14.07.2023	-	-

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)

Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

Duration of Sampling: 24 hours each location

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 30.0
2. Relative Humidity (%) : 62
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	53.39	35.68	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	89.46	71.20	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	30.47	24.22	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	36.94	25.80	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

## TEST REPORT

Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr. Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	11.07.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/VO/23-24/018 Date- 02.05.2023
Sample ID	SCECPL/TR/23/232/AA-226/04, 05 & 06	Report Release Date	18.07.2023
Period of Analysis	13.07.2023	Remarks	-----

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. METEOROLOGICAL INFORMATION

1. Average Ambient Temperature (°C) : 30.0
2. Relative Humidity (%) : 62
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

### C. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.27	0.38	0.26	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Paw*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sample Collected by	Vivek Kr. Malakar & Team
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	12.07.2023	Sample Condition	Sealed and Preserved
Type of Sample	Gases	Sample Drawn By	Sabz Care Lab
Sample Details	Ambient Air	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Sample ID	SCECPL/TR/23/232/AA-227/03 & 04	Report Release Date	18.07.2023
Period of Analysis	13.07.2023	Remarks	-----

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**B. METEOROLOGICAL INFORMATION**

1. Average Ambient Temperature (°C) : 30.0
2. Relative Humidity (%) : 62
3. Barometric Pressure (mBar) : 1002
4. Smell or Odour : No Remarkable smell
5. Weather condition : Clear

**C. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.42	0.26	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Diyush*  
Quality Manager  
(Diyush Ranjan)

*Pour*

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001215F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	27.07.2023 to 28.07.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	31.07.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume I (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/240/AA-236/01, 02 & 03	Report Release Date	01.08.2023
Period of Analysis	31.07.2023 to 01.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.5°C , Barometric Pressure : 1000 mBar Relative Humidity : 71%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	48.70	40.81	32.75	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	85.45	78.21	71.81	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	28.66	30.47	22.66	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	29.32	32.44	26.58	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Paw*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001216F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.07.2023 to 29.07.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	31.07.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/240/AA-237/01 & 02	Report Release Date	01.08.2023
Period of Analysis	31.07.2023 to 01.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.5°C , Barometric Pressure : 1000 mBar Relative Humidity : 71%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	56.45	34.51	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	91.71	72.37	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	32.55	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.59	28.92	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
  
Quality Manager  
(Piyush Ranjan)



ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecplmdp@gmail.com





**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	27.07.2023 to 28.07.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	31.07.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)	Sampling Plan	SCECPL/SOP/AA/01
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/240/AA-236/04, 05 & 06	Report Release Date	01.08.2023
Period of Analysis	31.07.2023 to 01.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.5°C , Barometric Pressure :1000 mBar Relative Humidity : 71%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.30	0.41	0.28	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

*Pani*

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



let's start thinking about nature for tomorrow

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.07.2023 to 29.07.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	31.07.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/240/AA-237/04 & 05	Report Release Date	01.08.2023
Period of Analysis	31.07.2023 to 01.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.5°C , Barometric Pressure : 1000 mBar Relative Humidity : 71%, Weather Condition - Clear		

### A. GENERAL INFORMATION

Location of Sampling: Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)

Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.49	0.31	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
Piyush  
Quality Manager  
(Piyush Ranjan)

*Ravi*

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001308F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazarihagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	09.08.2023 to 10.08.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	11.08.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/258/AA-246/01, 02 & 03	Report Release Date	16.08.2023
Period of Analysis	11.08.2023 to 12.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 29.0°C , Barometric Pressure : 1010 mBar Relative Humidity : 74%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours Each Location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	49.88	42.66	30.33	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	87.14	80.96	70.43	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	29.69	32.03	24.22	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	31.07	34.59	26.97	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Pari*

Authorized Signatory  
*Piyush*  
16/8/23  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001309F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	10.08.2023 to 11.08.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	11.08.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/258/AA-247/01 & 02	Report Release Date	16.08.2023
Period of Analysis	11.08.2023 to 12.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 29.0°C , Barometric Pressure : 1010 mBar Relative Humidity : 74%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)

Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Spe cifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	54.79	36.91	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	93.48	74.21	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	34.38	27.34	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	37.52	29.90	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

### TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	09.08.2023 to 10.08.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	11.08.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/258/AA-246/04, 05 & 06	Report Release Date	16.08.2023
Period of Analysis	11.08.2023 to 12.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 29.0°C , Barometric Pressure : 1010 mBar Relative Humidity : 74%, Weather Condition - Clear		

#### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)  
Location-3: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

#### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.32	0.40	0.29	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
16/8/23  
Quality Manager  
(Piyush Ranjan)

*Pari*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	10.08.2023 to 11.08.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	11.08.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/258/AA-247/04 & 05	Report Release Date	16.08.2023
Period of Analysis	11.08.2023 to 12.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 29°C , Barometric Pressure : 1010 mBar Relative Humidity : 74%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Near New Coal Stock Yard (23°53'28.59"N to 85°04'47.09"E)  
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.51	0.32	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)  
16/8/23

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





CLC

**Sabz Care Environmental Cosultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000001435F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.08.2023 to 29.08.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-262/01, 02 & 03	Report Release Date	31.08.2023
Period of Analysis	30.08.2023 to 31.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28.0°C , Barometric Pressure : 1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)

**Duration of Sampling:** 24 hours Each Location

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	48.43	56.71	52.65	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	88.26	94.83	91.48	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.25	35.16	33.59	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.01	39.28	35.18	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Ranu

Authorized Signatory  
Piyush  
31/8/23  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001436F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.08.2023 to 30.08.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-263/01,02 & 03	Report Release Date	31.08.2023
Period of Analysis	30.08.2023 to 31.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28.0°C , Barometric Pressure :1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-5: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-4)	RESULTS (Location-5)	RESULTS (Location-6)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	37.43	41.75	31.72	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	76.84	82.26	72.53	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	26.56	29.69	25.78	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	30.49	34.01	28.14	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001437F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.08.2023 to 30.08.2023	Sample Collected by	Rasnjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-264/01 & 02	Report Release Date	31.08.2023
Period of Analysis	30.08.2023 to 31.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28.0°C , Barometric Pressure : 1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-7: Keredari Village (23°51'49.49"N to 85°05'19.06"E)  
Location-8: Bukra Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	43.90	33.42	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	83.19	75.38	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.25	28.91	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	36.94	30.49	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

