

Ref. No. 1079/CBCMP/EMG/2024/July/39

Date: 15.07.2024

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

Sub: Six-monthly progress report on compliance of conditions stipulated in the Environmental Clearance (EC) by MoEF & CC and monitoring report for the period October 2023 to March 2024 for NTPC Mining 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

Ref3: EC Amendment letter No. J-11015/133/2007-IA.II(M) dated 05.01.2024


Dear Sir,

With reference to the above subject please find enclosed herewith the six-monthly status report on compliance of various conditions stipulated in the Environment Clearance & its amendments accorded to NTPC Mining Ltd.- Chatti Bariatu Coal Mining Project (7 MTPA) for the period October 2023 to March 2024. The monitoring reports on ambient air quality, ground and surface water quality, noise monitoring data etc. are also enclosed with the compliance report.

This is for your kind information please.

Thanking you.

Yours Faithfully,


[Varababu Palathirthapu]
Dy. GM/P&S
CBCMP, NML

Encl: A/a

Copy to:

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

COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS

Period: Oct 2023 to March 2024

Six Monthly EC Compliance Report

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

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

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

Environmental Clearance Amendment Ltr. No.: J-11015/133/2007-IA.II(M) Dated
05.01.2024



Chhatti Bariatu Coal Mining Project, NTPC Mining Limited,
Hazaribagh Jharkhand.

CHHATTI BARIATU COAL MINING PROJECT
NTPC MINING LIMITED
HAZARIBAGH, JHARKHAND
2024-03-15



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

SIX MONTHLY COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE

(PERIOD OCTOBER 2023 TO MARCH 2024)

CHHATTIBARIATU COAL MINING PROJECT (7 MTPA)

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

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
A.	Specific Conditions	
(i).	Mining shall not be carried out in 63 ha of forestland until prior forestry clearance is obtained.	Complied. Stage-II Forest Clearance for diversion of 128.92 ha forest land involved in ML has been accorded by MoEF&CC vide F.No. 8-42/2010-FC dated 25.11.2011 and re-validated by MoEF&CC vide letter dated 13.04.2017 . Copy of FC letters enclosed as Annexure-01 .
(ii).	Topsoil of 3.07 Mm ³ 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.	Being Complied. Mining activities at Chatti Bariatu Coal Mining Project started on 25.04.2022 and till 31.03.2024 , 0.62 mill. cum topsoil has been excavated. The topsoil is being stacked properly at earmarked site separately within the lease area with proper protective measures. Photographs of the topsoil dump are enclosed as Annexure-02 . The topsoil is being used concurrently for development of green belt on OB dump's slope area. Photographs enclosed as Annexure-03 .
(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	Being Complied. The mining activity in CBCMP started on 25.04.2022 and till 31.03.2024 , 5.96 mill. cum 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 35 m and will be restricted to 90 m in 3 benches with bench height of 30 m as per latest Central Institute of Mining and Fuel Research (CIMFR) study recommendations. Photographs of OB dump is enclosed as Annexure-03 .

(Signature)

वराबाबू पी. / VARABABU P.

उप महाप्रबंधक (पी. एन्ड एच.) / OGM(P&H)

एनटीपीसी लिमिटेड / NTPC Limited

चट्टी बरियातु कोयला खनन परियोजना / CBCMP

हजारीबाग / Hazaribag



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Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneswar on a yearly basis.	<p>Presently, the OB dump is active. However, the reclamation of the closed portion of OB dump will be done using the native plant species and grass seeds during this monsoon season.</p> <p>The study for the stability of OB dump and pit slopes has been conducted by M/s CSIR-CIMFR, Dhanbad, Jharkhand. As per the slope stability report, "<i>existing slope of pit and dumps of Chatti-Bariatu Coal Mining Project may be considered to be stable</i>". The factor of safety along all the slopes was found to be more than 1.5.</p>
(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.	<p>Complied.</p> <p>Currently, OB is being dumped at extreme North within the mining lease. Plantation has been done in the safety zone between the OB dump and habitation in the NW corner of the ML using native species and species of economic importance. Photographs attached as Annexure-04.</p>
(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</p>	<p>Being Complied.</p> <p>Garland drains and siltation ponds of appropriate size have been constructed to arrest silt with adequate water retention. The total length of garland drains is 2506 m (1161.38 m around OB dump) with a width and depth of 1 m each. 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.</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. More no. of drains has been planned to be constructed before the rainy season to collect the rainwater.</p> <p>The maximum annual rainfall in the last 10 years recorded at Barkagaon/Hazaribagh is 1750 mm (in</p>

Varababu P.

वराबाबू पी. / VARABABU P.
जन महसुसबक (पे. एन्ड एच.) / JOM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
मही बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

VARABABU P.
JOM(P&H)
NTPC Limited
CBCMP
Hazaribag



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	material.	2021). The sump has been developed in the de-coaled area of mine pit and designed by keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. The water collected in the quarry area is being utilized for sprinkling to suppress the dust in the mine area, internal roads and for the development of green belt.
(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.	Being Complied. OB dump is in active stage and presently, the height of OB dump is 35 m . Retaining wall is under construction and till March' 24, 250 m long wall has been constructed. Photographs attached as Annexure-05.
(vii).	Drills shall be wet operated.	Being Complied. Drills are provided with a water injection system and wet cutting arrangements for wet drilling operations. Also, water is being regularly sprinkled in the drilling area to minimize fugitive dust emissions. Photographs of the same have been enclosed as Annexure-06.
(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.	Being Complied. Blasting is being carried out as per the blast design report prepared by M/s CIMFR, Dhanbad, Jharkhand a GoI, CSIR unit , and blasting is being done as per the recommendations. Controlled blasting techniques using delay detonators are being used only during daytime to reduce the blast vibration and to control the flying of rocks. Also, the charge delay per hole is optimized. Blast vibration monitoring data is enclosed as Annexure-07.
(ix).	Raw coal from CHP shall be transported by closed conveyors to	Agreed to comply.

(Signature)

वसुबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एण्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


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उप महाप्रबंधक (पी. एण्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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	the railway siding and from there to linked Barh STPS by rail. There shall be no road transportation of coal.	<p>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.</p> <p>In view of delay in completion of conveyor system, amendment in Environmental Clearance has been accorded from MoEF&CC vide letter dated 01.12.2020 & 05.01.2024 for transportation of coal by road from mine end as an interim arrangement till 31.10.2024 by adopting all mitigation measures like covering the dispatch trucks with tarpaulin. The coal is being transported strictly through covered trucks only. Photographs enclosed as Annexure-08.</p>
	<p>Amendment vide letter no. J11015/133/2007-IA.II(M) Dated 01.12.2020</p> <p>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</p>	<p>The coal is being transported through State Highway to railway sidings and North Karanpura Super Thermal Power Plant (NKSTPP) complying with the conditions. The width of the coal transportation road is more than 7 mts.</p> <p>NTPC has carried out required strengthening and broadening of the existing village road from mine boundary to State highway. The expected timeline for completion of construction of alternate road is June 2024.</p>
	PP shall use high axle truck/dumpers (30-40 tonne capacity only) to reduce the number of fleet on road.	The coal at CBCMP is being transported through road in tarpaulin covered high axle trucks with size of up to 50 tonnes.
	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	<p>Agreed to comply.</p> <p>Mine closing activities shall be done as per the approved mine closure plan.</p>

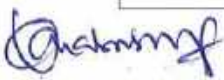

वराबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एन्ड एच.) / OGM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

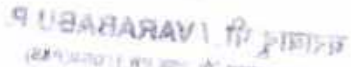

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उप महाप्रबंधक (पी. एन्ड एच.) / OGM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
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Chatli Bariatu Coal Mining Project (7MTPA)

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	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"	<p>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.</p> <p>An Escrow account has been opened and the amount is being deposited annually. As per direction received from CCO an amount of Rs. 6.21 Crore has been deposited for FY 2023-24 (3rd) and FY 2024-24 (4th) as mine closure costs.</p> <p>Till date Rs. 11.84 Crore has been deposited in Escrow Account as part of the Mine Closure Costs. The account statement for FY 2023-24 has been enclosed as Annexure-09.</p>
	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	<p>Approx. 4,500 plants have been planted along the coal transportation route along the boundary of mines. Based on the NTPC's request the state forest department has agreed to take up the plantation work along the coal transportation route and a demand was raised for the same vide DFO Ltr. No. 3464 dated 24.06.2023. Subsequently, the amount of 4.61 Cr (1st instalment) & 2.13 Cr (2nd instalment) have been deposited with the Office of DFO on 04.09.2023 & 28.03.2024, respectively for plantation of trees. Copy of the letter to DFO is enclosed as Annexure-10.</p>
	<p>Amendment vide letter no. J11015/133/2007-IA.II(M) Dated 05.01.2024</p> <p>1.1) As proposed, PP shall complete the balance work of conveyor and CHP by July, 2024 and railway siding by March, 2025. Further, PP shall explore the possibility of implementing in-pit conveyor till</p>	<p>Being Complied.</p> <p>The work of conveyor, CHP and railway siding is under progress. Further, the CHP is very close to the mine-pit and the mine pit location changes with advancement of the mining progress. Hence, the in-pit conveyor is presently not feasible.</p>


वराबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एच. एल.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
घड़ी बरियारु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


वराबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एच. एल.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
घड़ी बरियारु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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Chatti Bariatu Coal Mining Project (7MTPA)

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	CHP to stop vehicular transportation.	
	1.2) PP shall submit the approved revised Mine Plan with progressive reclamation for change in land use/area of forest land as per approvals obtained to IRO, MoEF&CC.	Agreed to Comply.
	1.3) PP shall avoid transporting coal by road through forest land without permission from concerned Forest Department.	Being Complied. All the necessary permissions have been obtained from the Forest Department for the transportation of coal by road through the forest land.
	1.4) PP shall use the road having width more than 7 mts with tarpaulin covered 40-50 (payload) dumpers/trucks. Further, State Pollution Control Board shall ensure the emissions of trucks by regular inspections.	The width of roads being used for transportation is more than 7 mts and the transportation is being done strictly with tarpaulin covered trucks. Further, the coal at CBCMP is being transported through high axle trucks with size of up to 50 tonnes. Photographs enclosed as Annexure-08.
	1.5) M/s NTPC shall write to Ministry of Power to co-ordinate with Ministry of Railways for expeditious construction of Railway siding near to the proposed location.	Complied. A request letter has been sent to Ministry of Power vide ref. no. REDCM Sectt/2024/CB&KD/543 dtd. 23.02.2024 to expedite the construction of the Railway Siding for Chatti Bariatu and Kerandari Coal Mining Project. Copy of the letter enclosed as Annexure-11.
	1.6) PP shall explore the use the nearest location of railway siding (Shivpur & Bachra) for transporting the coal instead of using road for long distance.	Agreed to Comply. Construction of the road to Shivpur railway siding has been awarded to M/s SHAJ in Dec' 19. Forest Clearance (FC) regarding the Forest land area (3.204 Ha) is awaited. Currently, the Bachra siding is being used for transportation of coal to the NTPC's Thermal Power Plants.
	1.7) PP shall not use any village road and road along sensitive	Being Complied.

Varababu P.

वराबाबु पी. / VARABABU P.
उप महाप्रबंधक (पी. एन्ड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
सडी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

VARABABU P.
उप महाप्रबंधक (पी. एन्ड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
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	locations such as schools, hospitals etc for transportation of coal by dumpers/trucks.	The trucks used for transportation of coal are optimally loaded and properly covered with tarpaulin to curb pollution. Further, the coal is being transported with all the necessary permission from the departments concerned.
	1.8) PP shall install at least 10 nos. of fog cannon in mine lease, overburden dump and transportation route within 6 months.	Regular water sprinkling within the mining area, along the transportation route and Railway Siding is being done through 12 nos. of mobile water tankers. Further, the proposal for instalment of fog cannons is under the tendering process.
	1.9) PP shall establish Environmental laboratory at project site by March 2024 and create Environmental Management Cell to monitor the issues related environmental degradation.	Being Complied. Presently, Monitoring and analysis is being done through MoEF&CC and NABL accredited lab in consultation with the State Pollution Control Board. However, an environmental laboratory has been established at the Pagar Site office and an Environment Management Cell is created to monitor the issues related to environmental degradation. The organizational structural chart enclosed as Annexure-12.
	1.10) PP shall explore at least 20% of overall fleet size of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of coal/OB etc and deploy e-vehicles for workers/staff in/out of the mine.	There are no CNG/LNG stations located near the CBCMP. Also, latest BS VI version tippers are used for transportation of coal to minimize the emissions.
	1.11) As proposed by PP, construction of road for enroute Shivpur siding shall be immediately completed with water sprinkler and tree planation along the road.	Agreed to Comply. Construction of the road to Shivpur railway siding has been awarded to M/s SHAJ in Dec' 19 . Forest Clearance (FC) regarding the Forest land area (3.204 Ha) is awaited.
	1.12) PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not	Being Complied. A "Public Grievance Redressal and Monitoring System" has been created to resolve issues related to the pollution of mines. Also, a committee has been constituted with the members including

वराबाबू पी. / VARABABU P.
उप महाप्रबंधक (बी. एण्ड एन.) / DGM(P&S)
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श्री बरियातु कोयला खनन परियोजना / CBCMP
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उप महाप्रबंधक (बी. एण्ड एन.) / DGM(P&S)
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	beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System".	representatives from different departments to resolve the issues as soon as possible. Further, a logbook is being maintained on "Public Grievance Redressal and Monitoring System" at Sikri and Pagar office of CBCMP. An intimation letter was sent to the IRO, Ranchi vide ref no. 1079/CBCMP/EMG/2024/April/27 dated 04.04.2024 regarding the creation of "Public Grievance Redressal and Monitoring System" at CBCMP. Further an online system with the web address, https://www.ntpc.co.in/grievance/ has also been established.
	1.13) PP shall ensure the compliance of expenditure to be incurred for wildlife conservation plan submitted to the State Govt. and the details expenditure shall be submitted with six monthly EC compliance report to Ministry's IRO. Also, PP shall engage State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market.	Being Complied. NTPC has deposited Rs. 46,25,21,000.00/- (Rupees Forty-Six Crore Twenty-Five Lakh Twenty-One Thousand only) in <i>ad-hoc</i> CAMPA account for the implementation of Site-Specific Wildlife Management Plan (SSWLMP) prepared in line with the Integrated Wildlife Management Plan. The implementation of SSWLMP shall be done by the State Forest Department.
	1.14) PP shall submit certified compliance report of EC vide letter F.No. J-11015/133/2007-IA. II (M) dated 19th April, 2010 with a conditions and later re-validated on 03.03.2016 and amendment in EC dated 1st December, 2020.	Agreed to Comply. The certified compliance report will be submitted along with the next six-monthly compliance report.
	1.15) PP shall commission a study for evaluating the impact of air pollution generated by its activities on the forests upto a distance of about 10 kms through an institution of MoEFCC.	Agreed to Comply. A request mail was sent to the Director of Institute of Forest Productivity, Ranchi, Jharkhand, to conduct a study for evaluating the impact of air pollution generated by the mining and related activities on the forests upto a distance of about 10 kms. The copy of the mail enclosed as Annexure-


वराबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एम्ड एस.) / OGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


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उप महाप्रबंधक (पी. एम्ड एस.) / OGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरियातु कोयला खनन परियोजना / CBCMP
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		13.
(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>Being Complied.</p> <p>Crushers 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 Annexure-14.</p> <p>Further, to minimize the dust generation along the coal transportation road, the coal is being transported in covered trucks only. Also, regular water sprinkling within the mining area, along the transportation route and Railway Siding is being done through 12 nos. of mobile water tankers. Photographs attached as Annexure- 15.</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. J11015/133/2007-IA. II (M) Dated 01.12.2</p>	<p>Agreed to comply.</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 on 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 Gopda village to revised alignment (Shivpur – Kathutia). The alignment and DPR is under finalization by Railways.</p>

Varababu P.

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उप महाप्रबंधक (पी. एम्ब. एस.) / DGM(P&S)
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बट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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उप महाप्रबंधक (पी. एम्ब. एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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		Amendment in Environmental Clearance has been obtained from MoEF&CC vide letter dated 05.01.2024 for construction of railway siding by March 2026 .
(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.	Being Complied. 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 4750 nos. of trees. Photographs enclosed as Annexure-16 .
(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.	Agreed to comply. As per the NOC issued to CBCMP by CGWA vide NOC no. CGWA/NOC/MIN/REN/1/2024/9123 , the groundwater abstraction permission is 1621.6 cum/day . Out of which 658 cum/day is for freshwater and 963.60 cum/day for dewatering from mine pit. However, the current average consumption (from October 2023 to March 2024) of fresh groundwater is 7.99 cum/day and the consumption of dewatered mine pit water is 329.16 cum/day (Overall average groundwater consumption- 337.15 cum/day). Water consumption report from Oct 2023 to March 2024 enclosed as Annexure-17 . Recycle and Reuse of water will be done to the maximum extent possible by establishing an ETP (under construction). The rainwater harvesting measures will be implemented at the project site. Recycled water will be used for sprinkling, green

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सह महाप्रबंधक (पी. एण्ड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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सह महाप्रबंधक (पी. एण्ड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
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		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 th May 1993 and 31 st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed for treatment of workshop effluents.	<p>Agreed to Comply.</p> <p>The ETP construction is under progress for effective treatment of the industrial effluents conforming to the prescribed statutory standards before final discharge. The work has been awarded to M/s Katoch Envirotech for supply and installation of 50 KLD capacity ETP. The copy of the work order has been enclosed as Annexure-18.</p> <p>The industrial wastewater will be collected, analyzed, and treated conforming to the stipulated standards before final discharge on generation of industrial wastewater.</p>
(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.	<p>Agreed to Comply.</p> <p>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.</p> <p>A total of 4750, 4153 and 5717 plants have been planted using native species at the ML Boundary (Safety Zone), R&R colony and township, respectively. Photographs attached as Annexure-19.</p>
(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	<p>Agreed to Comply.</p> <p>The mining operations at the project started from 25.04.2022. An approved progressive mine closure plan is under implementation to meet specified stipulations. The reclamation of the mined-out area will be done as per the approved mine closure plan and then planted with trees over it.</p> <p>Also, efforts will be made to undertake adequate</p>

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वसुबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एण्ड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
घट्टी बरियातु कोयला खनन परियोजना / CBCMP
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	being converted into a water reservoir and gently along the upper benches and stabilized and reclaimed with plantation.	afforestation in the mine lease area in consultation with the local DFO/ State Forest Department. Yearly progress report on the mine closure activities of the mine is regularly being submitted to CCO. The last report of the progressive mine closure activity report was submitted to CCO through email on 28.08.2023 . Copy of the mail attached as Annexure-20 .
(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.	Agreed to comply. 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 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.	Being Complied. 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. 34 Dated 03.08.2023 . Copy of the approval attached as Annexure-21 . For implementation of site-specific wildlife management plan prepared in line with IWLMP a total amount Rs. 24,46,62,678.00 was deposited in the <i>ad-hoc</i> CAMPA account vide ref. No. NC03R/2020247588/23.03.2021 . Copy attached as Annexure-22 . Further, DFO vide letter no. 4700 dated 23.08.2023 demanded for deposition of differential amount of Rs 21,78,58,322.00 in <i>ad-hoc</i> CAMPA account. The amount demanded was deposited in the <i>ad-hoc</i> CAMPA account. The payment proof has been enclosed as Annexure-23 .
(xix).	Regular monitoring of groundwater level and quality shall be carried out	Being Complied.