*Pari*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

**TEST REPORT**

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.08.2023 to 29.08.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-262/04, 05 & 06	Report Release Date	31.08.2023
Period of Analysis	30.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28.0°C , Barometric Pressure : 1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.39	0.48	0.41	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
31/8/23  
Quality Manager  
(Piyush Ranjan)

*Ranj*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/VO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.08.2023 to 30.08.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-263/04, 05 & 06	Report Release Date	31.08.2023
Period of Analysis	30.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28°C , Barometric Pressure :1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-5: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.31	0.30	0.28	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)



*Ravi*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	29.08.2023 to 30.08.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	30.08.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/276/AA-264/02 & 03	Report Release Date	31.08.2023
Period of Analysis	30.08.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 28.0°C , Barometric Pressure :1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

#### A. GENERAL INFORMATION

**Location of Sampling:** Location-7: Keredari Village (23°51'49.49"N to 85°05'19.06"E)  
Location-8: Bokru Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

#### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.38	0.31	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush*  
31/8/23  
Quality Manager  
(Piyush Ranjan)

*Ranjan*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001487F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	12.09.2023 to 13.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-273/01, 02 & 03	Report Release Date	19.09.2023
Period of Analysis	15.09.2023 to 16.09.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)  
**Duration of Sampling:** 24 hours Each Location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	50.84	58.26	56.09	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	90.34	96.72	93.18	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	32.55	39.32	35.42	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	36.35	43.58	39.68	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*For*

Authorized Signatory  
*Piyush*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001488F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-274/01,02 & 03	Report Release Date	19.09.2023
Period of Analysis	15.09.2023 to 16.09.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-5: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)  
**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-4)	RESULTS (Location-5)	RESULTS (Location-6)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	39.68	40.27	33.78	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	78.16	85.21	75.84	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	28.38	30.47	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	30.49	35.37	28.53	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Boi*

Authorized Signatory



Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001489F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-275-A/01 & 02	Report Release Date	19.09.2023
Period of Analysis	15.09.2023 to 16.09.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-7: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

Location-8: Bukru Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

**Duration of Sampling:** 24 hours each location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	45.17	34.29	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	88.56	76.32	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	34.38	27.75	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.59	27.56	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

*Ravi*

Authorized Signatory

*Piyush*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-274/04, 05 & 06	Report Release Date	19.09.2023
Period of Analysis	15.09.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.41	0.45	0.51	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Ravi*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-274/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	15.09.2023	Report Release Date	19.09.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition : Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-5: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.32	0.28	0.31	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Pewi*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)	Sampling Plan	SCECPL/SOP/AA/01
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/290/AA-275A/02 & 03	Report Release Date	19.09.2023
Period of Analysis	15.09.2023	Type of Sample	Suspended Dust and Gases
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure :1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

### A. GENERAL INFORMATION

**Location of Sampling:** Location-7: Keredari Village (23°51'49.49"N to 85°05'19.06"E)  
Location-8: Bukru Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.41	0.32	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001597F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	27.09.2023 to 28.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-289/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023 to 30.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

### A. GENERAL INFORMATION

- Location of Sampling:** Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
- Duration of Sampling:** 24 hours Each Location

### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	49.21	56.44	57.09	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	88.95	92.64	90.31	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	33.59	37.50	34.38	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	37.72	40.65	36.74	80 (µg/m <sup>3</sup> )

### \*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory  
*Piyush Ranjan*  
31/10/2023  
Quality Manager  
(Piyush Ranjan)

*Ranjan*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

TC-9948



lets start thinking about nature for tomorrow

**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000001598F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.09.2023 to 29.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-290/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023 to 30.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
 Location-5: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
 Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**Duration of Sampling:** 24 hours each location

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-4)	RESULTS (Location-5)	RESULTS (Location-6)	Requirements/ Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	37.89	38.23	31.58	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	74.31	81.48	72.88	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182 (Part 2)	26.56	28.12	24.22	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182 (Part 6)	29.32	30.49	27.56	80 (µg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
31/10/2023  
Quality Manager  
(Piyush Ranjan)

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

**MSME**सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





### TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001599F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.09.2023 to 29.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-291-A/01 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023 to 30.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

#### A. GENERAL INFORMATION

**Location of Sampling:** Location-7: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

Location-8: Bukru Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

**Duration of Sampling:** 24 hours each location

#### B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifications as per CPCB
1.	Particulate Matter as PM <sub>2.5</sub>	µg/m <sup>3</sup>	IS 5182 (Part 24)	42.78	31.30	60 (µg/m <sup>3</sup> )
2.	Particulate Matter as PM <sub>10</sub>	µg/m <sup>3</sup>	IS 5182 (Part 23)	85.13	74.56	100 (µg/m <sup>3</sup> )
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 2)	31.25	26.56	80 (µg/m <sup>3</sup> )
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m <sup>3</sup>	IS 5182(Part 6)	34.59	28.14	80 (µg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Particulate matters, SO<sub>2</sub> and NO<sub>2</sub> are within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
31/10/2023  
Quality Manager  
(Piyush Ranjan)

*Faruq*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





CLC

**Sabz Care Environmental Cosultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

**TEST REPORT**

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	27.09.2023 to 28.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-289/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

Location of Sampling: Location-1: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)  
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)  
Location-3: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.40	0.52	0.48	2 (mg/m <sup>3</sup> )

\*\*\* END OF REPORT \*\*\*

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

Authorized Signatory

*Piyush*  
3/10/2023  
Quality Manager  
(Piyush Ranjan)

*Raw*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





de

**Sabz Care Environmental Consultancy Pvt. Ltd.**

let's start thinking about nature for tomorrow

**TEST REPORT**

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.09.2023 to 29.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
		Sampling Plan	SCECPL/SOP/AA/01
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-290/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

Location of Sampling: Location-4: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)  
Location-5: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)  
Location-6: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements/ Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.31	0.35	0.26	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Authorized Signatory**

*Piyush*  
31/10/2023  
Quality Manager  
(Piyush Ranjan)

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecplmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



CLC

**Sabz Care Environmental Consultancy Pvt. Ltd.***Let's start thinking about nature for tomorrow***TEST REPORT**

Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh, Jharkhand	Work Order No.	CBCMPL/WO/23-24/018 Date- 02.05.2023
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	28.09.2023 to 29.09.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume 1 (NAAQM/36/2012-13)		
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/309/AA-291/02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.09.2023	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

**A. GENERAL INFORMATION**

**Location of Sampling:** Location-7: Keredari Village (23°51'49.49"N to 85°05'19.06"E)  
Location-8: Bukru Village (Coordinates- 23°51'52.35"N to 85°02'31.82"E)

**B. TEST RESULTS**

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-7)	RESULTS (Location-8)	Requirements/Specifi- cations as per CPCB
1	Carbon Monoxide as CO	mg/m <sup>3</sup>	IS 5182(Part 10)	0.34	0.30	2 (mg/m <sup>3</sup> )

**\*\*\* END OF REPORT \*\*\***

**Remarks:** The ambient air quality with respect to Carbon Monoxide is within the prescribed National Ambient Air Quality Standard.

- Test values are reported based on the samples received.
- Samples will be destroyed after 15 days from date of issues of the Test Report subject to nature of preservation. Samples will be preserved as per the standard method.

**Authorized Signatory**

*Piyush*  
3/10/2023  
Quality Manager  
(Piyush Ranjan)

*Ran*

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



## Photographs of CAAQMS installed within mine lease area of CBCMP



V3RP+VCG, Pagar, Jharkhand 825311, India

Latitude  
23.89074648°

Longitude  
85.08445363°

Local 03:34:36 PM  
GMT 10:04:36 AM

Altitude 461 meters  
Thursday, 16.03.2023

Note : Borewell 5



V3RP+VCG, Pagar, Jharkhand 825311, India

Latitude  
23° 53' 26.77103" N

Longitude  
85° 5' 4.10842" E

Local 04:23:37 PM  
GMT 10:53:37 AM

Altitude 461 meters  
Tuesday, 18.04.2023

Note : CAAQMS- Near CBCMP Site Office



V3RP+VCG, Pagar, Jharkhand 825311, India

Latitude  
23° 53' 26.88983" N

Longitude  
85° 5' 4.15208" E

Local 04:25:07 PM  
GMT 10:55:07 AM

Altitude 461 meters  
Tuesday, 18.04.2023

Note : CAAQMS- Near CBCMP Site Office

*Raw*

**Sabz Care****Environmental Consultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC99482300000657F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	04.04.2023 to 05.04.2023	Sample Collected by	Ranjeet Yadav
Sample ID	SCECPL/TR/23/126/NR-83/01,02 & 03	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-2014
Sample details	Ambient Noise	Report Release Date	11.04.2023
Metrological Information	Average Ambient Temperature : 29.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 36%, Weather Condition - Clear		

**Limit in Leq dB(A)**(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)**PERMISSIBLE NOISE EXPOSURE FOR  
INDUSTRIAL WORKERS**

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. &amp; 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. &amp; 6:00 A.M.

**AMBIENT NOISE QUALITY REPORT**

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)	55.8	75.4	61.0	74.3	79.2
2. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	47.5	67.8	54.2	66.9	72.1
3. Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	52.2	72.8	59.9	72.1	78.0

\*\*\* END OF REPORT \*\*\*

**Remarks-**

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ravi*Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.***Let's start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000000658F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	04.04.2023 to 06.04.2023	Sample Collected by	Ranjeet Yadav
Sample ID	SCECPL/TR/23/126/NR-84/01 & 02	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-2014
Sample details	Ambient Noise	Report Release Date	11.04.2023
Metrological Information	Average Ambient Temperature : 29.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 36%, Weather Condition - Clear		

**Limit in Leq dB(A)****(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)**

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. &amp; 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. &amp; 6:00 A.M.

**PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS**

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

**AMBIENT NOISE QUALITY REPORT**

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	Leq-Mean	Maximum
1. Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)	57.4	74.0	58.9	72.8	79.7
2. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	45.2	65.8	52.9	65.1	71.0

**\*\*\* END OF REPORT \*\*\*****Remarks-**

- dB(A)  $L_d$  &  $L_n$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{eq}$  denotes average of 24 hours which is relatable to human hearing.

*Ran*

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000772F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	18.04.2023 to 19.04.2023	Sample Collected by	Ranjeet Yadav
Sample ID	SCECPL/TR/23/140/NR-98/01,02 & 03	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-2014
Sample details	Ambient Noise	Report Release Date	22.04.2023
Metrological Information	Average Ambient Temperature: 35.0°C, Barometric Pressure: 1010 mBar Relative Humidity: 32%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Coal Face (Near DG Set) (Coordinates- 23°53'49"N to 85°03'44"E)	58.5	75.3	60.0	74.1	80.4
2. Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	53.7	74.0	60.9	73.3	78.9
3. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	51.6	68.2	53.1	67.0	73.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ran*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**Sabz Care****Environmental Consultancy Pvt. Ltd.***Let's start thinking about nature for tomorrow*Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017**TEST REPORT**

Unique Lab Report No. (ULR No.)	TC994823000000773F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/22-23/010
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	19.04.2023 to 20.04.2023	Sample Collected by	Ranjeet Yadav
Sample ID	SCECPL/TR/23/140/NR-98/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-2014
Sample details	Ambient Noise	Report Release Date	22.04.2023
Metrological Information	Average Ambient Temperature : 35°C, Barometric Pressure : 1010 mBar Relative Humidity : 32%, Weather Condition - Clear		

**Limit in Leq dB(A)**(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. &amp; 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. &amp; 6:00 A.M.