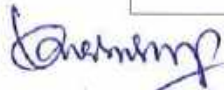
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एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
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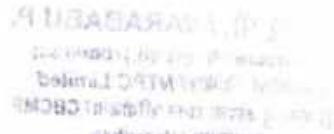
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	by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality 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.	One Piezometer with telemetry has been 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 along with compliance report to the Regional Office, MoEF&CC at Ranchi & CPCB. Piezometer monitoring data for the period from October 2023 to March 2024 is attached herewith as Annexure-24 .
(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.	Being Complied. 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 from October 2023 to March 2024 has been enclosed as Annexure-25 . Further, in case the levels are found to be higher than the prescribed limits in the groundwater and mine discharge water, drinking water shall be provided to the affected villages in the impact zone.
(xxi).	The company shall put up artificial groundwater recharge measures including rainwater harvesting structures for augmentation of 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.	Agreed to Comply. Rainwater Harvesting structures shall be implemented for augmentation of ground water recharge in the core and buffer zone. The water requirement of the nearby villages shall be met in case the village wells go dry due to dewatering of mine.

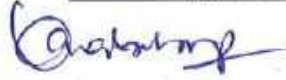

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एनटीपीसी लिमिटेड / NTPC Limited
घट्टी बरियातु कोयला खनन परियोजना / CBCMP
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(xxii).	ETP shall also be provided for workshops, and CHP. Effluents shall be treated to conform to prescribed standards, particularly for pH and TSS in case of discharge into any watercourse within of outside the lease.	Agreed to Comply. The ETP construction is under progress and the work has been awarded to M/s Katoch Envirotech for supply and installation of 50 KLD capacity ETP. The copy of the work order has been enclosed as Annexure-18 . The 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.	Being Complied. Sewage Treatment Plant (STP) of 1.5 MLD capacities has been provided in R&R colony at Dhenga . The same is being operated and maintained as per the Standard Operating Procedure. Photographs attached as Annexure-26 .
(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.	Being Complied. 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 F.Y. 2023-24 have been attached as Annexure-27 .
(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	Being Complied. 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 plan. So far the land compensation amount has been paid for 702.66 acres out of 1071.90 acres . The plan which covers the stipulated conditions is under implementation.


वरबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
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VARABABU P. P. P. P. P.
उप महाप्रबंधक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
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	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.	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 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.	Being Complied. 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 2015 . 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 2015 in Fitter, Welder, and Electrician with 100% placement records. Till date 461 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	Being Complied. The project activities at CBCMP started on 25.04.2022 . The land use/land cover map based on satellite imagery before start of project activities during the month of April 2022 was prepared and submitted on 01.12.2022 . The next map shall be prepared for the period 2025-27 in 2025.

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उप महाप्रबंधक (पी. एम्ब एच.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बिही बरिघातु कोयला खनन परियोजना / CBCMP
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	one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneswar	
(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.	<p>Agreed to Comply.</p> <p>The Mine Closure Plan has been approved by the Ministry of Coal and submitted to Coal Controller, MoC. The mining operations at CBCMP started in April 2022. 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.</p> <p>An Escrow account has been opened and the amount is being deposited annually. As per direction received from CCO an amount of Rs. 6.21 Crore has been deposited for FY 2023-24 (3rd) and FY 2024-25 (4th) as mine closure costs.</p> <p>Till date Rs. 11.84 Crore has been deposited in Escrow Account as part of the Mine Closure Costs. The account statement of the Escrow Account for FY 2023-24 has been enclosed as Annexure-09.</p>
B.	General conditions	
(i)	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	<p>Agreed to Comply.</p> <p>Permission from MOEF&CC will be taken in case of any change in technology and scope of work is proposed</p>
(ii)	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	<p>Agreed to comply.</p> <p>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.</p>
(iii)	Four ambient air quality monitoring	Being Complied.

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वरबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एंड एल.) / DOM(P&L)
एनटीपीसी लिमिटेड / NTPC Limited
शही बरिवातु कोयला खनन परियोजना / CBCMP
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उप महाप्रबंधक (पी. एंड एल.) / DOM(P&L)
एनटीपीसी लिमिटेड / NTPC Limited
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	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.	<p>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.</p> <p>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.</p> <p>All the environmental quality parameters have been found within the stipulated norms. The ambient air quality monitoring data report from October 2023 to March 2024 has been attached as Annexure-28.</p> <p>Apart from this, one Continuous Ambient Air Quality Monitoring Station (CAAQMS) has been installed to monitor Ambient Air Quality (AAQ) within the mining lease area near NTPC/NML Site Office at Pagar. The data is shared continuously through online server to JSPCB. The monitoring data report from October 2023 to March 2024 has been attached as Annexure-29.</p> <p>Link for server: https://isac.jharkhand.gov.in/pollution/</p>
(iv)	Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc.) and other monitoring data shall be	<p>Being Complied.</p> <p>Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr,</p>

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बड़ी बरियातु कोयला खनन परियोजना / CBCMP
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	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.	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 8 different locations in core and buffer zone. Monitoring reports enclosed as Annexure-30 .
(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.	Being Complied. Adequate measures are being taken to keep the noise levels below 85 dB(A) in the work environment. Workers engaged in blasting, drilling operations, operations 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 confirm to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Agreed to comply. The ETP construction is under progress and the work has been awarded to M/s Katoch Envirotech . After ETP construction, the industrial wastewater shall be collected, analyzed, and treated conforming to the stipulated standards before final discharge after completion of ETP.
(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.	Being Complied. All vehicles plying for the project are well maintained & in good working condition. Regular pollution monitoring of all the vehicles involved in the project is being done in order to control emissions. The pollution under control certificate of a vehicle deployed in mine has been enclosed as Annexure-31 for reference.

Varababu P.
वरबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Varababu P.
VARABABU P.
उप महाप्रबंधक (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
		Vehicles used for coal transportation are optimally loaded and covered with tarpaulins. Photographs attached as Annexure-10 .
(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.	Being Complied. Monitoring of environmental quality parameters is 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 Annexure-24, 25, 28, 29 & 30 .
(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.	Being Complied. Initial medical examination (IME) of workers is done prior to joining the assigned task. IME of 98 workers has been done for the period from October 2023 to March 2024 . Copy of one IME report has been attached as Annexure-32 . Protective equipments are made available to personnel working in dusty areas & adequate training on safety & health is being 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. The photographs of the training session on safety & health are enclosed as Annexure-33 .
(x)	A separate environmental management cell with suitable	Complied.

वराबाबू पी. / VARABABU P.

उप महाप्रबंधक (पी. एंड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
महोदय बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

VARABABU P.
उप महाप्रबंधक (पी. एंड एस.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
महोदय बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the head of the Company.	A Separate Environmental Management Cell (EMC) with suitable qualified personnel has been established and is under supervision of senior executive directly reporting to Head of the Coal Mining Projects. The organizational structural chart has been enclosed as Annexure-12 .
(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 reported to this Ministry and its Regional Office at Bhubaneswar.	Being Complied. The requisite funds for environmental mitigation measures have been included in the project cost The financial provision stipulated towards environmental mitigative measures will not be diverted for other proposes. Also, year-wise expenses detail for environmental protection measures are submitted to the Regional Office of MoEF & CC at Ranchi along with the EC compliance reports. The details of expenditure on environmental activities for F.Y. 2023-24 have been attached as Annexure-27 .
(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.	Complied. Advertisements of EC have been published in three local Papers widely circulated in Jharkhand namely. 1. Times of India, dt. 25.04.2010 , Ranchi. 2. The Hindustan (Hindi), 25.04.2010 , Ranchi. 3. Prabhat Khabar (Hindi), 24.04.2010 , Ranchi.
(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	Complied. A copy of the EC letter has been sent to the office of Zila Parishad, Municipal Corporation and other concerned local authorities.

(Signature)

वरबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एन्ड एन.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

वरबाबू पी. / VARABABU P.
उप महाप्रबंधक (पी. एन्ड एन.) / DGM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	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.	The EC letter has also been uploaded on the company's website.
(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.	Complied. Copy of EC letter was sent to office of District Industry Centre (DIC), District Collector for display. A copy of the EC had also been forwarded to JSPCB and the Regional office for display.
(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 the entrance of the project premises and mines office and in corporate office and on the company's website.	Being Complied. The environmental clearance letter has been uploaded on the NTPC website. The compliance status of the stipulated EC conditions is also uploaded on NTPC's website. 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.
(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	Being Complied. The six-monthly compliance report is submitted regularly to the statutory authority concerned. The last EC compliance report was submitted on 09.12.2023 vide letter reference no.

Varababu P.

वराबाबु पी. / VARABABU P.
उप महाप्रबंधक (पी. एण्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

वराबाबु पी. / VARABABU P.
उप महाप्रबंधक (पी. एण्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



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

Sl. No.	STIPULATED CONDITION AS	COMPLIANCE STATUS AS ON 31.03.2024
	Office of the MOEF, the Respective Zonal offices of CPCB and the SPCB.	1079/CBCMP/EMG/2023/Dec/02.
(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.	Agree to comply. 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 st march in Form -V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.	Being Complied. 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 27.09.2023 vide letter reference no. NTPC/1079/CBCMP/ENV/MIN/193.

वराबाबू पी. / VARABABU P.

उप महाप्रबंधक (पी. एण्ड एस.) / DOM(P&S)

एनटीपीसी लिमिटेड / NTPC Limited

चट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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: 2nd 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


 वराबाबु पी. / VARABABU P.
 जल संसाधन (वि. एवं वन.) विभाग
 राष्ट्रीय नदी निकाय NTPC Limited
 राष्ट्रीय नदी निकाय नदी निकाय / CCMF
 राँची / Jharkhand

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-1, 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

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, Bhubaneshwar 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, Bhubaneshwar, 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, Bhubaneshwar.
4. User Agency for information.
5. Monitoring cell.
6. Guard File.

(C.D. Singh)

Deputy Inspector General of Forests

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: 21st November, 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. 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.


वरबाबु पी. / VARABABU P.
आयोजना (सी. एन. एन.) / NTPC Limited
एन. टी. पी. सी. लिमिटेड / NTPC Limited
हजारिबाग / Hazaribagh

- (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.



वराबाबु पी. / VARABABU P.
जय प्रकाश (पि. एच. एच.) / JAY PRAKASH
एनपीसी लिमिटेड / NTPC Limited
एनपीसी कोला जल परियोजना / NTPC
कलकत्ता / KOLKATA

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,

S.P. Singh

(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.

S.P. Singh
(S.P. Singh)

Assistant Inspector General of Forests

Varababu P.

वराबाबु पी. / VARABABU P.
जल संचालन (वि. एवं संच.) / जल संचालन
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय कोयला संयंत्रों में / CCMF
झारखण्ड / Jharkhand

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: 13th 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;


वरबाबु पी. / VARABABU P.
जल संसाधन (वि. एवं सं.) विभाग
एनटीपीसी लिमिटेड / NTPC Limited
कोयला खनन एवं परिवहन / CBMP
हजारीबाग / Hazaribagh

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;

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:

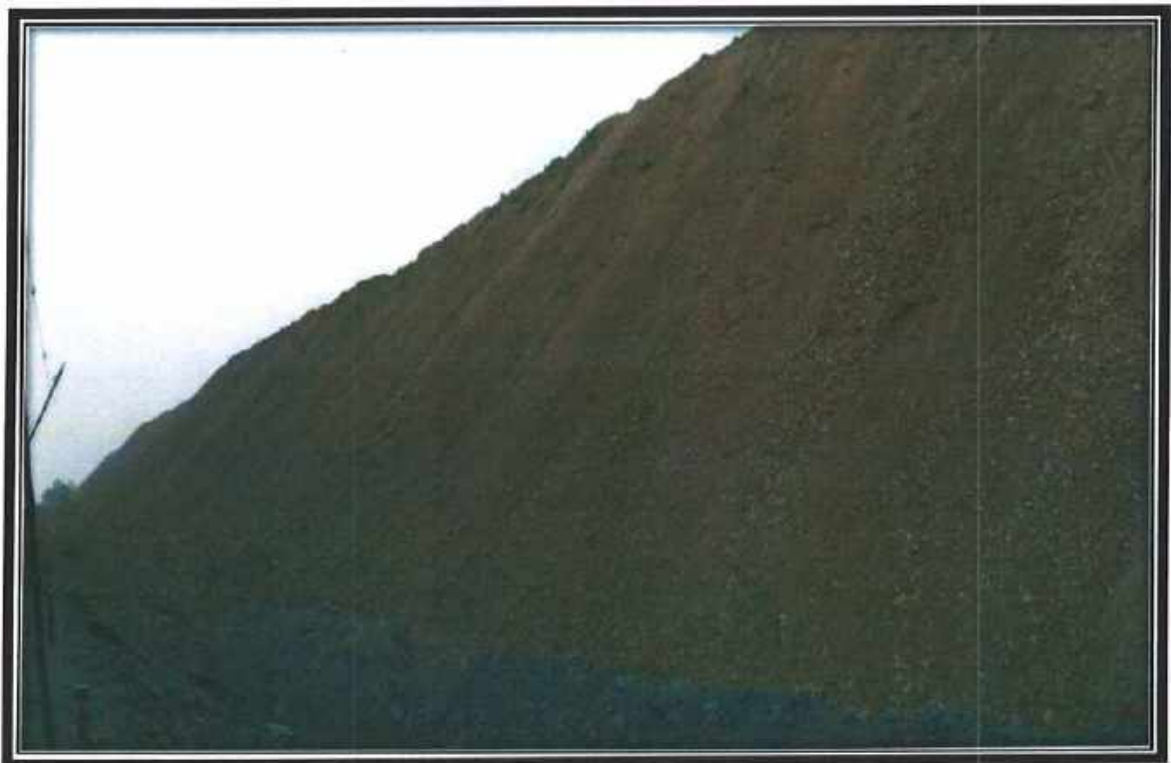
1. The Principal Chief Conservator of Forests Government of Jharkhand, Ranchi.
2. The Nodal Officer (FCA), Office of the PCCF, Government of Jharkhand, Ranchi.
3. The Addl. Principle Chief Conservator of Forest (Central), Regional Office, Ranchi.
4. User Agency.
5. Monitoring Cell of the FC section MoEF&CC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

(Nishceeth Saxena)

Sr. Assistant Inspector General of Forests (FC)


 वरबाबु पी. / VARABABU P.
 जन प्रवर्तक (वि. एवं स.)/ JNPP
 एनपीसी लिमिटेड/ NTPC Limited
 राष्ट्रीय कोयला विकास प्रयोगशाला/ CSMP
 नारायण / Narayan

Top Soil stacked properly within Mine Lease Area at CBCMP



Varababu P.

वरबाबु पी. / VARABABU P.
आयुक्त (वि. एवं सं.)/ CBCMP
एनएचएस लिमिटेड / NHPC Limited
एनपीएस मंडल कार्यालय / CBCMP
हजारीबाग / Hazaribag

Photographs of OB Dump (Covered with Topsoil) at CBCMP



Plantation in the NW corner of ML boundary at CBCMP



Varababu P.

Varababu P. / VARABABU P.
 Sr. Engineer (S. & T) / Assistant
 Engineer (S. & T) / NTPC Limited
 10, 11th Floor, 11th Floor / CBCMP
 Bangalore / Karnataka

Retaining Wall at the Toe of OB Dump in CBCMP



Drilling Work carried out at CBCMP



Varababu P.