**PERMISSIBLE NOISE EXPOSURE FOR  
INDUSTRIAL WORKERS**

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

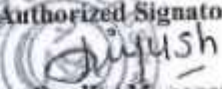
**AMBIENT NOISE QUALITY REPORT**

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Keredari Village (Coordinates- 23°51'34.99"N to 85°05'14.39"E)	53.1	73.7	60.8	73.0	78.9
2. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	48.5	66.9	54.3	66.2	71.9

**\*\*\* END OF REPORT \*\*\*****Remarks-**

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ranjit*

Authorized Signatory  
  
 Quality Manager  
 (Piyush Ranjan)

**ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB**

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000000922F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Vivek Kr. Malakar
Date of Study	16.05.2023 to 17.05.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/166/NR-117/01,02 & 03	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab		
Sample details	Ambient Noise	Report Release Date	22.05.2023
Metrological Information	Average Ambient Temperature- : 33.0°C, Barometric Pressure : 1009 mBar Relative Humidity : 34%, Weather Condition - Clear		

**Limit in Leq dB(A)**

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

- \*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.  
\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

**PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS**

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

**AMBIENT NOISE QUALITY REPORT**

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	55.4	75.1	61.3	74.2	79.7
2. Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	57.5	74.1	59.0	72.9	79.8
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	45.5	66.1	53.2	65.4	71.3

\*\*\* END OF REPORT \*\*\*

**Remarks-**

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ram*

Authorized Signatory  
(Mansoor Alam)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000923F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	17.05.2023 to 18.05.2023	Sample Collected by	Vivek Kr. Malakar
Sample ID	SCECPL/TR/23/166/NR-117/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Report Release Date	22.05.2023
Metrological Information	Average Ambient Temperature : 33°C, Barometric Pressure : 1009 mBar Relative Humidity : 34%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)	53.5	74.1	61.2	73.4	79.3
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	50.0	68.4	55.8	67.7	73.4

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*[Signature]*

Authorized Signatory  
(Mansoor Alam)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



# Sabz Care Environmental Consultancy Pvt. Ltd.



lets start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000948F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Sampling Method	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Vivek Kr. Malakar
Date of Study	29.05.2023 to 30.05.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/180/NR-123/01,02 & 03	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab		
Sample details	Ambient Noise	Report Release Date	02.06.2023
Meteorological Information	Average Ambient Temperature : 32.5°C, Barometric Pressure : 1008 mBar Relative Humidity : 36%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	54.1	74.7	61.8	74.0	79.9
2. Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	58.3	74.9	60.5	73.8	78.7
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.5	64.9	52.3	64.2	69.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000000949F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Work Order No.	CBCMPL/WO/23-24/018
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	30.05.2023 to 31.05.2023	Sample Collected by	Vivek Kr. Malakar
Sample ID	SCECPL/TR/23/180/NR-123/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Report Release Date	02.06.2023
Meteorological Information	Average Ambient Temperature : 32.5°C, Barometric Pressure : 1008 mBar Relative Humidity : 36%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)	58.3	74.9	59.8	73.7	80.6
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	48.5	69.1	56.2	68.4	74.3

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ran*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000000982F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Md R. Rahman
Date of Study	14.06.2023 to 15.06.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/195/NR-134/01,02 & 03	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab		
Sample details	Ambient Noise	Report Release Date	21.06.2023
Meteorological Information	Average Ambient Temperature : 35.0°C, Barometric Pressure : 1006 mBar Relative Humidity : 41%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	Leq Mean	Maximum
1. Site Office CBCMPL (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	58.4	75.0	59.9	73.8	58.4
2. Keredari Guest House (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.8	73.5	59.7	72.6	78.1
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.1	64.5	51.9	63.8	69.5

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A)  $L_d$  &  $L_n$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{eq}$  denotes average of 24 hours which is relatable to human hearing.

*Pan*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com





# Sabz Care Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC99482300000983F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	15.06.2023 to 16.06.2023	Sample Collected by	Md R. Rahman
Sample ID	SCECPL/TR/23/195/NR-134/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Report Release Date	21.06.2023
Meteorological Information	Average Ambient Temperature : 35.0°C, Barometric Pressure : 1006 mBar Relative Humidity : 41%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.  
\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard, Coal Face (23°53'28.59"N to 85°04'47.09"E)	55.6	75.2	60.8	74.1	79.0
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	50.4	70.7	57.1	69.8	75.0

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ravi*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001096F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	22.06.2023 to 23.06.2023	Sample Collected by	Md R. Rahman
Sample ID	SCECPL/TR/23/208/NR-141/01,02 & 03	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Report Release Date	27.06.2023
Meteorological Information	Average Ambient Temperature : 32.50°C, Barometric Pressure : 1002 mBar Relative Humidity : 59%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Site Office CBCM (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.5	74.3	59.0	73.1	79.4
2. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.7	72.1	59.5	71.4	77.1
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	45.3	65.6	52.0	64.7	69.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ranjan*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001097F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date – 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	23.06.2023 to 24.06.2023	Sample Collected by	Md R. Rahman
Sample ID	SCECPL/TR/23/208/NR-141/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Report Release Date	27.06.2023
Meteorological Information	Average Ambient Temperature : 32.50°C, Barometric Pressure : 1002 mBar Relative Humidity : 32.5%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard (Coordinates -23°53'28.59"N to 85°04'47.09"E)	54.6	75.0	61.8	74.2	79.8
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	55.1	71.7	56.6	70.5	77.4

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*For*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07583048389, e-mail : scecpimdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001192F	
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Vivek Kr. Malakar
Date of Study	11.07.2023 to 12.07.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/232/NR-154/01,02 & 03	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab		
Sample details	Ambient Noise	Report Release Date	18.07.2023
Meteorological Information	Average Ambient Temperature - : 32.50°C, Barometric Pressure : 1002 mBar Relative Humidity : 59%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	Leq Mean	Maximum
1. Site Office CBCM (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.5	74.1	59.0	72.9	79.8
2. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.2	72.8	59.9	72.1	78.0
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	42.5	63.1	50.2	62.4	68.3

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A)  $L_d$  &  $L_n$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{eq}$  denotes average of 24 hours which is relatable to human hearing.

*Ravi*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001193F		
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	12.07.2023 to 13.07.2023	Sample Collected by	Vivek Kr. Malakar
Sample ID	SCECPL/TR/23/232/NR-155/04 & 05	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	Coal Mines
Sample details	Ambient Noise	Report Release Date	18.07.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1002 mBar Relative Humidity : 62%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	Leq Mean	Maximum
4. Near New Coal Stock Yard (Coordinates -23°53'28.59"N to 85°04'47.09"E)	53.9	74.5	61.6	73.8	79.7
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	49.7	70.1	56.9	69.3	74.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A)  $L_{d\alpha}$  &  $L_{n\alpha}$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{eq}$  denotes average of 24 hours which is relatable to human hearing.

*Ravi*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scscplmdp@gmail.com



**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001194F		
Name of the Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	12.07.2023	Sample Collected by	Vivek Kr. Malakar
Sample ID	SCECPL/TR/23/232/NR-152/01, 02, 03 04	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	Coal Mines
Sample Details	Source Noise	Report Release Date	18.07.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1002 mBar Relative Humidity : 62%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L <sub>eq</sub> Mean	Maximum
1. Near Excavator Volvo Ex 480	62.8	82.7	88.6
2. Dozer CAT - D8	63.5	81.2	86.9
3. Tata Hitachi Drill ( EX 2102C)	68.1	83.5	90.4
4. Near Secondary Crusher	65.7	81.1	88.0

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>eq</sub> & L<sub>90</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ran*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scacplmdp@gmail.com





Let's start thinking about nature for tomorrow

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001217F	
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Ranjeet Yadav
Date of Study	27.07.2023 to 28.07.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	31.07.2023	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/240/NR-160/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	01.08.2023
Meteorological Information	Average Ambient Temperature- : 30.50°C, Barometric Pressure : 1000 mBar Relative Humidity : 71%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	Leq Mean	Maximum
1. Site Office CBCM (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	55.4	73.8	61.2	73.1	78.8
2. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.7	73.3	60.4	72.6	78.5
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	43.5	63.9	50.7	63.1	68.7

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A)  $L_d$  &  $L_n$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{eq}$  denotes average of 24 hours which is relatable to human hearing.

*Panj*

Authorized Signatory  
*Piyush*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001218F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.07.2023 to 29.07.2023	Sample Collected by	Ranjeet Yadav
Sample Receiving Date	31.07.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/240/NR-160/04 & 05	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature: 30.50°C, Barometric Pressure: 1000 mBar Relative Humidity: 71%, Weather Condition - Clear		
Report Release Date	01.08.2023		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard (Coordinates -23°53'28.59"N to 85°04'47.09"E)	56.2	74.6	62.0	73.9	79.6
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	51.1	70.8	57.0	69.9	75.4

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com





**Sabz Care**  
**Environmental Consultancy Pvt. Ltd.**



*Let's start thinking about nature for tomorrow*

Recognized by JSPCB, Ranchi  
Accredited by NABL, ISO/IEC 17025:2017

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001219F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.07.2023	Sample Collected by	Ranjeet Yadav
Sample Receiving Date	31.07.2023		
Sample ID	SCECPL/TR/23/232/NR-161/01, 02, 03 04	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	Coal Mines
Sample Details	Source Noise	Report Release Date	01.08.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1002 mBar Relative Humidity : 62%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L <sub>eq</sub> Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	67.1	82.5	89.4
2. Dozer CAT - D8 480 (10 meter Distance from Source)	61.8	81.7	87.6
3. Tata Hitachi Drill ( EX 2102C) 480 (10 meter Distance from Source)	65.9	81.5	87.8
4. Near Secondary Crusher 480 (10 meter Distance from Source)	62.5	80.2	85.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ran*

Authorized Signatory  
*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

ISO 9001 : 2015 CERTIFIED COMPANY : OHSAS : 45001 : 2018 CERTIFIED LAB

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001310F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Anup Dutta
Date of Study	09.08.2023 to 10.08.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	11.08.2023	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/258/NR-167/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.08.2023
Meteorological Information	Average Ambient Temperature: 29°C, Barometric Pressure: 1010 mBar Relative Humidity: 74%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Site Office CBM (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.5	74.1	59.0	72.9	79.8
2. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	55.4	73.8	61.2	73.1	78.8
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.8	65.2	52.6	64.5	70.2

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ravi*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





# Sabz Care Environmental Consultancy Pvt. Ltd.

Let's start thinking about nature for tomorrow

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001311F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Anup Dutta
Date of Study	10.08.2023 to 11.08.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	11.08.2023	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/258/NR-167/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.08.2023
Meteorological Information	Average Ambient Temperature: 29°C, Barometric Pressure: 1010 mBar Relative Humidity: 74%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.  
\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Near New Coal Stock Yard (Coordinates -23°53'28.59"N to 85°04'47.09"E)	53.9	74.2	60.6	73.3	78.5
5. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	50.9	69.3	56.7	68.6	74.3

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

### TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001312F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	10.08.2023	Sample Collected by	Anup Dutta
Sample Receiving Date	11.08.2023		
Sample ID	SCECPL/TR/23/258/NR-168/01, 02, 03 04	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	Coal Mines
Sample Details	Source Noise	Report Release Date	16.08.2023
Meteorological Information	Average Ambient Temperature : 29°C, Barometric Pressure : 1010 mBar Relative Humidity : 74%, Weather Condition - Clear		

### Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L <sub>eq</sub> Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	65.1	80.5	87.4
2. Dozer CAT - D8 480 (10 meter Distance from Source)	62.8	82.7	88.6
3. Tata Hitachi Drill ( EX 2102C) 480 (10 meter Distance from Source)	63.5	82.3	87.8
4. Near Secondary Crusher 480 (10 meter Distance from Source)	63.4	81.1	86.8