वरबाबु पी. / VARABABU P.
 जल संचयन (क. एवं रसायन) विभाग
 राष्ट्रीय नदी नदी/ NTPC Limited
 नदी नदी नदी नदी नदी/ CBCMP
 नदी नदी / NTPC



Event Report

Date/Time Long at 14:11:26 March 6, 2024
 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 3.8 Volts
 Unit Calibration November 3, 2023 by UES New Delhi
 File Name _TEMP.EVT

Notes

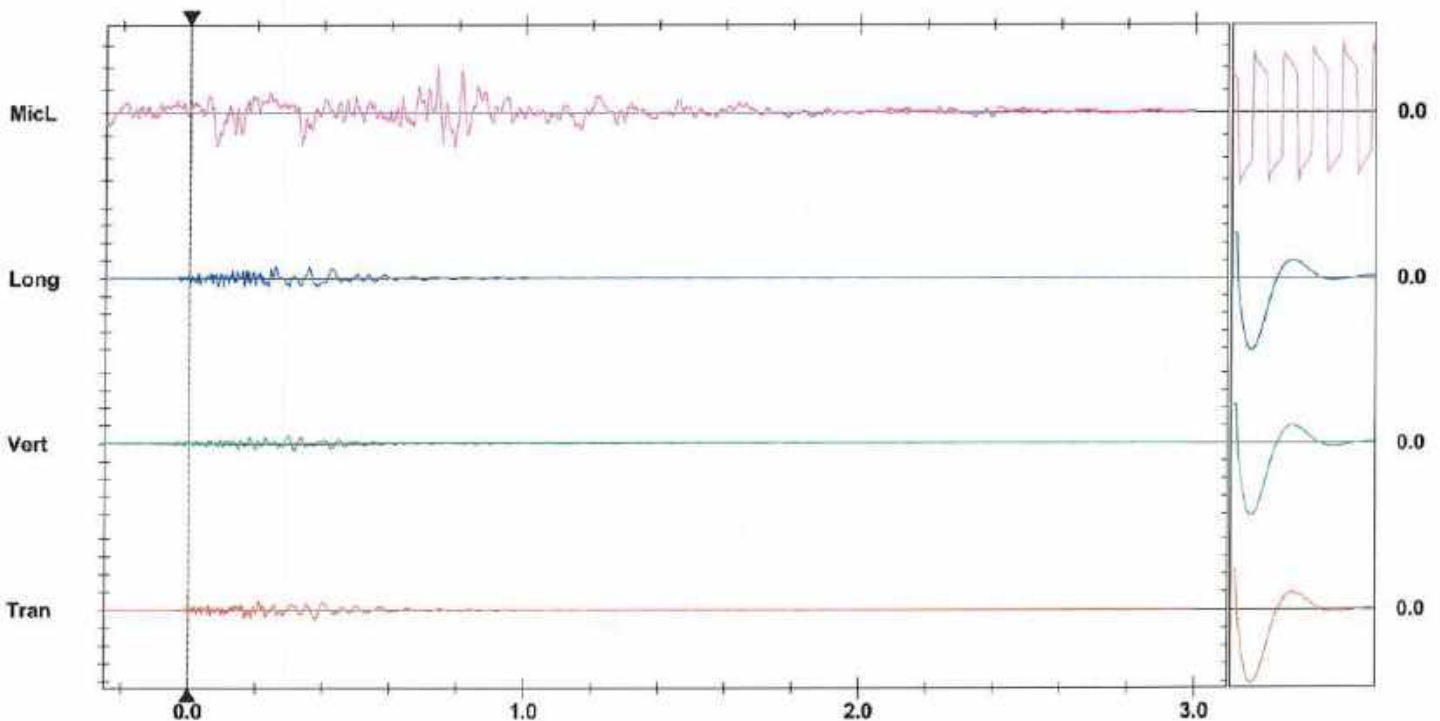
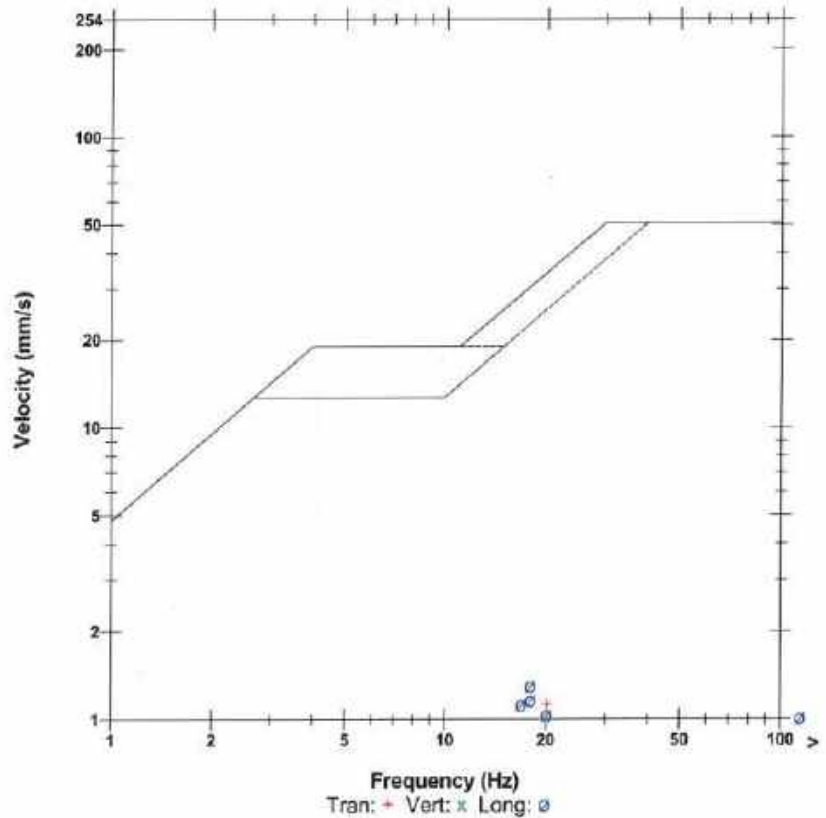
Location: 1- Bottom seam
 Client: NTPC
 User Name: CBCMPL
 General: COAL MINES

Microphone Linear Weighting
 PSPL 2.048 pa.(L) at 0.735 sec
 ZC Freq 27 Hz
 Channel Test Passed (Freq = 20.5 Hz Amp = 1207 mv)

	Tran	Vert	Long	
PPV	1.119	0.875	1.301	mm/s
ZC Freq	20	25	18.0	Hz
Time (Rel. to Trig)	0.378	0.294	0.255	sec
Peak Acceleration	0.051	0.036	0.074	g
Peak Displacement	0.008	0.005	0.012	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.5	4.3	4.3	

Peak Vector Sum 1.492 mm/s at 0.255 sec

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

Coal transportation with covered trucks at CBCMP



Detail of ESCROW deposits for the FY 2023-24

Unit name: NTPC Limited Chhatti Bariatu Coal Mining Project

ESCROW A/c No. : 33769593988.

FDR no.	FY 2023-24					
	Opening Balance	Deposit	Reimbursement	Miscellaneous Withdrawal (If any)	Interest	TDS
40882261595	2,84,01,895.60	-	-	-	19,66,260.27	1,96,627.00
41784727017	2,88,38,033.87	-	-	-	19,96,511.32	1,99,652.00
42831105100	-	3,03,00,000.00	-	-	33,593.48	3,360.00
42835165858	-	3,18,00,000.00	-	-	14,406.43	3,524.00
Total	5,72,39,929.47	6,21,00,000.00	-	-	40,10,771.50	4,03,163.00
						12,29,47,537.97

Current interest
 40,10,771.50
 4,03,163.00
 12,29,47,537.97

Varababu P.
 वरबाबु पी. / VARABABU P.
 जन महासंस्था (पि. एच. एस.) / Jomspas
 एनटीपीसी लिमिटेड / NTPC Limited
 एचडी बरिबतु कोला खान परियोजना / CBCMP
 हज़ारिबग / Hazaribag



A Maharatna Company

एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)

NTPC Limited
(A Govt. of India Enterprise)

चट्टी बारियातु कोयला खनन परियोजना
Chhatti Bariatu Coal Mining Project

Date: 20.04.2024

Ref No:1079/CBCMP/CD/268

To

The Divisional Forest Office (Hazaribagh West),
Van Bhavan, Hazaribagh,
Jharkhand, Pin 825301.

Sub: Regarding plantation scheme of 62,500 trees of NTPC CBCMP on deposit work basis through Forest department, Hazaribagh.

Dear Sir

The coal production and dispatch from CBCMP Mine is in full swing. As per environmental condition on dated 01.12.2020, it is stated that "Project proponent to plant 100000 no's of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer" Annexure I.

In this regard, at the initial phases NTPC CBCMP has been deposited an amount of Rs 4,61,29,153.00 as a 1st year instalment towards plantation of 33000 no of trees to your kind department to conduct the work on depository basis for the compliance of EC. Further we have deposited Rs 2,13,28,168/- for contribution for 2nd year on 28.03.2024.

It is to inform that we have completed plantation of 4500 plants along the coal dispatch route near the Mines area. Thus, in order to comply with EC conditions in totality, It is further requested to provide an economically suitable and low duration scheme for the plantation of the remaining 62,500 no. of trees along with scope of work, details of the scheme and other relevant details to enable NTPC-CBCMP to conduct plantation work as per EC conditions on depository work basis.

Yours sincerely




वरबाबु पी. / VARABABU P.

एन एमएसकेएस (पी. एच. एस.) / DOM(PAS)
एन टी पी सी लिमिटेड / NTPC Limited
चट्टी बारियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag




Pawn Kumar Rawat
AGM (Coal Dispatch & Billing)

पवन कुमार रावत / PAWAN KUMAR RAWAT
अवर महाप्रबंधक (कोयला वितरण एवं बिलिंग)
AGM (COAL DISPATCH & BILLING)
एन टी पी सी लिमिटेड / NTPC Limited
चट्टी बारियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

चट्टी बारियातु कोयला खनन परियोजना, सिकरी साईट कार्यालय, पी.ओ.-बड़कागाँव, जिला-हजारीबाग-825311 (झारखण्ड)
Chhatti 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: 011-24381018, Email : ntpccc@ntpc.co.in, web: www.ntpc.co.in

 e-Challan Finance Department, Government of Jharkhand Receiving Dept: Forest, Environment and Climate Change Department			
Valid Up To :- 06/04/2024		Treasury Copy	
GRN:-2401360339		Date:- 28/03/2024 18:59:15	
Receiving Office :- HZBFWL005-D.F.O., HAZARIBAG WEST DIV, HZB-D.F.O., HAZARIBAG WEST DIV, HZB			
District:- Hazaribag		Treasury:- Hazaribag	
Year:- 01/04/2024		to :- 31/03/2025	
Head(8782)		Amount ₹	
Head Details		878200103010101	
FOREST REMITTANCES		21328168.00	
Net Payable Amount:-		21328168.00	
Two Crore Thirteen Lakh Twenty Eight Thousand One Hundred Sixty Eight Rupees And Zero Paise Only			
Challan No and Date: 166 (28/03/2024)		For Treasury Use Only(Hazaribagh)	
Identity Proof (TAN Number) - RCHN00278F			
PAN No:- NA			
Remitter Name:- NTPC LTD			
Address :- SIKRI SITE OFFICE, NTPC LTD, CHATTIBARIATU			
Remarks :- CMP			
Deposit Work			
Treasury Officer Signature is not required.			
FOR USE IN TREASURY LINK BANK			
CHEQUE/DD No :- 627705 Dt 28.03.2024			
Scroll No and (Date) :- 143 (30/03/2024)			
Bank Name :-SBI,HAZARIBAGH,HAZARIBAGH,JHARKHAND			
Note:- Bank Official are requested to update the receipt Online before Stamping.		Signature & Seal of Bank	

वरबाबु श्री. / VARABABU P.
जन सहकारी (पि. एच. एन.) / JSCMP
एनपीसी लिमिटेड / NTPC Limited
वर्ग सीक्यू सोलर सन एनर्जिस / CBCMP
हजारिबाग / Hazaribag

 e-Challan Finance Department, Government of Jharkhand Receiving Dept: Forest, Environment and Climate Change Department			
Valid Up To :- 06/04/2024		AG Copy	
GRN:-2401360339		Date:- 28/03/2024 18:59:15	
Receiving Office :- HZBFWL005-D.F.O., HAZARIBAG WEST DIV, HZB-D.F.O., HAZARIBAG WEST DIV, HZB			
District:- Hazaribag		Treasury:- Hazaribag	
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PAN No:- NA			
Remitter Name:- NTPC LTD			
Address :- SIKRI SITE OFFICE, NTPC LTD, CHATTIBARIATU			
Remarks :- CMP			
Deposit Work			
Treasury Officer Signature is not required.			
FOR USE IN TREASURY LINK BANK			
CHEQUE/DD No :- 627705 Dt 28.03.2024			
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Bank Name :-SBI,HAZARIBAGH,HAZARIBAGH,JHARKHAND			
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एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)

Ref no.: REDCM Sectt/2024/CB&KD/543

Date: 23.02.2024

To,
The Joint Secretary (Thermal),
Ministry of Power,
Govt. of India,
Shram Shakti Bhawan, Rafi Marg,
New Delhi -110001

Subject: Request to Ministry of Railways for expediting construction of Railway siding for Kerandari and Chatti Bariatu Coal Mining Projects

Sir,

Chatti-Bariatu and Kerandari Coal Mining Project, located in Hazaribagh District (Jharkhand), are adjacent coal blocks with common coal evacuation system which includes pipe conveyor and Railway siding system.

Conveyor system is under construction by NTPC and is expected to be completed by Oct'24. The Railway Siding system is to be constructed by Indian Railways and Detailed Project Report (DPR) for the same is under finalization by Railways. The expected timeline for its completion is three years post-approval by the Railway Board. The project has been delayed due to delay in forest clearance, land and local law & order issues.

Both Chatti Bariatu and Kerandari Coal Mining Project have started coal production from Sep'22 and Jan'24 respectively. As per the conditions of Environment Clearance, there shall be no transportation of coal by road. However, given that coal production has already begun, and the conveyor/Railway siding system is not yet ready, an application for amendment in the Environment Clearance for transportation of coal by road through trucks was submitted to MoEF&CC. MOEF&CC vide letter dated 05.02.2024 has extended timeline for construction of closed belt conveyor up to October 2024 & construction of railway siding by March 2025. Further, advised NTPC to request Ministry of Power to co-ordinate with Ministry of Railways for expeditious construction of Railway siding.

In view of the above, I would request your intervention to facilitate and expedite the construction of the Railway Siding system for the Chatti-Bariatu and Kerandari Coal Mining Project. Your support in this matter would significantly contribute to the timely completion of this crucial infrastructure.

Thanking You,

वरबाबू पी. / VARABABU P.
जन महासंयोजक (पी. एन्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी परियोजना कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

(Animesh Jain)
CEO, NML &
Regional ED (Coal Mining), NTPC

कोयला खनन मुख्यालय: एनटीपीसी लिमिटेड, गिन्नी प्लाजा, चुटिया थाना के सामने, चुटिया, राँची 834001 (झारखण्ड)
Coal Mining Headquarters, NTPC Limited, Ginni Plaza, Opposite Chutia Police Station, Chutia, Ranchi-834001 (Jharkhand)
Registered Office : NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodi Road, New Delhi-110003

www.ntpc.co.in

Visit : /ntpc1 /ntpcltd1 /ntpclimited /company/ntpc /ntpclimited



File No.: J-11015/120/2007-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 05/02/2024



To,

Shri Birendra Kumar
NTPC LIMITED
NTPC Limited, NTPC Bhawan, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi – 110003
, New Delhi, NEW DELHI, DELHI, , 110003
environment.ntpc@gmail.com

Subject: Kerendari 'A' Coal Mine Block (6 MTPA in project area of 1173 ha (ML area 654 Ha) of M/s National Thermal Power Corporation Ltd., located in North Karanpura Coalfields in District Hazaribagh (Jharkhand) – For Amendment of EC dated 31.03.2010 read with subsequent EC transfer on 28.10.2105-regarding

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/JH/CMIN/443765/2023 dated 14/12/2023 for grant of an amendment in prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A0101JH5909189A
(ii) File No.	J-11015/120/2007-IA-II(M)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Kerandari Coal Mining Project
(viii) Location of Project (District, State)	HAZARIBAGH, JHARKHAND
(ix) Issuing Authority	MoEF&CC
(x) EC Date	
(xii) Applicability of General Conditions	NO
(xiii) Status of implementation of the project	

(Signature)
वरबाबु पी. / VARABABU P.
वन पर्यावरण (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

3. Environment Clearance (EC) to the project Kerendari 'A' Coal Mining Project of 6 MTPA peak capacity in mine lease area of 654 ha was accorded by Ministry's vide letter No.: J11015/133/2007-IA. II (M) dated 31.03.2010 to M/s NTPC

Limited.

4. Hon'ble Supreme Court of India vide Judgement dated 25th August, 2014 read with orders dated 24th September, 2014 has cancelled the allocation of 204 coal blocks which include the North Karanpura Coal Fields. In pursuance of the order of Hon'ble Supreme Court, the said coal mine was allocated again to M/s NTPC Limited vide vesting order No. 103/29/2015/NA dated 8th September, 2015 issued by the Nominated Authority in the Ministry of Coal. Pursuant to the said Notification, Ministry has transferred/revalidated EC to M/s NTPC Limited on 28.10.2015 with certain terms & conditions therein.

5. Project Proponent (M/s NTPC Limited) vide proposal number IA/JH/CMIN/443765/2023 dated 14/12/2023 has requested for a following amendment in specific conditions no. 2A (xi) and 2A (xiv) of Environment Clearance (EC) 31.03.2010 with respect to the permission for transportation of coal by road:

Sr No	As per EC dated 31.03.2010	Amendment Sought
(i)	2A (xi) Raw coal from CHP shall be transported by closed conveyors to the railway siding proposed at village Khadamdari and thereafter by rail to the linked Tanda/Barh STPP. The conveyor cum rail corridor consisting of a stretch of 13.1 km of rail and 10.5 km of overhead closed conveyors and extend upto unloading part at the Railway Siding with Silo Loading facilities and from there to linked Barh STPS/Tanda by rail. There will be no road transportation of coal.	Change in mode for transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Kusmahi, Bira Toli, Tori & Katkamsandi railway sidings (over a distance of 27 km, 38 km, 84 km, 95 km, 96 km, & 96 km respectively) for a period of three (03) years or till the associated railway siding become operational, whichever is earlier, for supply to Tanda/Barh STPP and transport of coal by road to NKSTPP (over a distance of 24 km).
(ii)	2A (xiv) Company's Railway siding at village Khadambari shall be established within 3 years from date of grant of environmental clearance.	

6. Above proposal for an amendment was considered in the 5th EAC meeting held on 22.12.2023, EAC during the meeting noted that the contract was signed with M/s L&T on 27.09.2019 for construction of conveyor belt and approximately 50% of the closed conveyor work has been completed and balance work is expected to complete by October 2024. PP committed that M/s NTPC will pursue with Ministry of Power to coordinate with Ministry of Railways for expeditious construction of Railway siding, which is in their domain to ensure railway transportation to respective linkage.


7. EAC after detailed deliberation on the information submitted and presented, **recommended** the proposal for grant of amendment in Environment Clearance to Kerendari 'A' Coal Mine Block (6 MTPA in project area of 1173 ha) of M/s National Thermal Power Corporation Ltd., located in North Karanpura Coalfields in District Hazaribagh (Jharkhand) by extending timeline for construction of closed belt conveyor upto October, 2024 & construction of railway siding by March, 2025 w.e.f 31st January 2024.

8. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords amendment in Environment Clearance to M/s NTPC Limited for Kerendari 'A' Coal Mining Project of 6 MTPA peak capacity in mine lease area of 654 ha (project area 1173 ha) by extending timeline for construction of closed belt conveyor upto October, 2024 & construction of railway siding by March, 2025 w.e.f 31st January 2024.