\*\*\* END OF REPORT \*\*\*

### Remarks-

dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Ravi*

Authorized Signatory  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001438F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Ranjeet Yadav
Date of Study	28.08.2023 to 29.08.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	30.08.2023	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/276/NR-181/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	31.08.2023
Meteorological Information	Average Ambient Temperature: 28°C, Barometric Pressure: 1002 mBar Relative Humidity: 65%, Weather Condition - Clear		

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	50.2	68.6	56.0	67.9	73.6
2. Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	53.6	70.4	55.1	69.2	75.5
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.3	66.9	54.0	66.2	72.1

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

ique Lab Report No. (ULR No.)	TC994823000001439F		
Name of Industry	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/VO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Ranjeet Yadav
Date of Study	29.08.2023 to 30.08.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	30.08.2023	Particular of the Plant	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/276/NR-182/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	31.08.2023
Meteorological Information	Average Ambient Temperature: 28°C, Barometric Pressure: 1002 mBar Relative Humidity: 65%, Weather Condition - Clear		

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	53.7	74.1	60.9	73.3	78.9
5. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	54.9	74.8	60.8	73.8	79.6

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Pani*

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Consultancy Pvt. Ltd.**

*Let's start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001440F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jorag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	29.08.2023	Sample Collected by	Ranjeet Yadav
Sample Receiving Date	30.08.2023		
Sample ID	SCECPL/TR/23/276/NR-183/01,02,03,04	Sample Condition	Scaled and Preserved
Sample Drawn by	Sabz Care Lab	Particular of the Plant	Coal Mines
Sample Details	Source Noise	Report Release Date	31.08.2023
Meteorological Information	Average Ambient Temperature : 28°C, Barometric Pressure : 1002 mBar Relative Humidity : 65%, Weather Condition - Clear		

Limit in Leq dB(A)

**(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)**

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	Leq Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	60.5	79.3	84.8
2. Dozer CAT - D8 480 (10 meter Distance from Source)	60.5	78.9	83.9
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	66.5	86.4	92.3
4. Near Secondary Crusher 480 (10 meter Distance from Source)	58.1	73.5	80.4

\*\*\* END OF REPORT \*\*\*

### Remarks-

- \* dB(A)  $L_{eq}$  &  $L_{90}$  denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and  $L_{95}$  denotes average of 24 hours which is relatable to human hearing.

*Ravi*



Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Consultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001490F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/VO/23-24/018 Date - 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/290/NR-189/A/01,02 & 03	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear	Report Release Date	19.09.2023

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	46.9	67.2	53.6	66.3	71.5
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	50.6	69.0	56.4	68.3	74.0
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.2	66.1	52.1	65.1	70.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Raj*

Authorized Signatory  
*Piyush Ranjan*  
19/9/23  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES





**Sabz Care Environmental Cosultancy Pvt. Ltd.**

*lets start thinking about nature for tomorrow*

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001491F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/VO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	13.09.2023 to 14.09.2023	Sample Collected by	Ranjeet Yadav
Sample Receiving Date	15.09.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/290/NR-189/B/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear		

Limit in Leq dB(A)

**(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)**

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

- \*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.
- \* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	La-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.7	74.3	59.2	73.1	80.0
5. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.4	73.0	60.1	72.3	78.2

\*\*\* END OF REPORT \*\*\*

#### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*[Signature]*

Authorized Signatory  
*[Signature]*  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MEME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care Environmental Cosultancy Pvt. Ltd.**

lets start thinking about nature for tomorrow

## TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001492F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand	Date - 02.05.2023	Coal Mines
Discipline	Chemical	Particular of the Plant	Coal Mines
Date of Study	13.09.2023	Group	Atmospheric Pollution
Sample Receiving Date	15.09.2023	Sample Collected by	Ranjeet Yadav
Sample ID	SCECPL/TR/23/290/NR-190/01,02,03,04	Sample Condition	Sealed and Preserved
Sample Drawn by	Sabz Care Lab	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample Details	Source Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 30°C, Barometric Pressure : 1010 mBar Relative Humidity : 73%, Weather Condition - Clear	Report Release Date	19.09.2023

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L <sub>eq</sub> Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	63.1	78.5	85.4
2. Dozer CAT - D8 480 (10 meter Distance from Source)	57.8	77.2	82.4
3. Tata Hitachi Drill ( EX 2102C) 480 (10 meter Distance from Source)	70.0	85.4	92.3
4. Near Secondary Crusher 480 (10 meter Distance from Source)	54.9	74.6	80.5

\*\*\* END OF REPORT \*\*\*

#### Remarks-

- dB(A) L<sub>eq</sub> & L<sub>eq</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

*Pavi*

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



**Sabz Care****Environmental Consultancy Pvt. Ltd.**

TC-9948



lets start thinking about nature for tomorrow

**TEST REPORT**

Unique Lab Report No. (ULR No.)		TC994823000001600F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date – 02.05.2023
Address	At- Chatti Bariatu, Jordeg & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Anup Dutta
Date of Study	27.09.2023 to 28.09.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	29.09.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/309/NR-199/A/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure :1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

Limit in Leq dB(A)(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF  
ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT  
OF INDIA)**PERMISSIBLE NOISE EXPOSURE FOR  
INDUSTRIAL WORKERS**

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. &amp; 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. &amp; 6:00 A.M.

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

**AMBIENT NOISE QUALITY REPORT**

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
1. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	45.9	66.5	53.6	65.8	71.7
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	47.3	67.9	55.0	67.2	73.1
3. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	46.6	65.0	52.4	64.3	70.0

\*\*\* END OF REPORT \*\*\*

**Remarks-**

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

Authorized Signatory

Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)

Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com

**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



## TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001601F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018 Date – 02.05.2023
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Anup Dutta
Date of Study	28.09.2023 to 29.09.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	29.09.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/309/NR-199/B/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.

\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L <sub>eq</sub> Mean	Maximum
4. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	58.1	74.7	59.6	73.5	80.4
5. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.5	71.9	59.3	71.2	76.9

\*\*\* END OF REPORT \*\*\*

### Remarks-

- \* dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

Authorized Signatory



Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com







### TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001602F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/VO/23-24/018
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.09.2023	Sample Collected by	Anup Dutta
Sample Receiving Date	29.09.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/FR/23/309/NR-200/01,02,03,04	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab	Sample Drawn by	Sabz Care Lab
Sample Details	Source Noise	Report Release Date	03.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1013 mBar Relative Humidity : 78%, Weather Condition - Clear		

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOVERNMENT OF INDIA)

#### PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

S.N.	CATEGORY OF AREA	DAY TIME	NIGHT TIME
1.	Industrial Area	75	70
2.	Commercial Area	65	55
3.	Residential Area	55	45
4.	Silence Zone	50	40

\*Day time is reckoned in between 6:00 A.M. & 10:00 P.M.  
\* Night time is reckoned in between 10:00 P.M. & 6:00 A.M.

Exposure time (in hours per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114

#### AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L <sub>eq</sub> Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	63.1	79.1	86.0
2. Dozer CAT - D8 480 (10 meter Distance from Source)	58.4	78.3	84.2
3. Tata Hitachi Drill ( EX 2102C) 480 (10 meter Distance from Source)	68.7	84.1	91.0
4. Near Secondary Crusher 480 (10 meter Distance from Source)	54.0	73.9	79.8

\*\*\* END OF REPORT \*\*\*

#### Remarks-

- dB(A) L<sub>d</sub> & L<sub>n</sub> denotes the time weighted average of the level of sound in decibels on scale(A) in day and night respectively and L<sub>eq</sub> denotes average of 24 hours which is relatable to human hearing.

Authorized Signatory

*Piyush Ranjan*  
Quality Manager  
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)  
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES

## Form 59

[See rules 115 (2)]

**Pollution Under Control Certificate**

Authorised By :  
Government of Jharkhand

Date : 08/11/2023  
Time : 14:04:04 PM  
Validity upto : 07/11/2024



Certificate SL. No. : JH00200130012856  
Registration No. : JH02BK2985  
Date of Registration : 09/Dec/2022  
Month & Year of Manufacturing : December-2021  
Valid Mobile Number : \*\*\*\*\*7695  
Emission Norms : BHARAT STAGE VI  
Fuel : DIESEL  
PUC Code : JH0020013  
GSTIN :  
Fees : Rs.300.00  
MIL observation : (GST to be paid extra as applicable)  
No

Vehicle Photo with Registration plate  
60 mm x 30 mm



Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	0.7	0.18

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to <https://puc.parivahan.gov.in>

Authorised Signature with stamp of PUC operator  
60mm x 20 mm



*Raw*



## GENERAL INFORMATION

### A. Demographics:

Name	Pawan Kumar Mahto
Workman ID:	CB-618
Age:	23
Sex:	M
Contact No:	7677247301

### B. Occupational Details:

Project Code:	
Contractor ID:	
Work ID:	CB-618
Department:	Mining
NTPC EIC No:	
Designation:	Pump Section Man
Work Skill Level:	Unskilled
Location of Employment	Chatli - Barnatu Coal mine
Address:	M/S - Chatli Barnatu Coal mine C/O - NTPC Pvt. Pagar - Kowadani - Hazaribag.
Personal ID Name/Number	5397 1449 4162

*Ravi*

Medical Examination Format

(FORM-O)

(See rule 29F (2) and 29L)

Report of medical examination under rule 29B in accordance with Form P1 of the  
Mines Rules 1955.

Certificate No. SDDC/RPL/44564/23-24

Certified that Shri /Shrimati\* Pawan K. Mahato to be employed as trade  
apprentice in.....trade in mines of NTPC, Form B No/Apprenticeship  
registration number.....has been examined for an initial medical examination in  
accordance with Form P1 of the Mines Rules 1955. He/she appears to be 23 years of  
age. The findings of the examining authority are given in the attached sheet. It is considered  
that Shri /Shrimati\* Anjana K. Mahato

(a) \*is medically fit for any employment/trade apprentice training in mines.

(b)\* is suffering from.....NA.....and is medically unfit for

(i) Any employment in mine; or

(ii) Any employment below ground; or

(iii) Any employment or work.....

(c)\*is suffering from.....he should get this disability\*  
cured/controlled and should be again examined within a period of..... months. He/She will  
appear for re-examination with the result of test of..... and the opinion  
of.....Specialist from..... He/She may be permitted/ not\*permitted to carry on his  
duties during this period.



Anil  
Signature of the Examining Authority  
with seal

Name and designation in Block letters

Dr. Anjana  
MBBS, MD (Pathologist)  
(Reg No - 3579)

Place: Hazratnagar

Date: 28/6/23

\*Delete whatever is not applicable.

\* \*Original - To be kept with examining authority

Copy One - To be handed over to person Concerned.

Copy Two - To be sent to the concerned manager of the mine.

Seen  
checked  
30-10-2023

Dr. P. S. Reddy  
DR. P. S. REDDY  
District Medical Officer  
NTPC Limited  
Hazardous Waste Management  
Hazardous Waste Management



# Report of the Examining Authority

## (Form-O)

Report of medical examination under rule 29B in accordance with Form P1 of the Mines Rules 1955

(To be filled in for every medical examination whether initial or after cured/control of disability)

Annexure to Certificate No. SDPC 1RPL 14456 4/23-24 as result of medical examination on 22/6/23  
 Identification Mark MA 66 on nose Left thumb impression of the candidate.

### 1 General development-

Good/Fair/Poor

2. Height 163 cms.

3. Weight 51 Kg.

### 4. General & Physical Examination

### 5. Eyes:

(i) Visual acuity- Distant vision (with or without glasses).

Right eye Normal Left Eye Normal

(ii) Any organic disease of eyes NO

(iii) Color blindness NA

(iv) Squint NO

(to be tested in special cases)

### 6. Ears:

(i) Hearing : Right Ear Normal Left Ear Normal

(ii) Any other organic diseases NO

(iii) Audiometry finding:

Conduction Type	Left Ear	Right Ear
Ear Conduction	Normal/Abnormal	Normal/Abnormal
Bone Conduction	Normal/Abnormal	Normal/Abnormal

### 7. Respiratory System:

(i) Chest Measurement: After full inspiration 84 cms, After full expiration 82 cms

(ii) Spirometry :

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity( FEV)	3.561	2.507	70.40
Forced Vital Capacity 1( FEV1)	3.082	1.983	64.34
FEV1/FVC	83.007	79.09	95.21
Peak Expiration Flow		0.977	

Enclosed Spirometry Report.