9. This issues with the approval of the Competent Authority.

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional


वरबाबु पी. / VARABABU P.
जन प्रशासन (पी. एच. एस.) / JOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

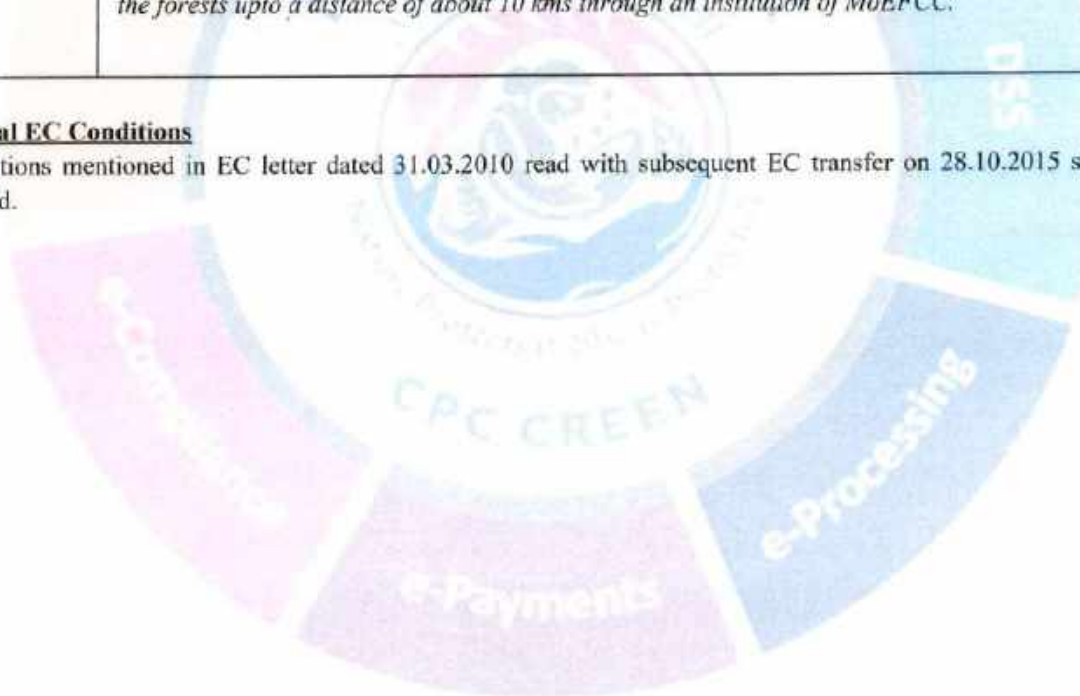
3. The Chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
4. The Regional Director, Central Ground Water Board, Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road, Dak Banglow, Patna- 800011, Bihar.
5. The Chairman, Jharkhand State Pollution Control Board, TA building, HEC complex, PO Dhurwa, Ranchi
6. The District Collector, **Hazaribagh**, Government of (Jharkhand)
7. PARIVESH Portal

वरबाबू पी. / VARABABU P.
 भवन मालिक/भवन निर्माण/सं. (P&S)
 एनटीपीसी लिमिटेड/ NTPC Limited
 बड़ी बरियदा कोयला खनन परियोजना/ CBCMP
 हजारीबाग/ Hazaribag

S. No	EC Conditions
1.11	PP shall explore at least 20% of overall fleet size of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of coal/OB etc and deploy e-vehicles for workers/staff in/out of the mine.
1.12	PP shall ensure the compliance of expenditure to be incurred for wildlife conservation plan submitted to the State Govt. and the details expenditure shall be submitted with six monthly EC compliance report to Ministry's IRO. Also, PP shall engage State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market.
1.13	PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System."
1.14	PP shall submit certified compliance report of EC vide letter No. J-11015/120/2007-IA, II (M) dated 31st March, 2010 and later re-validated letter dated 28.10.2015.
1.15	PP shall commission a study for evaluating the impact of air pollution generated by its activities on the forests upto a distance of about 10 kms through an institution of MoEFCC.

Additional EC Conditions

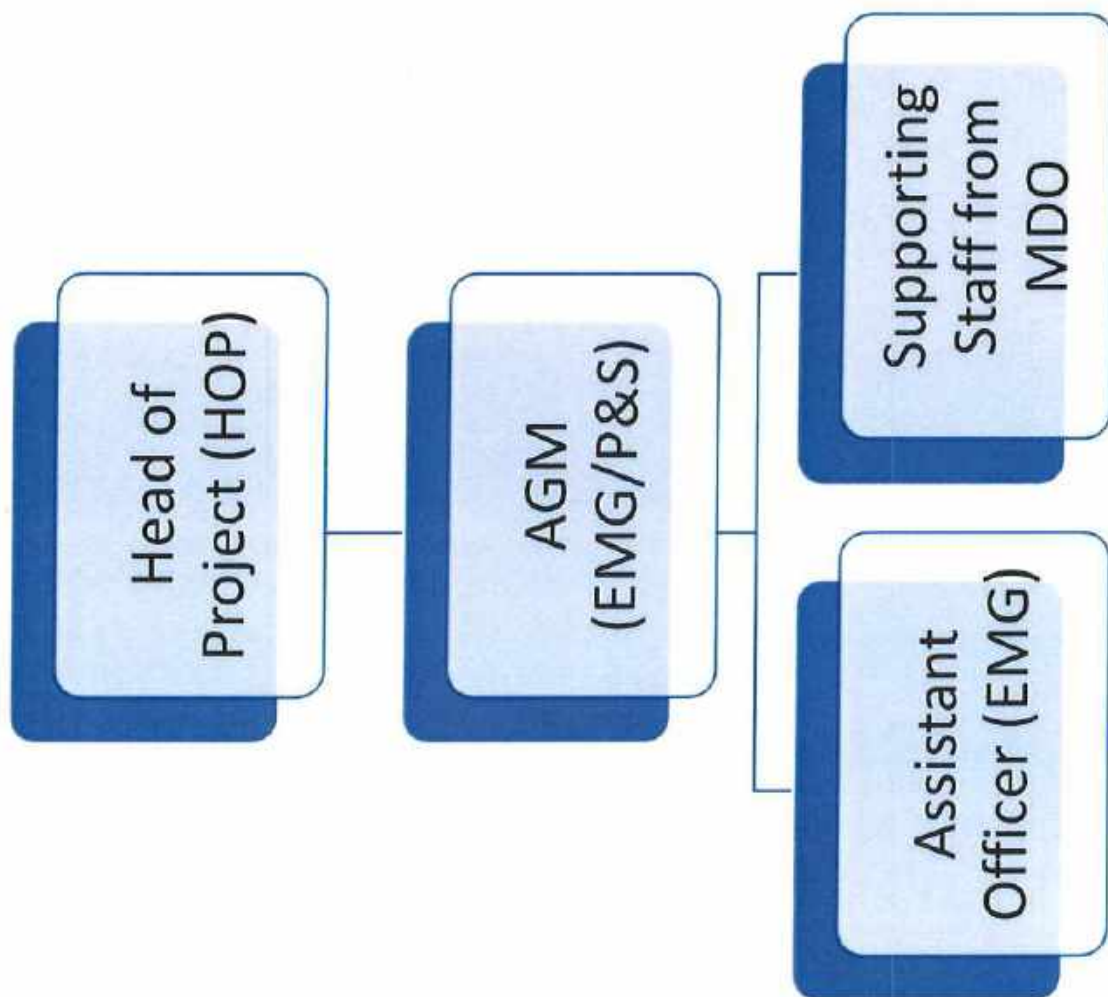
All conditions mentioned in EC letter dated 31.03.2010 read with subsequent EC transfer on 28.10.2015 shall remain unchanged.



(Signature)

वराबाबु पी. / VARABABU P.
 जन प्रशासनिक (पी. एच. एस.) / DOM(PAS)
 इन्फोसिस लिमिटेड / NTPC Limited
 बड़ी हरिवानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

ENVIRONMENT MANAGEMENT CELL AT NTPC- CBCMP



वराबाबु पी. / VARABABU P.
 डन मरामन्वला (पी. एम. एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Re: To conduct a study for evaluating the impact of air pollution generated by the mining activities of Chatti Bariatu Coal Mining Project of M/s NTPC Limited on the forests up to a distance of about 10 kms.

EMG_CBCMP <emg_cbcmp@ntpc.co.in>

Thu 5/2/2024 10:30 AM

To: dir_ifp@icfre.org <dir_ifp@icfre.org>; ifpranchi2018@gmail.com <ifpranchi2018@gmail.com>

1 attachments (245 KB)

EC_Amendment_Certificate_of_CBCMP.pdf;

Respected Sir,

With reference to the trailing mail, please find the attached latest EC Amendment letter accorded to CBCMP vide its letter no. **J-11015/133/2007-IA.II (M)** dated **05.01.2024**.

With warm regards,

Ravi Kumar

Assistant Officer (Environment Management)

CBCMP, NTPC Ltd.

Mob- 8396059957

From: EMG_CBCMP

Sent: Thursday, May 2, 2024 10:26 AM

To: dir_ifp@icfre.org <dir_ifp@icfre.org>; ifpranchi2018@gmail.com <ifpranchi2018@gmail.com>

Cc: AK SONI <AKSONI01@NTPC.CO.IN>; Pavan Vasantrao <PAVANKHANDWE@NTPC.CO.IN>; Ravi Kumar <RKUMAR10@NTPC.CO.IN>

Subject: To conduct a study for evaluating the impact of air pollution generated by the mining activities of Chatti Bariatu Coal Mining Project of M/s NTPC Limited on the forests up to a distance of about 10 kms.


Respected Sir,

The **Environmental Clearance (EC)** to Chatti Bariatu Coal Mining Project (CBCMP) was granted by MoEF vide its letter no. **J-11015/133/2007-IA.II (M)** dated **19.04.2010**. The EC was further amended two times by MoEF&CC vide its letter no. **J-11015/133/2007-IA.II (M)** dated **01.12.2020 & 05.01.2024**, respectively with certain additional specific conditions (The copy of the latest EC amendment letter is enclosed herewith). One of the specific conditions of the latest EC Amendment letter dated **05.01.2024** stipulates that, **"PP shall commission a study for evaluating the impact of air pollution generated by its activities on the forests up to a distance of about 10 kms through an institution of MoEFCC"**.

We understand that your esteemed Institute carries out such aforementioned study as per the requirement of MoEF&CC. In this context, we request you to provide credentials of such studies done by the Institute and provide budgetary offer to conduct a study for evaluating the impact of air pollution generated by mining activities of **Chatti Bariatu Coal Mining Project** on the forests up to a distance of about 10 kms.

We remain available to provide any further clarification on the matter and solicit your early response.

With warm regards,



वरबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एम.) / DOM(P&A)
लघुवीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Ravi Kumar
Assistant Officer (Environment Management)
CBCMP, NTPC Ltd.
Mob- 8396059957



वराबाबु पी. / VARABABU P.
जन गणमण्डल (पी. एण्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
सडी बरिवातु कोयला खनन परियोजना / CBCMP
हज़ारिबाग / Hazaribag

**Water Sprinkling System and Fog Canon Installed at the Crusher Unit in
CBCMP**



Varababu P.

वराबाबु पी. / VARABABU P.
जन महासंस्था (पी. एन. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी हरिकानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Dust Suppression along transportation route through Mobile Water Tankers



Varababu P.

वराबाबु पी. / VARABABU P.
जन महासंघ (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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



(Signature)

वराबाबू पी. / VARABABU P.
 जून मल्लिकार्जुन (पी. एच. एच.) / JOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी हरियाणा कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & Ltr (From 01.10.23 to 31.10.23)

Sl No	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3)	Water Consumption (in ltr/day)	Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3)	Water Consumption (in ltr/day)	Total Consumption in m3 (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/10/23	4.1	2518.00	2521.00	3.00	3000.00	2.6	4121	4124.34	3.34	3340.00	6.34	6340.00
2	02/10/23	4.2	2521.00	2524.54	3.54	3540.00	2.8	4124.34	4128.02	3.68	3680.00	7.22	7220.00
3	03/10/23	4.1	2524.54	2528.19	3.65	3650.00	2.9	4128.02	4132.56	4.54	4540.00	8.19	8190.00
4	04/10/23	4.4	2528.19	2531.72	3.53	3530.00	2.5	4132.56	4135.61	3.05	3050.00	6.58	6580.00
5	05/10/23	4.2	2531.72	2535.27	3.55	3550.00	2.8	4135.61	4139.27	3.66	3660.00	7.21	7210.00
6	06/10/23	4.2	2535.27	2538.37	3.10	3100.00	2.8	4139.27	4143.24	3.97	3970.00	7.07	7070.00
7	07/10/23	4.1	2538.37	2542.00	3.63	3630.00	2.7	4143.24	4147.04	3.80	3800.00	7.43	7430.00
8	08/10/23	4.9	2542.00	2545.37	3.37	3370.00	2.6	4147.04	4151.14	4.10	4100.00	7.47	7470.00
9	09/10/23	4.5	2545.37	2548.28	2.91	2910.00	2.8	4151.14	4154.87	3.73	3730.00	6.64	6640.00
10	10/10/23	4.2	2548.28	2551.87	3.59	3590.00	2.6	4154.87	4158.28	3.41	3410.00	7.00	7000.00
11	11/10/23	4.4	2551.87	2554.48	2.61	2610.00	2.8	4158.28	4162.05	3.77	3770.00	6.38	6380.00
12	12/10/23	4.1	2554.48	2558.00	3.52	3520.00	2.6	4162.05	4165.67	3.62	3620.00	7.14	7140.00
13	13/10/23	4.2	2558.00	2561.58	3.58	3580.00	2.8	4165.67	4169.00	3.33	3330.00	6.91	6910.00
14	14/10/23	4.6	2561.58	2565.00	3.42	3420.00	2.9	4169.00	4172.73	3.73	3730.00	7.15	7150.00
15	15/10/23	5.6	2565.00	2568.43	3.43	3430.00	2.8	4172.73	4176.51	3.78	3780.00	7.21	7210.00
16	16/10/23	4.2	2568.43	2572.28	3.85	3850.00	2.8	4176.51	4180.37	3.86	3860.00	7.71	7710.00
17	17/10/23	4.1	2572.28	2575.48	3.20	3200.00	2.6	4180.37	4184.42	4.05	4050.00	7.25	7250.00
18	18/10/23	4.1	2575.48	2578.24	2.76	2760.00	2.8	4184.42	4187.58	3.16	3160.00	5.92	5920.00
19	19/10/23	4.3	2578.24	2582.19	3.95	3950.00	2.6	4187.58	4191.29	3.71	3710.00	7.66	7660.00
20	20/10/23	4.4	2582.19	2585.34	3.15	3150.00	2.8	4191.29	4195.29	4.00	4000.00	7.15	7150.00
21	21/10/23	4.4	2585.34	2588.00	2.66	2660.00	2.9	4195.29	4198.71	3.42	3420.00	6.08	6080.00
22	22/10/23	4.2	2588.00	2591.36	3.36	3360.00	2.8	4198.71	4203.11	4.40	4400.00	7.76	7760.00
23	23/10/23	4.1	2591.36	2594.26	2.90	2900.00	2.2	4203.11	4207.14	4.03	4030.00	6.93	6930.00
24	24/10/23	4.6	2594.26	2597.77	3.51	3510.00	2.5	4207.14	4211.08	3.94	3940.00	7.45	7450.00
25	25/10/23	5.6	2597.77	2600.00	2.23	2230.00	2.6	4211.08	4215.38	4.30	4300.00	6.53	6530.00
26	26/10/23	4.2	2600.00	2603.34	3.34	3340.00	2.4	4215.38	4219.49	4.11	4110.00	7.45	7450.00
27	27/10/23	4.1	2603.34	2607.02	3.68	3680.00	2.5	4219.49	4223.00	3.51	3510.00	7.19	7190.00

VARABABU P. / VARABABU P.

DOM(P&B)
NTPC Limited
Hazaribag / Hazaribag

28	28/10/23	4.1	2607.02	2610.03	3.01	3010.00	2.8	4223.00	4227.81	4.81	4810.00	7.82	7820.00
29	29/10/23	4.3	2610.03	2614.00	3.97	3970.00	2.5	4227.81	4231.09	3.28	3280.00	7.25	7250.00
30	30/10/23	4.5	2614.00	2617.35	3.35	3350.00	5.7	4231.09	4235.89	4.80	4800.00	8.15	8150.00
31	31/10/23	4.3	2617.35	2620.00	2.65	2650.00	6.7	4235.89	4239.01	3.12	3120.00	5.77	5770.00
Total Water Consumption (Oct_2023)						102.00	102000.00			118.01	118010.00	220.01	220010.00



यराबाबु पी. / VARABABU P.
 डन पावरप्लांट (पी. एण्ड एन.) / DOM(P&N)
 इन्टीग्रेटीड लिमिटेड / NTPC Limited
 बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag

वराबाबू पी. / VARABABU P.

भवन प्रशासक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMPL
हजारीबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & Ltr (From 01.11.23 to 30.11.23)

Sl No	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Total Consumption in m3/day (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/11/23	4.1	2617.35	2621.12	3.77	3770.00	2.6	4235.89	4240.09	4.20	4200.00	7.97	7970.00
2	02/11/23	4.2	2621.12	2624.48	3.36	3360.00	2.8	4240.09	4244.00	3.91	3910.00	7.27	7270.00
3	03/11/23	4.1	2624.48	2628.37	3.89	3890.00	2.9	4244.00	4248.21	4.21	4210.00	8.10	8100.00
4	04/11/23	4.4	2628.37	2632.09	3.72	3720.00	2.5	4248.21	4252.29	4.08	4080.00	7.80	7800.00
5	05/11/23	4.2	2632.09	2635.28	3.19	3190.00	2.8	4252.29	4256.38	4.09	4090.00	7.28	7280.00
6	06/11/23	4.2	2635.28	2638.81	3.53	3530.00	2.8	4256.38	4260.43	4.05	4050.00	7.58	7580.00
7	07/11/23	4.1	2638.81	2642.41	3.60	3600.00	2.7	4260.43	4264.58	4.15	4150.00	7.75	7750.00
8	08/11/23	4.9	2642.41	2645.59	3.18	3180.00	2.6	4264.58	4269.02	4.44	4440.00	7.62	7620.00
9	09/11/23	4.5	2645.59	2649.00	3.41	3410.00	2.8	4269.02	4273.33	4.31	4310.00	7.72	7720.00
10	10/11/23	4.2	2649.00	2652.17	3.17	3170.00	2.6	4273.33	4277.61	4.28	4280.00	7.45	7450.00
11	11/11/23	4.4	2652.17	2655.28	3.11	3110.00	2.8	4277.61	4282.03	4.42	4420.00	7.53	7530.00
12	12/11/23	4.1	2655.28	2659.11	3.83	3830.00	2.6	4282.03	4286.54	4.51	4510.00	8.34	8340.00
13	13/11/23	4.2	2659.11	2662.34	3.23	3230.00	2.8	4286.54	4291.11	4.57	4570.00	7.80	7800.00
14	14/11/23	4.6	2662.34	2665.48	3.14	3140.00	2.9	4291.11	4295.10	3.99	3990.00	7.13	7130.00
15	15/11/23	5.6	2665.48	2668.55	3.07	3070.00	2.8	4295.10	4299.34	4.24	4240.00	7.31	7310.00
16	16/11/23	4.2	2668.55	2672.38	3.83	3830.00	2.8	4299.34	4304.00	4.66	4660.00	8.49	8490.00
17	17/11/23	4.1	2672.38	2675.57	3.19	3190.00	2.6	4304.00	4307.37	3.37	3370.00	6.56	6560.00
18	18/11/23	4.1	2675.57	2679.00	3.43	3430.00	2.8	4307.37	4311.11	3.74	3740.00	7.17	7170.00
19	19/11/23	4.3	2679.00	2682.39	3.39	3390.00	2.6	4311.11	4315.19	4.08	4080.00	7.47	7470.00
20	20/11/23	4.4	2682.39	2685.54	3.15	3150.00	2.8	4315.19	4319.83	4.64	4640.00	7.79	7790.00
21	21/11/23	4.4	2685.54	2688.81	3.27	3270.00	2.9	4319.83	4323.77	3.94	3940.00	7.21	7210.00
22	22/11/23	4.2	2688.81	2691.88	3.07	3070.00	2.8	4323.77	4327.56	3.79	3790.00	6.86	6860.00
23	23/11/23	4.1	2691.88	2695.05	3.17	3170.00	2.2	4327.56	4331.08	3.52	3520.00	6.69	6690.00
24	24/11/23	4.6	2695.05	2699.00	3.95	3950.00	2.5	4331.08	4335.00	3.92	3920.00	7.87	7870.00
25	25/11/23	5.6	2699.00	2702.72	3.72	3720.00	2.6	4335.00	4339.37	4.37	4370.00	8.09	8090.00
26	26/11/23	4.2	2702.72	2705.77	3.05	3050.00	2.4	4339.37	4343.39	4.02	4020.00	7.07	7070.00
27	27/11/23	4.1	2705.77	2709.08	3.31	3310.00	2.5	4343.39	4348.07	4.68	4680.00	7.99	7990.00

28	28/11/23	4.1	2709.08	2712.22	3.14	3140.00	2.8	4348.07	4352.64	4.57	4570.00	7.71	7710.00
29	29/11/23	4.3	2712.22	2715.39	3.17	3170.00	2.5	4352.64	4357.21	4.57	4570.00	7.74	7740.00
30	30/11/23	4.5	2715.39	2718.69	3.30	3300.00	5.7	4357.21	4361.00	3.79	3790.00	7.09	7090.00
Total Water Consumption (Nov_2023)						101.34	101340.00			125.11	125110.00	226.45	226450.00

Varababu P.


यराबाबू पी. / VARABABU P.
 डी.एम.एस. (सी. एन्ड. एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 चण्डी बरिगुड कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & Ltr (From 01.12.23 to 31.12.23)

Sl. No.	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Total Consumption in m3/day (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/12/23	4.1	2718.69	2722.65	3.96	3960.00	2.6	4361.00	4365.45	4.45	4450.00	8.41	8410.00
2	02/12/23	4.2	2722.65	2727.00	4.35	4350.00	2.8	4365.45	4369.29	3.84	3840.00	8.19	8190.00
3	03/12/23	4.1	2727.00	2731.08	4.08	4080.00	2.9	4369.29	4374.00	4.71	4710.00	8.79	8790.00
4	04/12/23	4.4	2731.08	2735.13	4.05	4050.00	2.5	4374.00	4378.81	4.81	4810.00	8.86	8860.00
5	05/12/23	4.2	2735.13	2739.05	3.92	3920.00	2.8	4378.81	4382.87	4.06	4060.00	7.98	7980.00
6	06/12/23	4.2	2739.05	2743.00	3.95	3950.00	2.8	4382.87	4387.37	4.50	4500.00	8.45	8450.00
7	07/12/23	4.1	2743.00	2747.29	4.29	4290.00	2.7	4387.37	4391.84	4.47	4470.00	8.76	8760.00
8	08/12/23	4.9	2747.29	2751.38	4.09	4090.00	2.6	4391.84	4395.73	3.89	3890.00	7.98	7980.00
9	09/12/23	4.5	2751.38	2755.72	4.34	4340.00	2.8	4395.73	4400.00	4.27	4270.00	8.61	8610.00
10	10/12/23	4.2	2755.72	2759.59	3.87	3870.00	2.6	4400.00	4404.72	4.72	4720.00	8.59	8590.00
11	11/12/23	4.4	2759.59	2764.04	4.45	4450.00	2.8	4404.72	4409.24	4.52	4520.00	8.97	8970.00
12	12/12/23	4.1	2764.04	2768.00	3.96	3960.00	2.6	4409.24	4413.61	4.37	4370.00	8.33	8330.00
13	13/12/23	4.2	2768.00	2772.18	4.18	4180.00	2.8	4413.61	4418.44	4.83	4830.00	9.01	9010.00
14	14/12/23	4.6	2772.18	2776.09	3.91	3910.00	2.9	4418.44	4423.09	4.65	4650.00	8.56	8560.00
15	15/12/23	5.6	2776.09	2780.24	4.15	4150.00	2.8	4423.09	4427.58	4.49	4490.00	8.64	8640.00
16	16/12/23	4.2	2780.24	2784.03	3.79	3790.00	2.8	4427.58	4431.37	3.79	3790.00	7.58	7580.00
17	17/12/23	4.1	2784.03	2788.44	4.41	4410.00	2.6	4431.37	4435.59	4.22	4220.00	8.63	8630.00
18	18/12/23	4.1	2788.44	2792.15	3.71	3710.00	2.8	4435.59	4439.48	3.89	3890.00	7.60	7600.00
19	19/12/23	4.3	2792.15	2796.62	4.47	4470.00	2.6	4439.48	4443.81	4.33	4330.00	8.80	8800.00
20	20/12/23	4.4	2796.62	2800.91	4.29	4290.00	2.8	4443.81	4448.29	4.48	4480.00	8.77	8770.00
21	21/12/23	4.4	2800.91	2804.62	3.71	3710.00	2.9	4448.29	4452.59	4.30	4300.00	8.01	8010.00
22	22/12/23	4.2	2804.62	2808.15	3.53	3530.00	2.8	4452.59	4457.00	4.41	4410.00	7.94	7940.00
23	23/12/23	4.1	2808.15	2812.34	4.19	4190.00	2.2	4457.00	4461.37	4.37	4370.00	8.56	8560.00
24	24/12/23	4.6	2812.34	2816.41	4.07	4070.00	2.5	4461.37	4465.76	4.39	4390.00	8.46	8460.00
25	25/12/23	5.6	2816.41	2820.71	4.30	4300.00	2.6	4465.76	4470.07	4.31	4310.00	8.61	8610.00
26	26/12/23	4.2	2820.71	2824.45	3.74	3740.00	2.4	4470.07	4474.79	4.72	4720.00	8.46	8460.00
27	27/12/23	4.1	2824.45	2828.37	3.92	3920.00	2.5	4474.79	4479.11	4.32	4320.00	8.24	8240.00

28	28/12/23	4.1	2828.37	2832.12	3.75	3750.00	2.8	4479.11	4483.54	4.43	4430.00	8.18	8180.00
29	29/12/23	4.3	2832.12	2836.53	4.41	4410.00	2.5	4483.54	4487.38	3.84	3840.00	8.25	8250.00
30	30/12/23	4.5	2836.53	2840.24	3.71	3710.00	2.4	4487.38	4491.83	4.45	4450.00	8.16	8160.00
31	31/12/23	4.5	2840.24	2844.00	3.76	3760.00	2.5	4491.83	4496.00	4.17	4170.00	7.93	7930.00
Total Water Consumption (Dec_2023)					125.31	125310.00				135.00	135000.00	260.31	260310.00

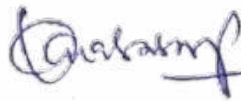

वराबाबु पी. / VARABABU P.
 डन पावरप्लान्स (पी. एनड एल.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी खरिवानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & ltr (From 01.01.24 to 31.01.24)

Sl No	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m ³ /hr	Initial Reading (in m ³)	Final Reading (in m ³)	Water Consumption (in m ³ /day)	Water Consumption (in ltr/day)	Flow Rate m ³ /hr	Initial Reading (in m ³)	Final Reading (in m ³)	Water Consumption (in m ³ /day)	Water Consumption (in ltr/day)	Total Consumption in m ³ /day (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/01/24	4.1	2844.00	2848.10	4.10	4100.00	2.6	4496.00	4500.21	4.21	4210.00	8.31	8310.00
2	02/01/24	4.2	2848.10	2852.18	4.08	4080.00	2.8	4500.21	4504.29	4.08	4080.00	8.16	8160.00
3	03/01/24	4.1	2852.18	2856.19	4.01	4010.00	2.9	4504.29	4508.38	4.09	4090.00	8.10	8100.00
4	04/01/24	4.4	2856.19	2860.24	4.05	4050.00	2.5	4508.38	4513.22	4.84	4840.00	8.89	8890.00
5	05/01/24	4.2	2860.24	2864.29	4.05	4050.00	2.8	4513.22	4517.48	4.26	4260.00	8.31	8310.00
6	06/01/24	4.2	2864.29	2868.37	4.08	4080.00	2.8	4517.48	4522.01	4.53	4530.00	8.61	8610.00
7	07/01/24	4.1	2868.37	2872.41	4.04	4040.00	2.7	4522.01	4526.19	4.18	4180.00	8.22	8220.00
8	08/01/24	4.9	2872.41	2876.51	4.10	4100.00	2.6	4526.19	4530.22	4.03	4030.00	8.13	8130.00
9	09/01/24	4.5	2876.51	2881.02	4.51	4510.00	2.8	4530.22	4534.71	4.49	4490.00	9.00	9000.00
10	10/01/24	4.2	2881.02	2885.06	4.04	4040.00	2.6	4534.71	4539.00	4.29	4290.00	8.33	8330.00
11	11/01/24	4.4	2885.06	2889.27	4.21	4210.00	2.8	4539.00	4543.37	4.37	4370.00	8.58	8580.00
12	12/01/24	4.1	2889.27	2893.34	4.07	4070.00	2.6	4543.37	4548.00	4.63	4630.00	8.70	8700.00
13	13/01/24	4.2	2893.34	2897.61	4.27	4270.00	2.8	4548.00	4552.11	4.11	4110.00	8.38	8380.00
14	14/01/24	4.6	2897.61	2902.09	4.48	4480.00	2.9	4552.11	4556.29	4.18	4180.00	8.66	8660.00
15	15/01/24	5.6	2902.09	2906.19	4.10	4100.00	2.8	4556.29	4560.37	4.08	4080.00	8.18	8180.00
16	16/01/24	4.2	2906.19	2910.28	4.09	4090.00	2.8	4560.37	4564.81	4.44	4440.00	8.53	8530.00
17	17/01/24	4.1	2910.28	2914.44	4.16	4160.00	2.6	4564.81	4569.00	4.19	4190.00	8.35	8350.00
18	18/01/24	4.1	2914.44	2918.52	4.08	4080.00	2.8	4569.00	4573.29	4.29	4290.00	8.37	8370.00
19	19/01/24	4.3	2918.52	2922.44	3.92	3920.00	2.6	4573.29	4577.78	4.49	4490.00	8.41	8410.00
20	20/01/24	4.4	2922.44	2926.62	4.18	4180.00	2.8	4577.78	4582.00	4.22	4220.00	8.40	8400.00
21	21/01/24	4.4	2926.62	2930.91	4.29	4290.00	2.9	4582.00	4586.11	4.11	4110.00	8.40	8400.00
22	22/01/24	4.2	2930.91	2935.00	4.09	4090.00	2.8	4586.11	4590.29	4.18	4180.00	8.27	8270.00
23	23/01/24	4.1	2935.00	2939.09	4.09	4090.00	2.2	4590.29	4594.38	4.09	4090.00	8.18	8180.00
24	24/01/24	4.6	2939.09	2943.44	4.35	4350.00	2.5	4594.38	4599.00	4.62	4620.00	8.97	8970.00
25	25/01/24	5.6	2943.44	2947.51	4.07	4070.00	2.6	4599.00	4603.11	4.11	4110.00	8.18	8180.00
26	26/01/24	4.2	2947.51	2951.79	4.28	4280.00	2.4	4603.11	4607.37	4.26	4260.00	8.54	8540.00
27	27/01/24	4.1	2951.79	2956.00	4.21	4210.00	2.5	4607.37	4611.57	4.20	4200.00	8.41	8410.00

28	28/01/24	4.1	2956.00	2960.06		4.06	4060.00	2.8	4611.57	4615.81	4.24	4240.00	8.30	8300.00
29	29/01/24	4.3	2960.06	2964.32		4.26	4260.00	2.5	4615.81	4620.00	4.19	4190.00	8.45	8450.00
30	30/01/24	4.5	2964.32	2968.49		4.17	4170.00	2.4	4620.00	4624.54	4.54	4540.00	8.71	8710.00
31	31/01/24	4.5	2968.49	2973.00		4.51	4510.00	2.5	4624.54	4629.00	4.46	4460.00	8.97	8970.00
Total Water Consumption (Jan_2024)							129.00		129000.00		133.00	133000.00	262.00	262000.00



यराबाबु पी. / VARABABU P.
 डन पावरप्लांट (पी. एन्ड एन.) / DOM(P&N)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी शक्ति कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & ltr (From 01.02.24 to 29.02.24)

Sl No	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Total Consumption in m3/day (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/02/24	4.1	2964.32	2968.41	4.09	4090.00	2.6	4620.00	4624.37	4.37	4370.00	8.46	8460.00
2	02/02/24	4.2	2968.41	2972.51	4.10	4100.00	2.8	4624.37	4628.84	4.47	4470.00	8.57	8570.00
3	03/02/24	4.1	2972.51	2976.55	4.04	4040.00	2.9	4628.84	4633.00	4.16	4160.00	8.20	8200.00
4	04/02/24	4.4	2976.55	2980.91	4.36	4360.00	2.5	4633.00	4637.64	4.64	4640.00	9.00	9000.00
5	05/02/24	4.2	2980.91	2985.00	4.09	4090.00	2.8	4637.64	4642.25	4.61	4610.00	8.70	8700.00
6	06/02/24	4.2	2985.00	2989.44	4.44	4440.00	2.8	4642.25	4646.27	4.02	4020.00	8.46	8460.00
7	07/02/24	4.1	2989.44	2994.11	4.67	4670.00	2.7	4646.27	4650.37	4.10	4100.00	8.77	8770.00
8	08/02/24	4.9	2994.11	2998.37	4.26	4260.00	2.6	4650.37	4654.73	4.36	4360.00	8.62	8620.00
9	09/02/24	4.5	2998.37	3002.39	4.02	4020.00	2.8	4654.73	4659.00	4.27	4270.00	8.29	8290.00
10	10/02/24	4.2	3002.39	3007.11	4.72	4720.00	2.6	4659.00	4663.38	4.38	4380.00	9.10	9100.00
11	11/02/24	4.4	3007.11	3011.84	4.73	4730.00	2.8	4663.38	4667.39	4.01	4010.00	8.74	8740.00
12	12/02/24	4.1	3011.84	3015.54	3.70	3700.00	2.6	4667.39	4672.00	4.61	4610.00	8.31	8310.00
13	13/02/24	4.2	3015.54	3020.00	4.46	4460.00	2.8	4672.00	4676.47	4.47	4470.00	8.93	8930.00
14	14/02/24	4.6	3020.00	3024.37	4.37	4370.00	2.9	4676.47	4681.11	4.64	4640.00	9.01	9010.00
15	15/02/24	5.6	3024.37	3028.58	4.21	4210.00	2.8	4681.11	4685.29	4.18	4180.00	8.39	8390.00
16	16/02/24	4.2	3028.58	3033.00	4.42	4420.00	2.8	4685.29	4690.00	4.71	4710.00	9.13	9130.00
17	17/02/24	4.1	3033.00	3037.49	4.49	4490.00	2.6	4690.00	4694.72	4.72	4720.00	9.21	9210.00
18	18/02/24	4.1	3037.49	3042.11	4.62	4620.00	2.8	4694.72	4699.00	4.28	4280.00	8.90	8900.00
19	19/02/24	4.3	3042.11	3046.00	3.89	3890.00	2.6	4699.00	4703.67	4.67	4670.00	8.56	8560.00
20	20/02/24	4.4	3046.00	3050.34	4.34	4340.00	2.8	4703.67	4708.00	4.33	4330.00	8.67	8670.00
21	21/02/24	4.4	3050.34	3054.73	4.39	4390.00	2.9	4708.00	4711.34	3.34	3340.00	7.73	7730.00
22	22/02/24	4.2	3054.73	3059.00	4.27	4270.00	2.8	4711.34	4715.73	4.39	4390.00	8.66	8660.00
23	23/02/24	4.1	3059.00	3063.11	4.11	4110.00	2.2	4715.73	4719.59	3.86	3860.00	7.97	7970.00
24	24/02/24	4.6	3063.11	3067.09	3.98	3980.00	2.5	4719.59	4724.00	4.41	4410.00	8.39	8390.00
25	25/02/24	5.6	3067.09	3071.34	4.25	4250.00	2.6	4724.00	4728.52	4.52	4520.00	8.77	8770.00
26	26/02/24	4.2	3071.34	3075.00	3.66	3660.00	2.4	4728.52	4733.11	4.59	4590.00	8.25	8250.00
27	27/02/24	4.1	3075.00	3079.34	4.34	4340.00	2.5	4733.11	4737.00	3.89	3890.00	8.23	8230.00

28	28/02/24	4.1	3079.34	3083.11	3.77	3770.00	2.8	4737.00	4741.09	4.09	4090.00	7.86	7860.00
29	29/02/24	4.3	3083.11	3087.00	3.89	3890.00	2.5	4741.09	4745.00	3.91	3910.00	7.80	7800.00
Total Water Consumption (Feb_2024)			122.68	122680.00						125.00	125000.00	247.68	247680.00

(Signature)

वराबाबू पी. / VARABABU P.
 डन पावरवर्क (पी. एच. एस.) / DDM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 चंडी बरिवाबु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

वराबाबु पी. / VARABABU P.