### 8. Circulatory System:

Blood Pressure 119/79 Pulse 91

Cardiological Assessment:

Auscultation	S1	(+)
	S2	(+)

*For*

	Additional Sound	(-)
Electrocardiograph (12 Leads) findings		Normal/Abnormal

Enclosed ECG Report

9. Abdomen:

Tenderness (-) Liver (-)  
Spleen (-) Tumor (-)

10. Nervous System:

History of fits or Epilepsy NO  
Paralysis NA Mental Health Normal

Neurological Assessment:

Findings	Normal/Abnormal
Superficial Reflexes	Normal
Deep Reflexes	Normal
Peripheral Circulation	Normal
Vibrational Syndromes	Normal

11. Locomotor System Normal  
12. Skin NO  
13. Hernia NA  
14. Hydrocele NA  
15. Any other abnormality NAD  
16. Urine: Reaction Addict Albumin (-) Sugar (-)  
17. Skiagram of chest Normal

18. ILO Classification of chest Radiograph:

Profusion of Pneumoconiotic Opacities	Grades	Types
Present/Absent		

19. Pathological/Microbiological investigation :

S. No	Tests	Findings
1	Blood- Tc, De, Hb, ESR, Platelets	WNL/Abnormal
2	Blood Group	A (+ve)
3	Blood Sugar- Fasting & PP	WNL/Abnormal
4	Lipid Profile	WNL/Abnormal
5	Blood Urea, Creatinine	WNL/Abnormal
6	Urine Routine	WNL/Abnormal
7	Stool Routine	WNL/Abnormal

Enclosed Investigation Report.

20. Any other test considered necessary by the examining authority NO  
21. Any opinion of specialist considered necessary NA  
22. Medical fitness tests for persons working at Height (as may be applicable) NAD

Place: Guwahati

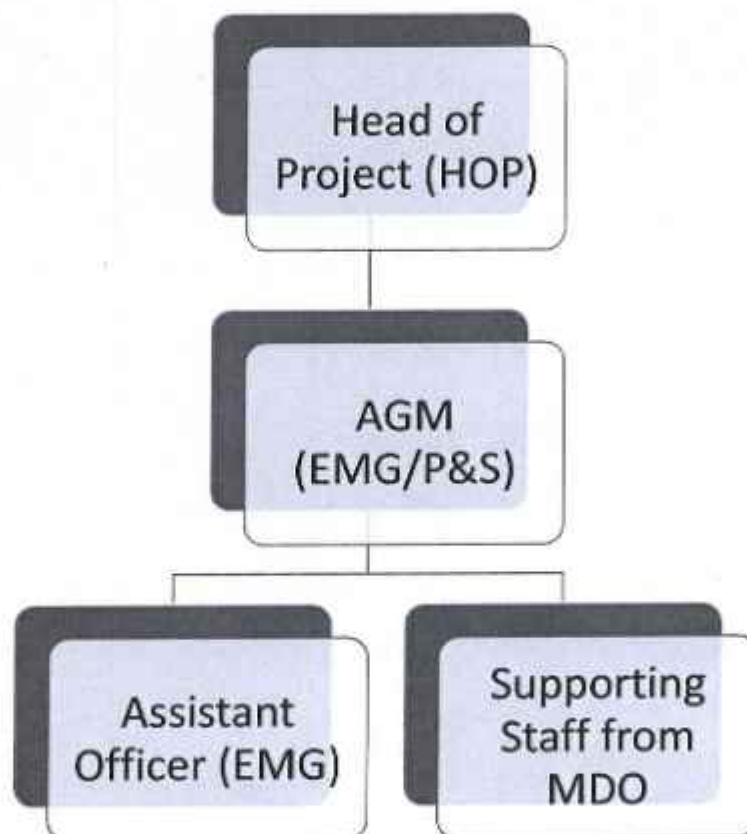
Signature of the Examining Authority with seal

Dr. Anjana  
MBBS, MD (Pathologist)  
(Reg No - 3579)

Raw



## ENVIRONMENT MANAGEMENT CELL AT NTPC- CBCMP



*Raw*

CTO No.- JSPCB/HO/RNC/CTO-16193411/2023/1157, Dated 28.06.2023; Submission of Environment Statement in Form-V for the financial year ending on 31st March 2023 for Chatti Bariatu Coal Mining Project of M/s NTPC Ltd.

EMG\_CBCMP <emg\_cbcmp@ntpc.co.in>

Wed 9/27/2023 6:15 AM

To: ranchijspcb@gmail.com <ranchijspcb@gmail.com>

Cc: ro.ranchi-mef@gov.in <ro.ranchi-mef@gov.in>; mkbiswas.cpcb@nic.in <mkbiswas.cpcb@nic.in>;

jspcb\_hazaribagh@rediffmail.com <jspcb\_hazaribagh@rediffmail.com>; Birendra Kumar <BIRENDRAKUMAR01@NTPC.CO.IN>;

Pavan Vasantrao <PAVANKHANDWE@NTPC.CO.IN>; AK SONI <AKSONI01@NTPC.CO.IN>; Ravi Kumar

<RKUMAR10@NTPC.CO.IN>

📎 1 attachments (21 MB)

D. No. 193 Environment Statement Form-V for CBCMP.pdf;

Dear Sir,

In compliance of the General Condition no. 8 of the CTO mentioned under subject, please find enclosed herewith the Environment Statement in Form-V for the financial year ending on 31st March 2023 for Chatti Bariatu Coal Mining Project of M/s NTPC Ltd.

Thanking You,

With regards,

Ravi Kumar

Assistant Officer (Environment Management)

CBCMP, NTPC Ltd.

Mob: 8396059957