भवन प्रशासक (पी. एच. एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकाबु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT, NTPC

Ground Water Consumption Details in Cubic Meter & Ltr (From 01.03.24 to 31.03.24)

Sl No	Date	CBCMPL Office (B.W. No-01)					NTPC Camp (B.W. No-02)					CBCMPL+NTPC Camp	
		Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Flow Rate m3/hr	Initial Reading (in m3)	Final Reading (in m3)	Water Consumption (in m3/day)	Water Consumption (in ltr/day)	Total Consumption in m3/day (CBCMPL+NTPC Camp)	Total Consumption in ltr/day (CBCMPL+NTPC Camp)
1	01/03/24	4.1	3087.00	3091.21	4.21	4210.00	2.6	4745.00	4749.11	4.11	4110.00	8.32	8320.00
2	02/03/24	4.2	3091.21	3095.37	4.16	4160.00	2.8	4749.11	4753.27	4.16	4160.00	8.32	8320.00
3	03/03/24	4.1	3095.37	3100.00	4.63	4630.00	2.9	4753.27	4757.38	4.11	4110.00	8.74	8740.00
4	04/03/24	4.4	3100.00	3104.45	4.45	4450.00	2.5	4757.38	4761.81	4.43	4430.00	8.88	8880.00
5	05/03/24	4.2	3104.45	3108.21	3.76	3760.00	2.8	4761.81	4766.37	4.56	4560.00	8.32	8320.00
6	06/03/24	4.2	3108.21	3112.71	4.50	4500.00	2.8	4766.37	4770.51	4.14	4140.00	8.64	8640.00
7	07/03/24	4.1	3112.71	3116.97	4.26	4260.00	2.7	4770.51	4775.01	4.50	4500.00	8.76	8760.00
8	08/03/24	4.9	3116.97	3120.82	3.85	3850.00	2.6	4775.01	4779.00	3.99	3990.00	7.84	7840.00
9	09/03/24	4.5	3120.82	3124.51	3.69	3690.00	2.8	4779.00	4783.49	4.49	4490.00	8.18	8180.00
10	10/03/24	4.2	3124.51	3128.00	3.49	3490.00	2.6	4783.49	4788.00	4.51	4510.00	8.00	8000.00
11	11/03/24	4.4	3128.00	3132.09	4.09	4090.00	2.8	4788.00	4792.27	4.27	4270.00	8.36	8360.00
12	12/03/24	4.1	3132.09	3136.48	4.39	4390.00	2.6	4792.27	4796.51	4.24	4240.00	8.63	8630.00
13	13/03/24	4.2	3136.48	3140.29	3.81	3810.00	2.8	4796.51	4800.61	4.10	4100.00	7.91	7910.00
14	14/03/24	4.6	3140.29	3144.81	4.52	4520.00	2.9	4800.61	4804.89	4.28	4280.00	8.80	8800.00
15	15/03/24	5.6	3144.81	3149.00	4.19	4190.00	2.8	4804.89	4809.00	4.11	4110.00	8.30	8300.00
16	16/03/24	4.2	3149.00	3153.12	4.12	4120.00	2.8	4809.00	4813.42	4.42	4420.00	8.54	8540.00
17	17/03/24	4.1	3153.12	3157.45	4.33	4330.00	2.6	4813.42	4818.04	4.62	4620.00	8.95	8950.00
18	18/03/24	4.1	3157.45	3161.37	3.92	3920.00	2.8	4818.04	4822.34	4.30	4300.00	8.22	8220.00
19	19/03/24	4.3	3161.37	3165.00	3.63	3630.00	2.6	4822.34	4826.51	4.17	4170.00	7.80	7800.00
20	20/03/24	4.4	3165.00	3169.18	4.18	4180.00	2.8	4826.51	4831.00	4.49	4490.00	8.67	8670.00
21	21/03/24	4.4	3169.18	3173.48	4.30	4300.00	2.9	4831.00	4835.19	4.19	4190.00	8.49	8490.00
22	22/03/24	4.2	3173.48	3178.00	4.52	4520.00	2.8	4835.19	4839.81	4.62	4620.00	9.14	9140.00
23	23/03/24	4.1	3178.00	3182.11	4.11	4110.00	2.2	4839.81	4844.00	4.19	4190.00	8.30	8300.00
24	24/03/24	4.6	3182.11	3186.43	4.32	4320.00	2.5	4844.00	4848.41	4.41	4410.00	8.73	8730.00
25	25/03/24	5.6	3186.43	3190.54	4.11	4110.00	2.6	4848.41	4853.00	4.59	4590.00	8.70	8700.00
26	26/03/24	4.2	3190.54	3195.00	4.46	4460.00	2.4	4853.00	4857.11	4.11	4110.00	8.57	8570.00
27	27/03/24	4.1	3195.00	3199.08	4.08	4080.00	2.5	4857.11	4861.52	4.41	4410.00	8.49	8490.00

28	28/03/24	4.1	3199.08	3203.47	4.39	4390.00	2.8	4861.52	4866.00	4.48	4480.00	8.87	8870.00
29	29/03/24	4.3	3203.47	3207.48	4.01	4010.00	2.5	4866.00	4870.00	4.00	4000.00	8.01	8010.00
30	30/03/24	4.5	3207.48	3211.71	4.23	4230.00	2.2	4870.00	4874.37	4.37	4370.00	8.60	8600.00
31	31/03/24	4.7	3211.71	3216.00	4.29	4290.00	1.9	4874.37	4878.49	4.12	4120.00	8.41	8410.00
Total Water Consumption (March_2024)					120.48	120480.00				125.00	125000.00	245.48	245480.00

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 बड़ी बरिकात कोवला खनन परिशेजना / CBCMP
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Mine Water Consumption (Dewatering)_CBCMP

Oct_2023

S.No	Date	Tanker_22 KL (in trip)	Water Consumption (in Ltr)	Tanker_12 KL (in trip)	Water Consumption (in Ltr)	Fire Tender_6 KL (in trip)	Water Consumption (in Ltr)	Total Water Consumption (in Ltr)	Total Water Consumption (in cum)
1	1 Oct 23	0	0	0	0	0	0	0	0
2	2 Oct 23	0	0	0	0	0	0	0	0
3	3 Oct 23	0	0	0	0	0	0	0	0
4	4 Oct 23	0	0	0	0	0	0	0	0
5	5 Oct 23	0	0	0	0	6	36000	36000	36
6	6 Oct 23	0	0	0	0	3	18000	18000	18
7	7 Oct 23	3	66000	0	0	8	48000	114000	114
8	8 Oct 23	2	44000	2	24000	4	24000	92000	92
9	9 Oct 23	4	88000	2	24000	11	66000	178000	178
10	10 Oct 23	10	220000	3	36000	12	72000	328000	328
11	11 Oct 23	16	352000	4	48000	15	90000	490000	490
12	12 Oct 23	14	308000	4	48000	20	120000	476000	476
13	13 Oct 23	12	264000	4	48000	15	90000	402000	402
14	14 Oct 23	18	396000	4	48000	19	114000	558000	558
15	15 Oct 23	15	330000	4	48000	18	108000	486000	486
16	16 Oct 23	18	396000	4	48000	15	90000	534000	534
17	17 Oct 23	12	264000	3	36000	12	72000	372000	372
18	18 Oct 23	13	286000	4	48000	13	78000	412000	412
19	19 Oct 23	15	330000	4	48000	6	36000	414000	414
20	20 Oct 23	19	418000	4	48000	15	90000	556000	556
21	21 Oct 23	18	396000	5	60000	11	66000	522000	522
22	22 Oct 23	10	220000	4	48000	9	54000	322000	322

23	23 Oct 23	9	198000	4	48000	9	54000	300000	300
24	24 Oct 23	10	220000	3	36000	8	48000	304000	304
25	25 Oct 23	15	330000	4	48000	8	48000	426000	426
26	26 Oct 23	16	352000	5	60000	9	54000	466000	466
27	27 Oct 23	16	352000	4	48000	12	72000	472000	472
28	28 Oct 23	17	374000	5	60000	13	78000	512000	512
29	29 Oct 23	16	352000	4	48000	10	60000	460000	460
30	30 Oct 23	14	308000	4	48000	6	36000	392000	392
31	31 Oct 23	16	352000	4	48000	7	42000	442000	442
		328	7216000	92	1104000	294	1764000	10084000	10084

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 जल प्रसारणकर्ता (सी. एन्ड एन.) / DOM(P&S)
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 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag

Mine Water Consumption (Dewatering)_CBCMP

Nov'23

S/No	Date	Tanker_22 KL (trip/day)	Water Consumption (in Ltr/day)	Tanker_12 KL (trip/day)	Water Consumption (in Ltr/day)	Fire Tender_6 KL (trip/day)	Water Consumption (in Ltr/day)	Total Water Consumption (in Ltr/day)	Total Water Consumption (in m3/day)
1	1 Nov 23	16	352000	4	48000	6	36000	436000	436
2	2 Nov 23	15	330000	4	48000	5	30000	408000	408
3	3 Nov 23	17	374000	3	36000	0	0	410000	410
4	4 Nov 23	17	374000	4	48000	4	24000	446000	446
5	5 Nov 23	18	396000	2	24000	10	60000	480000	480
6	6 Nov 23	17	374000	3	36000	10	60000	470000	470
7	7 Nov 23	13	286000	2	24000	5	30000	340000	340
8	8 Nov 23	16	352000	4	48000	6	36000	436000	436
9	9 Nov 23	10	220000	2	24000	5	30000	274000	274
10	10 Nov 23	11	242000	3	36000	7	42000	320000	320
11	11 Nov 23	8	176000	1	12000	6	36000	224000	224
12	12 Nov 23	14	308000	4	48000	7	42000	398000	398
13	13 Nov 23	13	286000	3	36000	1	6000	328000	328
14	14 Nov 23	14	308000	4	48000	2	12000	368000	368
15	15 Nov 23	10	220000	4	48000	1	6000	274000	274
16	16 Nov 23	11	242000	3	36000	2	12000	290000	290
17	17 Nov 23	13	286000	3	36000	3	18000	340000	340
18	18 Nov 23	12	264000	4	48000	1	6000	318000	318
19	19 Nov 23	14	308000	4	48000	1	6000	362000	362
20	20 Nov 23	12	264000	2	24000	0	0	288000	288
21	21 Nov 23	18	396000	3	36000	2	12000	444000	444
22	22 Nov 23	20	440000	5	60000	3	18000	518000	518

23	23 Nov 23	16	352000	6	72000	0	0	424000	424
24	24 Nov 23	14	308000	3	36000	0	0	344000	344
25	25 Nov 23	12	264000	4	48000	0	0	312000	312
26	26 Nov 23	14	308000	3	36000	3	18000	362000	362
27	27 Nov 23	14	308000	3	36000	0	0	344000	344
28	28 Nov 23	12	264000	3	36000	0	0	300000	300
29	29 Nov 23	14	308000	2	24000	0	0	332000	332
30	30 Nov 23	14	308000	3	36000	1	6000	350000	350
		419	9218000	98	1176000	91	546000	10940000	10940

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 राष्ट्रीय बरिदाबु कोयला खनन परिषद / CBCMP
 हजारीबाग / Hazaribag

Mine Water Consumption (Dewatering)_CBCMP NTPC Ltd

Dec'23

S.No	Date	Tanker_22 KL (trip/day)	Water Consumption (in Ltr/day)	Tanker_12 KL (trip/day)	Water Consumption (in Ltr/day)	Fire Tender_6 KL (trip/day)	Water Consumption (in Ltr/day)	Total Water Consumption (in Ltr/day)	Total Water Consumption (in m3/day)
1	1 Dec 23	10	220000	3	36000	0	0	256000	256
2	2 Dec 23	10	220000	2	24000	0	0	244000	244
3	3 Dec 23	12	264000	2	24000	0	0	288000	288
4	4 Dec 23	13	286000	3	36000	1	6000	328000	328
5	5 Dec 23	9	198000	2	24000	0	0	222000	222
6	6 Dec 23	0	0	0	0	0	0	0	0
7	7 Dec 23	0	0	0	0	0	0	0	0
8	8 Dec 23	0	0	0	0	0	0	0	0
9	9 Dec 23	2	44000	1	12000	1	6000	62000	62
10	10 Dec 23	10	220000	3	36000	2	12000	268000	268
11	11 Dec 23	10	220000	2	24000	0	0	244000	244
12	12 Dec 23	11	242000	2	24000	1	6000	272000	272
13	13 Dec 23	13	286000	3	36000	0	0	322000	322
14	14 Dec 23	11	242000	3	36000	0	0	278000	278
15	15 Dec 23	6	132000	2	24000	1	6000	162000	162
16	16 Dec 23	10	220000	2	24000	1	6000	250000	250
17	17 Dec 23	10	220000	4	48000	1	6000	274000	274
18	18 Dec 23	10	220000	4	48000	0	0	268000	268
19	19 Dec 23	6	132000	4	48000	0	0	180000	180
20	20 Dec 23	13	286000	2	24000	0	0	310000	310
21	21 Dec 23	10	220000	4	48000	0	0	268000	268
22	22 Dec 23	10	220000	2	24000	0	0	244000	244

23	23 Dec 23	12	264000	4	48000	0	0	312000	312
24	24 Dec 23	13	286000	2	24000	0	0	310000	310
25	25 Dec 23	13	286000	2	24000	0	0	310000	310
26	26 Dec 23	12	264000	4	48000	0	0	312000	312
27	27 Dec 23	15	330000	3	36000	1	6000	372000	372
28	28 Dec 23	14	308000	3	36000	0	0	344000	344
29	29 Dec 23	12	264000	3	36000	0	0	300000	300
30	30 Dec 23	14	308000	2	24000	0	0	332000	332
31	31 Dec 23	13	286000	1	12000	0	0	298000	298
		304	6688000	74	888000	9	54000	7630000	7630

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एन. एन. एन. (पी. एन. एन. एन.) / DOM(P&S)

एन.टी.पी.सी. लिमिटेड / NTPC Limited

बड़ी खरियाबु कोयला खनन परियोजना / CBCMP


हजारीबाग / Hazaribag

Mine Water Consumption (Dewatering)_CBCMP NTPC Ltd

Jan'24

Sl No	Date	Tanker_22 KL (trip/day)	Water Consumption (in Ltr/day)	Tanker_12 KL (trip/day)	Water Consumption (in Ltr/day)	Fire Tender_6 KL (trip/day)	Water Consumption (in Ltr/day)	Total Water Consumption (in Ltr/day)	Total Water Consumption (in m3/day)
1	1 Jan 24	0	0	0	0	0	0	0	0
2	2 Jan 24	10	220000	2	24000	0	0	244000	244
3	3 Jan 24	8	176000	2	24000	1	6000	206000	206
4	4 Jan 24	11	242000	2	24000	0	0	266000	266
5	5 Jan 24	16	352000	4	48000	0	0	400000	400
6	6 Jan 24	8	176000	3	36000	0	0	212000	212
7	7 Jan 24	4	88000	2	24000	0	0	112000	112
8	8 Jan 24	8	176000	3	36000	0	0	212000	212
9	9 Jan 24	6	132000	2	24000	0	0	156000	156
10	10 Jan 24	9	198000	4	48000	0	0	246000	246
11	11 Jan 24	10	220000	3	36000	0	0	256000	256
12	12 Jan 24	8	176000	2	24000	0	0	200000	200
13	13 Jan 24	14	308000	5	60000	0	0	368000	368
14	14 Jan 24	14	308000	4	48000	0	0	356000	356
15	15 Jan 24	14	308000	4	48000	2	12000	368000	368
16	16 Jan 24	15	330000	4	48000	5	30000	408000	408
17	17 Jan 24	14	308000	4	48000	6	36000	392000	392
18	18 Jan 24	3	66000	2	24000	7	42000	132000	132
19	19 Jan 24	4	88000	2	24000	6	36000	148000	148
20	20 Jan 24	12	264000	8	96000	23	138000	498000	498
21	21 Jan 24	10	220000	6	72000	34	204000	496000	496
22	22 Jan 24	9	198000	7	84000	34	204000	486000	486

23	23 Jan 24	9	198000	6	72000	29	174000	444000	444
24	24 Jan 24	10	220000	12	144000	23	138000	502000	502
25	25 Jan 24	9	198000	14	168000	17	102000	468000	468
26	26 Jan 24	9	198000	12	144000	15	90000	432000	432
27	27 Jan 24	7	154000	12	144000	18	108000	406000	406
28	28 Jan 24	8	176000	12	144000	14	84000	404000	404
29	29 Jan 24	9	198000	10	120000	16	96000	414000	414
30	30 Jan 24	12	264000	12	144000	20	120000	528000	528
31	31 Jan 24	14	308000	8	96000	16	96000	500000	500
		294	6468000	173	2076000	286	1716000	10260000	10260


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 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
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Mine Water Consumption (Dewatering)_CBCMP NTPC Ltd


Feb'24

Date	Tanker_22 KL (trip/day)	Water Consumption (in Ltr/day)	Tanker_12 KL (trip/day)	Water Consumption (in Ltr/day)	Fire Tender_6 KL (trip/day)	Water Consumption (in Ltr/day)	Total Water Consumption (in Ltr/day)	Total Water Consumption (in m3/day)
1 Feb 24	18	396000	4	48000	26	156000	600000	600
2 Feb 24	16	352000	7	84000	30	180000	616000	616
3 Feb 24	16	352000	12	144000	16	96000	592000	592
4 Feb 24	10	220000	14	168000	16	96000	484000	484
5 Feb 24	6	132000	5	60000	8	48000	240000	240
6 Feb 24	12	264000	6	72000	14	84000	420000	420
7 Feb 24	11	242000	12	144000	14	84000	470000	470
8 Feb 24	9	198000	10	120000	4	24000	342000	342
9 Feb 24	8	176000	8	96000	4	24000	296000	296
10 Feb 24	12	264000	10	120000	2	12000	396000	396
11 Feb 24	12	264000	8	96000	8	48000	408000	408
12 Feb 24	13	286000	8	96000	8	48000	430000	430
13 Feb 24	0	0	0	0	0	0	0	0
14 Feb 24	2	44000	0	0	4	24000	68000	68
15 Feb 24	0	0	0	0	0	0	0	0
16 Feb 24	3	66000	2	24000	4	24000	114000	114
17 Feb 24	2	44000	0	0	0	0	44000	44
18 Feb 24	7	154000	8	96000	0	0	250000	250
19 Feb 24	10	220000	9	108000	0	0	328000	328
20 Feb 24	10	220000	5	60000	8	48000	328000	328
21 Feb 24	12	264000	12	144000	3	18000	426000	426
22 Feb 24	15	330000	10	120000	0	0	450000	450

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अन परामर्शक (पी. एच. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकात कोयला खनन परियोजना / CBCMP
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23	23 Feb 24	14	308000	9	108000	2	12000	428000	428
24	24 Feb 24	12	264000	10	120000	0	0	384000	384
25	25 Feb 24	3	66000	7	84000	0	0	150000	150
26	26 Feb 24	10	220000	8	96000	0	0	316000	316
27	27 Feb 24	14	308000	10	120000	0	0	428000	428
28	28 Feb 24	6	132000	5	60000	0	0	192000	192
29	29 Feb 24	12	264000	8	96000	0	0	360000	360
		275	6050000	207	2484000	171	1026000	9560000	9560



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 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
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Mine Water Consumption (Dewatering)_CBCMP NTPC Ltd

March'24

S.No	Date	Tanker_22 KL (trip/day)	Water Consumption (in Ltr/day)	Tanker_12 KL (trip/day)	Water Consumption (in Ltr/day)	Fire Tender_6 KL (trip/day)	Water Consumption (in Ltr/day)	Total Water Consumption (in Ltr/day)	Total Water Consumption (in m3/day)
1	1 Mar 24	9	198000	4	48000	0	0	246000	246
2	2 Mar 24	10	220000	3	36000	0	0	256000	256
3	3 Mar 24	14	308000	6	72000	0	0	380000	380
4	4 Mar 24	13	286000	6	72000	0	0	358000	358
5	5 Mar 24	18	396000	6	72000	0	0	468000	468
6	6 Mar 24	4	88000	2	24000	0	0	112000	112
7	7 Mar 24	11	242000	2	24000	0	0	266000	266
8	8 Mar 24	15	330000	8	96000	0	0	426000	426
9	9 Mar 24	16	352000	7	84000	0	0	436000	436
10	10 Mar 24	14	308000	6	72000	0	0	380000	380
11	11 Mar 24	18	396000	5	60000	1	6000	462000	462
12	12 Mar 24	20	440000	4	48000	0	0	488000	488
13	13 Mar 24	10	220000	2	24000	0	0	244000	244
14	14 Mar 24	12	264000	4	48000	3	18000	330000	330
15	15 Mar 24	14	308000	5	60000	1	6000	374000	374
16	16 Mar 24	16	352000	6	72000	0	0	424000	424
17	17 Mar 24	15	330000	2	24000	0	0	354000	354
18	18 Mar 24	18	396000	8	96000	0	0	492000	492
19	19 Mar 24	19	418000	4	48000	0	0	466000	466
20	20 Mar 24	20	440000	10	120000	0	0	560000	560
21	21 Mar 24	11	242000	4	48000	0	0	290000	290
22	22 Mar 24	10	220000	2	24000	0	0	244000	244

23	23 Mar 24	14	308000	6	72000	0	0	380000	380
24	24 Mar 24	18	396000	6	72000	0	0	468000	468
25	25 Mar 24	15	330000	5	60000	2	12000	402000	402
26	26 Mar 24	0	0	0	0	0	0	0	0
27	27 Mar 24	20	440000	7	84000	1	6000	530000	530
28	28 Mar 24	22	484000	6	72000	1	6000	562000	562
29	29 Mar 24	20	440000	6	72000	3	18000	530000	530
30	30 Mar 24	18	396000	6	72000	0	0	468000	468
31	31 Mar 24	12	264000	4	48000	3	18000	330000	330
		446	9812000	152	1824000	15	90000	11726000	11726


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 डन पावर प्रोजेक्ट (पी. एण्ड एन.) / DDM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag



Registered Office :

Plot No. 37 & 39, Navodaya Colony,
Road No. 2, Banjara Hills,
Hyderabad - 500 034. (T.S.) India.
Phone : +91 - 40 - 4911 33 33/34
E-mail : rplhyd@rithwikprojects.com
Website : www.rithwikprojects.com
CIN : U45200TG1999PTC031431

PURCHASE ORDER					
To	M/s . KATOCH ENVIROTECH Sihol, Boda, Palampur, Kangra, Himachal Pradesh, 176083 Contact person : - Mr. Lovely Katoch -9857174476 mail id: katochenvirotech55@gmail.com, vishalrana.ud@gmail.com GST NO: 02HIOP55863M1ZB	ENQ NO:	BY MAIL		
		Purchase Order No:	RPPL/PO/CBCMPL/23-24/0129		
		Purchase Order Date:	21.03.2024		
		Site:	CHATTI BARIATU COAL MINING SITE		
		Indent No:			
		Indent Date:			
		Quote No:	Quote on 20.03.2024		
		QUOT DT:			
With reference to the above and further to our discussions, We are pleased to place our Order for Supply of EFFLUENT WATER TREATMENT SYSTEM ETP of Capacity 50 m ³ per day based on MBBR Technology subject to following terms & conditions:					
S.No	ITEM DESCRIPTION	UOM	QTY	RATE (Rs)	AMOUNT (Rs)
1	Supply and installation of EFFLUENT WATER TREATMENT SYSTEM ETP(50 KLD ETP) of Capacity 50 m ³ per day based on MBBR Technology, Technical specifications as per Annexures.	Set	1	5,70,000	5,70,000
	Total				5,70,000.00
	Add: GST @ 18%				1,02,600.00
	Sub Total				6,72,600.00
GRAND TOTAL (R/O)					6,72,600
AMOUNT IN WORDS:		Rupees Six Lakh Seventy Two Thousand Six Hundred only			
1	PRICE BASIS:	Ex Works			
2	TAXES	GST @ 18% as shown above			
3	FREIGHT CHARGES:	Extra to M/s. RPPL A/c			
4	DELIVERY SCHEDULE:	Supply will be within 2-3 weeks from the receipt of PO, with Advance and 2 weeks for installation.			
5	PAYMENT TERMS:	50% Advance on basic value along with purchase order, 25% with full GST against delivery of materials at our site, balance 25% after installation and commissioning.			
6	Contact person:	Mr. Bhaskar-9704902815/Mr.Shyam -9939660507/Mr. Siva Kumar-63000158360			
7	FOC	Chemicals will be supplied by you for 12 Months on free of cost.			
8	Warranty	Warranty terms as per Annexure			
9	BILLING ADDRESS:	RITHWIK PROJECTS PVT.LTD., Opp. Kargil Petrol Pump, 402S, Sai Vision Green, Cemetery Road , Ranchi-patna road, Sadar Hazaribag, Hazaribagh, Jharkhand - 825301, GST : 20AABCR5748L1Z4			
10	MATERIAL REJECTION/ REPLACEMENT:	THE VENDOR IS SOLELY RESPONSIBLE FOR MATERIAL PARAMETER/SPECIFICATIONS. IF MATERIAL IS NOT AS PER SPECIFICATION, SAME WILL BE REJECTED AND THE ENTIRE MATERIAL HAS TO BE REPLACED AT YOUR OWN COST.			
The duplicate copy of this Purchase order should be signed by you with seal in token of your acceptance. Mere acknowledgement of goods received shall not be construed 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: Sai Kumar Gobivada Date : 21.03.2024		Yours faithfully, For RITHWIK PROJECTS-PVT. LTD.			
We do hereby agree to the terms and condition on this Purchase Order		Authorized Signatory			
Copy to: Site Accounts/HO		Accepted By M/s . KATOCH ENVIROTECH			

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ANNEXURE - I	
RPPL/PO/23-24/0129, Dtd: 21.03.2024	
TERMS & CONDITIONS:	
1	Respective types of taxes i.e., CGST & SGST / IGST shall be mentioned in your invoice.
2	You should not charge composition rate of GST. In case of such issue, you should inform us before accepting this PO.
3	You are cautioned to charge correct tax depends upon the place of supply. We should not be held responsible for any such wrong charging of tax and in turn our avilment of ITC, if affected, you shall be held responsible to make good loss to us in all aspects.
4	Any discounts offered by you should be mentioned in your invoice and GST shall be charged on the net value.
5	In case if we or the Standing Committee suto moto found later that input tax credit benefit has not been passed to us by way of reduction in price, we reserve every right to approach the Standing Committee as an interested party under rule 128 of CGST Rules, 2017 as per the provisions applicable to Anti-profiteering.
6	If any advance amounts are paid against the PO, same shall be shown in your invoice by duly deducting from the total bill amount.
7	Credit to the Government as per statutory time is mandatory. If there is any delay in credit to the department and disallowance of input credit due to delay, the relevant cost by way interest and penalty to your account.

Dao



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ANNEXURE -II

DESIGN BASIS :

Technology Applied : MBBR
Designed Flow Rate : 50 m ³ /day
Operation hours: 24 hr./d
Average Flow rate: 2.083 KL PER HOUR

The system will be based on ETP water characteristics as under:

Parameters	Inlet	Outlet After ACF
Flow Rate	50 KLD	-
pH	6.5-8.5	6.5 - 8.0
BOD	350 - 400 ppm	< 20 ppm
COD	600 - 700 ppm	< 50 ppm
Suspended solids	250 ppm	< 50 ppm
Oil & grease	50 ppm	Nil

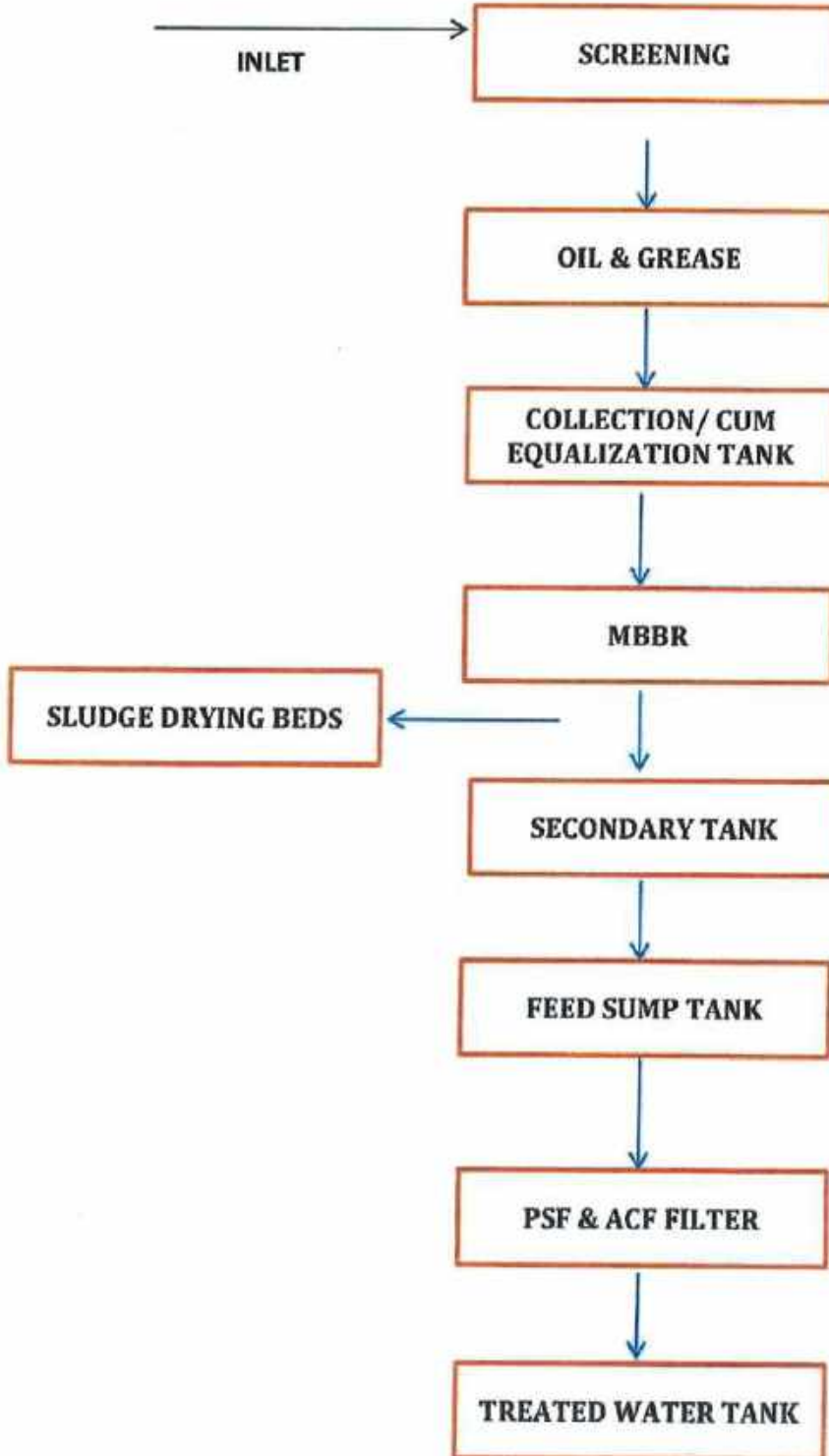
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PROCESS BLOCK DIAGRAM




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OPERATION PRINCIPLE :

Primary screening:

The plant is designed for receiving raw sewage and settling / screening of the heavy floating particles. There will be a primary bar screen chamber to screen the foreign particles followed by oil trap to trap the oil contents therein.

Treatment

Collection & Transfer:

Primarily sewage will be collected in a collection tank which will be equalized. Our scope starts with transfer of sewage mbbf unit. Equalization tank will be fitted with aeration grid to homogenizing the sewage and also to keep it equalized during storage. This sewage is then transferred to the MBBF tank by sewage transfer pump. The sewage transfer pump will be mud type with suitable particle handling capacity.

MBBF REACTORS: The sewage from sump will then constantly pumped into ETP by an employing lift pumps at a constant low rate. STP is of modular construction

Comprises of bar screen, collection tank, Primary Tube Settler, Aeration section, Sedimentation Section (Tube Settler), Treated Effluent Holding/Transfer Chamber and Chlorination. The treatment occurs in various aerobic chambers provided in the system. The system will have the flexibility of varying the sequence of aerobic chambers depending upon flow rates. In aerobic chambers, thousands of MBBF media is fed, upon which the bio mass grow. The attached growth ensures that water is treated to the highest possible biological standards that are generally not possible with alternative systems.

SETTLING SECTION: The sedimentation tank/tube settler, which is designed on low over flow rate is provided after the aeration tank to enable separation of solids. A steep slope is provided in the settling tank to eliminate the need of scrapper mechanism. The settled sludge being collected in the bottom of tube settler is partially re-circulated back to Aeration Tank to give a constant feed to the bacteria & balance is taken to the sludge drying beds to dry & disposed of.

Sodium Hypochlorite Dosing System model CDS 1:

Dosing of Sodium hypochlorite helps in disinfecting the water and making it suitable and safe for garden. The chemical is dosed by means of an electronic dosing pump wherein a facility is available for manual control stroke length and stroke frequency.

Pressure Sand Filter (PSF):

The clarified water will then be pumped from surge tank to Pressure filter to reduce suspended load and turbidity.

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Activated Carbon Filter (ACF):

The pre filtered water is then passed through activated carbon column of specific grade to reduce BOD, colours, odour and fine particles. It finally polishes the treated water and also reduces the residual chlorine. The wastewater so treated can be utilized for gardening or for flushing and recycling. The backwash from the PSF and ACF units will be fed back into the collection tank.

Electrical:

The system will have an automated PLC and reliable control of various stages of the process. It is the programmable logic controller (PLC) technology, connected with MCC/ Electrical panel installed in for central control of all electrical rotary. All the cabling will be complete with cable tray. The MCC will have Auto manual option for easy operation. It contains all the electrical controls and is to IP 55 standards.

EQUIPMENT DETAILS-EWALT SCOPE:**Raw effluent lifting pump**

Pump Type	: Raw Lifting pump
Make	: Lubi/Kirlosker/Equiv.
Drive	: 1 HP
No. of Feed Pump	: 2 No

Bar Screen for Effluent Line

Type	: Bar Screen-Manual
Make	: Katoch Envirotech
Size	: As per drawing
MOC	: MSEP
Quantity	: 1 (W)

Air Blower

Blower Make	: Shanti/Akash/Yash
Gear Oil & Grease	: Pre Filled
Motor HP	: 2
MOC	: CI
Accessories	: Complete with standard accessories
Quantity	: 2 No's (1W+1S)

Sludge Transfer Pump

Make	: Lubi/Kirlosker /Equiv.
Drive	: 1 HP
MOC	: CI
No. of Feed Pump	: 1 Nos



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Air Diffusers Purging Grid

Type	: Fine Bubble
Make	: Prince/Astra.
MOC	: Tube Type UPVC
Quantity	: 1 Lot

Chemical Dozer for Disinfection

Dosing Rate	: Varied
Dosing pump Capacity	: 6-10 lph
Make	: E-Dose/Equiv.
No. of D. Pump	: 3 No

Filter Feed Pump

Type	: Centrifugal, monoblock Pump
Make	: Lubi/ Kirlosker /Equiv.
Drive	: 2 HP
MOC	: CI
No. of Feed Pump	: 2 Nos (1W+1S)

Pressure Sand Filter (PSF)

Type	: Vertical pressurized vessel
Size	: 18X72
Filter Vessel MOC	: FRP
Multiport valve	: Inbuilt
Make	: Pentair/Equiv.
Filter Media	: Fine Sand, pebbles and gravels
Quantity	: 1 Nos.

Activated Carbon Filter (ACF)

Type	: Vertical pressurized vessel
Size	: 18X72
Filter Vessel MOC	: FRP
Multiport valve	: Inbuilt
Make	: Pentair/Equiv.
Filter Media	: Pebbles, Gravels & Carbon
Quantity	: 1 Nos.

Internal Piping & valves for ETP unit

MOC	: Jindal class B
Make	: Jindal
Fitting	: Ball valve, Tees, Unions, MTA, FTA, etc.
Fitting MOC	: MS Standard
Quantity	: Complete Job



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Electrical Control Panel with PLC

Type : IP-55
Panel Make : Katoch Envirotech
MCB/Relay/connectors : Eton/Schneider/Equiv
Quantity of panel : 1 No
Mode : Manual

Electrical Cabling

Type : Flexible, copper
Size : Suitable
Make : Havells /Finolex/Polycab /Equiv
Limit : Panel to drive within battery limit
Quantity : 1 Lot Complete

Water Flow Meter

Type : Direct Dial analog
Class : B
Make : Kranti/prince/Equiv.
Quantity : 1 No.

The Fresh water line is required for backwash of filtration unit to be provided by RPPL in ETP area.

Details of Civil Work – RPPL Scope:

Sr. No.	Name of the Unit	Quantity	Material of Construction	Size M x M x M (LWD) Effective
1.	Collection Tank	1 no.	RCC	As per Drawing
2.	Screen / O>Chamber	1no.	RCC	As per drawing
3.	Treated Water Tank	1 No.	RCC	As per drawing
4.	Foundation for plant	Various	RCC	As per drawing
5.	3 phase electricity line with neutral up to our control panel & earthing, earthing pits.	As per Requirement		



(Signature)

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6.	Fresh water Line connect to various points of STP & Filter Pump	As per Requirement		
7.	Overhead shed for STP unit or individual covering of all components and side covering.	If ETP is in open: Shed should be provided in the area, where the supplied unit has to be stored. This shed shall protect the unit against direct sunlight, harsh wind conditions and direct rainfall [which may damage the electrical / electronic sub- s of the supplied unit]		
8.	Sludge Drying Bed & Media		Brick	As per drawing

Scope of Supplier (Kotach Envirotech)

1. Designing of Sewage treatment plant.
2. G.A, P & ID, plan and section drawings for construction purpose.
3. Training of STP operator during installation & commissioning.
4. Operation manual for sewage Treatment Plant.
5. Installation & commissioning certificate.
6. Chemical MSDS (Material safety data sheet).
7. One Year free required chemicals will be provided.

RPPL SCOPE:

1. Electric backup with DG for STP to ensure permanent electricity for trouble-free operation.



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2. All kind of civil work, foundations, puddle flanges, man hole covers etc.
3. Transportation, unloading, lowering & placement of equipment in ETP area.
4. All kinds of chemicals, consumables after commissioning as required.
5. Water analysis from PCB authorized lab as required.
6. Provision for men power & material at site.
7. 2 no permanent ETP operator for un-interrupted operations.
8. Provision of sanitation facility for service engineers.
9. Provision of sludge yard and disposal of sludge.
10. Disposal of treated water.
11. Site Security, illumination/ firefighting system if any.
12. Any plumbing is in our scope during dismantling or erection.

WARRANTY

Warrants its product to be free from defect in material and workmanship upon leaving its factory. The obligation shall be limited to repair or replacement and in no event shall the liability exceed said parts repair or replacement for the period here of:


Non-Consumable Parts:

For a period not to exceed 12 months from the date of dispatch of machine. The warranty does not cover the damage caused by:

- Improper Electrical supply.
- Non-qualified personnel loading or unloading, moving or installing the equipment.
- Fire, explosion food or similar perils.
- Unauthorized modifications or alterations of the equipment.
- Improper or inadequate maintenance.

For RITHWIK PROJECTS PVT. LTD.




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Photographs of Plantation in township by NTPC



● ○ REDMI NOTE 8 PRO
● ○ PIC BY UPENDRA



● ○ REDMI NOTE 8 PRO
● ○ PIC BY UPENDRA

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Photographs of Plantation in R&R colony by NTPC



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Photographs of Plantation in Safety Zone of CBCMP



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हजारिबाग / Hazaribag

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 Vasantryao

<PAVANKHANDWE@NTPC.CO.IN>; Birendra Kumar <BIRENDRAKUMAR01@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](#)

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e-mail
05-08-2023
H. Bhan



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 Hazaribagh 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, Hazaribagh (RCCF, Hazaribagh) 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, Hazaribagh, 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, Hazaribagh, DFO, Hazaribagh 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, Hazaribagh 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:

(Signature)

Office of the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, Jharkhand

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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
	Total:-	3854.34
	Cost Escalation @20%	770.87
	Grand Total:-	4625.21

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:

- 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.
- 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.



Disputes/Chattibanyktu Coal Mining NTPC

Page 2 of 4

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जन सहकारिता (पी. एन. एस.) / JSCMP
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियारु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

- (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.

Varababu P.

वराबाबू पी. / VARABABU P.

अन्य परामर्शदाता (सी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिबान्ग कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

D:\pandey\Chattishgarh\xtu Coal Mining NTPC

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

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), Chattibariatu 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: 44-43

दिनांक: 10/8/23

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

प्रेषित।

वन प्रमंडल पदाधिकारी,
हजारीबाग पश्चिमी प्रमंडल

D:\pandey\Chattibariatu Coal Mining NTPC

वराबाबू पी. / VARABABU P.

वन प्रमंडल पदाधिकारी (पी. एन्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकाण कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

011



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

NTPC Limited

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

Ref No. / सन्दर्भ 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 : **CMS1871699484**.

हमें आपको यह सूचित करने में बसबसता हो रही है कि कंपनी ने निम्नलिखित विवरण के अनुसार राशि को सीधे आपके बैंक **CORPORATION BANK, LODHI COMPLEX BRANCH** खाता संख्या **150725890400696** पर जमा करने की व्यवस्था की है।

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 राशि-इलेक्ट्रॉनिक क्लियरिंग सेवा (ईसीएस) के माध्यम से आपके बैंक खाते में जमा की गई है और इसलिये, 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 इंजिनीयर इन चार्ज / स्टोर विभाग से उपरोक्त संदर्भ संख्या के साथ संपर्क करें।

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

वराबाबु पी. / VARABABU P.

अन मरिचक (पी. एच. एस.) / DOM(PAS)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोवला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag



NTPC Limited

Chatti-Bariatu Coal Mining Project
Sikri Site Office, P.O. Barkagaon
Hazariabag - 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

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

To / सेवा में,

Date / दिनांक: 25.11.2023

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 :

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
Total Amount Paid				217,858,322.00

Amount (in words) / राशि :

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

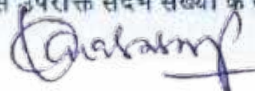
The amount has been credited to your bank account as indicated above through Electronic Clearing Service (ECS) and therefore, no service charge is deductible by your bank.

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.


वराबाबु पी. / VARABABU P.
जन महासंयोजक (पी. एन्ड एच.) / JOM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazariabag

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



वराबाबू पी. / VARABABU P.

जन महासंस्था (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाना कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

TELEMETRY PIEZOMETER DATA (In Meter) FROM OCT 2023 to MARCH 2024 CHATTI BARIATU COAL MINING PROJECT						
Date	Oct_2023	Nov_2023	Dec_2023	Jan_2024	Feb_2024	March_2024
1	17.65	19.55	21.63	DWLR under servicing	DWLR under servicing	24.71
2	17.37	19.62	21.74			24.57
3	17.30	19.73	21.77			24.18
4	17.66	19.90	21.81			24.73
5	17.19	20.16	21.85			24.49
6	16.75	20.22	21.43			23.5
7	16.36	20.32	20.95			23.64
8	16.12	20.30	20.66			23.29
9	16.51	20.44	20.68			22.94
10	16.83	20.29	20.7			22.59
11	17.14	20.15	20.67			22.39
12	17.37	20.48	20.33			22.19
13	17.54	20.50	20.31			22.09
14	17.78	20.53	20.29			22.01
15	17.74	20.44	20.45			21.92
16	17.68	20.69	20.49			21.93
17	17.97	20.81	20.51			21.9
18	17.75	20.86	20.73			21.84
19	18.07	20.88	20.91			21.8
20	18.28	20.79	Network Issue			21.73
21	18.79	20.95				21.73
22	18.53	20.92				21.79
23	18.28	21.02				21.76
24	17.96	20.93				21.8
25	18.01	Network Issue				21.79
26	18.43					21.71
27	18.78	21.36	21.05			21.65
28	19.07	Network Issue	21.11			21.63
29	19.03		21.29		24.79	21.6
30	19.33		21.39			21.6
31	19.42				21.41	

वराबाबू पी. / VARABABU P.
 जून महासंचालक (पी. एण्ड एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 चट्टी बरियातु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag




Let's start thinking about nature for tomorrow

Unique Lab Report No. (ULR No.)		TEST REPORT	
Chhatti Bariatu Coal Mining Project, NTPC Ltd.		Discipline	Chemical
At- Chhatti Bariatu, Jorag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand		Group	Water & Residues in Water
14.10.2023		Particular of the Plant	Coal Mines
14.10.2023		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Water		Sample Collected by	Ranjeet Yadav & Team
Ground Water		Sampling Plan	SCECPL/SOP/WA/01
SCECPL/TR/23/321/WT-190/01-05		Sample Condition	Sealed & Preserved
14.10.2023 to 18.10.2023		Sampling Method	IS 17614 (Part 1): 2021
Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar, Relative Humidity : 61%, Weather Condition - Clear		Sample Drawn By	Sabz Care Lab
Period of Analysis		Report Release Date	19.10.2023
Meteorological Information		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: Chhatti 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	

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	7.60	7.05	7.07	6.77	7.67	6.5 to 8.5	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	1812	1132	1284	604	728	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.7	0.2	0.9	1.3	4.8	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	1014.0	645.0	744.0	370.0	422.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	369.34	180.54	87.32	50.74	146.32	200	600
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	186.3	178.3	188.2	196.3	198.8	200	600

Authorized Signatory


वराबाबू पी. / VARABABU P.
जन महासंघ (पी. एन्ड एन.) / DOM(PAN)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Page 1 of 2


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



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	46.6	39.2	49.8	42.5	45.8	75	200
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	19.6	23.0	18.9	20.9	22.6	30	100
10.	Chloride	mg/L	IS:3025 P- 32	1.0	37.1	39.3	44.8	37.1	41.3	250	1000
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.19	0.18	0.21	0.17	0.24	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	31.1	27.6	32.9	26.3	23.5	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.1	9.6	8.4	11.1	13.3	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	BDL	0.036	0.033	0.038	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	0.084	0.092	0.093	0.084	0.10	1.0	1.0
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.029	0.034	0.031	0.028	0.035	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.

(Signature)

वराबाबू पी. / VARABABU P.

एन. एच. एन. (पी. एच. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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 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	14.10.2023	Sample Collected by	Ranjeet Yadav & Team
Date of Sample Receiving	14.10.2023	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/23/321/WT-190/01-05	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	14.10.2023 to 18.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar, Relative Humidity : 61%, 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
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(Signature)

वराबाबू पी. / VARABABU P.

अध्यक्ष, पर्यावरण (पी. एच. एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

(Signature)
19/10/23
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

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Unique Lab Report No. (ULR No.)		TEST REPORT	
C994823000001649F			
Name of Customer	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	14.10.2023	Particular of the Plant	Coal Mines
Date of Sample Receiving	14.10.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Ranjeet Yadav & Team
Sample Details	Surface Water (Baledeori Nala)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/321/WT-191/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	14.10.2023 to 18.10.2023	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar, Relative Humidity : 61%, Weather Condition - Clear	Sample Drawn By	Sabz Care Lab
		Location:	
		SW1 : Upstream of Baledeori Nala	
		(Coordinate : 23°53'31.83"N to 85°4'27.34"E)	
		SW2 : Downstream of Baledeori Nala	
		(Coordinate: 23°53'40.41"N to 85°4'46.41"E)	
		Report Release Date	19.10.2023

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	7.97	7.91	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	449.3	461.4	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	34.7	42.1	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	25.7	29.1	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	3.9	4.3	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	72.3	69.6	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	31.8	29.4	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	23.0	13.8	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	54.9	49.1	600

Varababu P.
वराबाबू पी. / VARABABU P.
 जन प्रशिक्षण (पी. एनड एन.) / DOM(PAN)
 इन्टरनेट लिमिटेड / NTPC Limited
 वडी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
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



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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	0.89	0.98	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	46.2	41.9	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.9	7.1	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.47	0.51	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	0.19	0.24	1.5
18	Iron	mg/L	IS:3025 P- 53 a	0.075	0.092	0.098	50
19	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.076	0.072	Not specified
20	Nickel	mg/L	IS:3025 P- 54 a	0.03	0.039	0.041	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
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वराबाबु पी. / VARABABU P.

वन महानिदेशक (पी. एच. एच.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी खरियालु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

Quality Manager
 (Piyush Ranjan)

Page 2 of 2

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

Contact : 09334315731, 07563048389, e-mail : scecp1mdp@gmail.com



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TEST REPORT

Name of Customer	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	14.10.2023	Particular of the Plant	Coal Mines
Date of Sample Receiving	14.10.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Ranjeet Yadav & Team
Sample Details	Surface Water (Baledeori Nala)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/321/WT-191/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	14.10.2023 to 18.10.2023	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar, Relative Humidity : 61%, Weather Condition - Clear	Sample Drawn By	Sabz Care Lab
		Location:	SW1 : Upstream of Baledeori Nala (Coordinate : 23°53'31.83"N to 85°4'27.34"E) SW2 : Downstream of Baledeori Nala (Coordinate: 23°53'40.41"N to 85°4'46.41"E)
		Report Release Date	19.10.2023

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	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-

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 जन पर्यावरण (पी. एच. एस.) / DOM(P&S)
 इन्स्टीट्यूट लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
 Quality Manager
 (Piyush Ranjan)
 19/10/23

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

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



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TC-9948



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Unique Lab Report No. (ULR No.)		TEST REPORT		TC994823000001650F	
Name of 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	Particular of the Plant	Coal Mines		
Date of Sampling	14.10.2023	Sample Collected by	Ranjeet Yadav		
Date of Sample Receiving	14.10.2023	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		
Sample ID	SCECPL/TR/23/321/WT-192/01-02	<u>Location:</u> 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	14.10.2023 to 18.10.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)		
Sampling Method	IS 17614 (Part 1): 2021	Report Release Date	19.10.2023		
Metrological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar, Relative Humidity : 61%, 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 rd Ed	4.0	7.18	7.24	5.5 to 9.0
2	Total Suspended Solids	mg/L	APHA 2540 D: 23 rd Ed	1.0	22.1	23.3	100
3	Total Dissolved Solids	mg/L	APHA 2540-C: 23 rd Ed	1.0	317.0	324.0	2100
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B: 23 rd Ed	5.0	20.1	21.7	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 rd 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	0.10	0.10	2
9	Chloride as Cl	mg/L	APHA 4500 Cl- B	1.0	36.9	37.5	Not specified

*** END OF REPORT ***

Note-

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(Signature)

यराबाबू पी. / VARABABU P.

एन एमएचएल (पी. एनड एन.) / DOM(P&N)
 एनटीपीसी लिमिटेड / NTPC Limited
 चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribagh

Authorized Signatory

(Signature)
Quality Manager
 (Piyush Ranjan)



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

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

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

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TC-9948



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Unique Lab Report No. (ULR No.)		TEST REPORT 394823000001786F	
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	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Date of Sample Receiving	11.11.2023	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/23/346/WT-225/01-05	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	11.11.2023 to 15.11.2023	Report Release Date	16.11.2023
Meteorological Information	Ambient Temperature : 23.0°C, Barometric Pressure :1018 mBar, Relative Humidity : 59%, 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	7.05	8.16	7.20	6.86	8.12	6.5 to 8.5	6.5 to 8.5
2.	Conductivity	µS/cm	IS:3025 P- 14	1.0	1029	1604	1131	445	627.5	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	0.6	4.7	1.1	1.6	1.5	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	627.6	962.0	667.0	275.0	370.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	134.52	350.46	84.96	49.56	125.08	200	600
7.	Total Hardness	mg/L	IS:3025 P- 21	1.0	169.7	174.2	195.3	207.6	195.9	200	600

Authorized Signatory

वराबाबू पी. / VARABABU P.
 जन महासंरक्षक (पी. एण्ड एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribagh

Page 1 of 2

Quality Manager
(Piyush Ranjan)

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

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



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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	48.9	42.8	46.9	44.8	51.0	75	200
9.	Magnesium	mg/L	IS:3025 P- 46	1.0	21.8	23.2	20.7	21.4	24.3	30	100
10.	Chloride	mg/L	IS:3025 P- 32	1.0	41.3	45.3	49.3	40.3	44.7	250	1000
11.	Fluoride	mg/L	IS:3025 P- 60	0.05	0.20	0.19	0.22	0.18	0.23	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	33.9	29.1	37.6	27.9	26.9	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.4	9.9	8.6	10.7	12.8	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	BDL	0.039	0.032	0.042	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	0.089	0.097	0.090	0.082	0.097	1.0	1.0
19.	Manganese	mg/L	IS:3025 P- 59 b	0.01	0.032	0.036	0.033	0.029	0.034	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-

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वराबाबु पी. / VARABABU P.

जन स्वास्थ्य (पी. एच. एच.) / DOM(PAS)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियान कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

16/11/23
Quality Manager
 (Piyush Ranjan)

Page 2 of 2

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

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



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TEST REPORT

Name of Customer	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	11.11.2023	Particular of the Plant	Coal Mines
Date of Sample Receiving	11.11.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Type of Sample	Water	Sample Collected by	Ranjeet Yadav & Team
Sample Details	Ground Water	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/346/WT-225/01-05	Sample Condition	Sealed & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
		Sample Drawn By	Sabz Care Lab
Period of Analysis	11.11.2023 to 15.11.2023	Location With Coordinate-	
Meteorological Information	Ambient Temperature : 23.0°C, Barometric Pressure : 1018 mBar, Relative Humidity : 59%, 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-

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(Signature)

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एन. एम. एल. (पी. एल. एल.) / DOM(P&S)
एन. एम. एल. लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)

Quality Manager

(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001787F	
Name of Customer	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	11.11.2023	Particular of the Plant	Coal Mines
Date of Sample Receiving	11.11.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Ranjeet Yadav & Team
Sample Details	Surface Water (Barki River)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/346/WT-226/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	11.11.2023 to 15.11.2023	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Ambient Temperature : 23.0°C, Barometric Pressure :1018 mBar, Relative Humidity : 59%, 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	16.11.2023

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	7.42	7.46	6.0 to 9.0
2	Conductivity	µS/cm	IS:3025 P- 14	1.0	386.2	303.0	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D	2.0	19.1	18.8	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B	5.0	27.3	28.4	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	4.1	4.9	Not specified
7	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	56.64	79.06	Not specified
8	Calcium	mg/L	IS:3025 P- 40	1.0	34.6	36.7	Not specified
9	Magnesium	mg/L	IS:3025 P- 46	1.0	17.0	18.1	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	27.3	24.5	600

वराबाबू पी. / VARABABU P.जन महासंस्था (पी. एन्ड एम.) / DOM(P&M)
एनटीपीसी लिमिटेड / NTPC Limited
वर्दी हरिकानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

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

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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	0.69	0.74	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	34.3	386	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.7	6.9	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.57	0.62	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	0.19	0.22	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	0.074	0.080	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

Piyush Ranjan
16/11/23
Quality Manager
(Piyush Ranjan)

Varababu P.
वरबाबू पी. / VARABABU P.
जन मंत्रालय (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag





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TEST REPORT

Name of Customer	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	11.11.2023	Particular of the Plant	Coal Mines
Date of Sample Receiving	11.11.2023	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Ranjeet Yadav & Team
Sample Details	Surface Water (Barki River)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/23/346/WT-226/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	11.11.2023 to 15.11.2023	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Ambient Temperature : 23.0°C, Barometric Pressure :1018 mBar, Relative Humidity : 59%, 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	16.11.2023


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 (1982) 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.
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वराबाबू पी. / VARABABU P.
 जन मण्डल विकास (पी. एण्ड एन.) / DOM(P&N)
 इन्टरप्रायसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

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



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001910F	
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	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	16.12.2023	Sample Collected by	Md. Razaur Rahman
Date of Sample Receiving	16.12.2023	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/23/362/WT-244/01-05	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	16.12.2023 to 19.12.2023	Report Release Date	19.12.2023
Meteorological Information	Ambient Temperature : 18.0°C, Barometric Pressure :1022 mBar, Relative Humidity : 58%, 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	6.67	7.91	7.31	7.08	7.90	6.5 to 8.5	6.5 to 8.5
2.	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	255.3	1444.8	998.9	432.5	619.2	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.9	4.8	1.9	1.4	2.1	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	175.0	840.0	678.0	281.0	416.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	341.02	69.62	57.82	129.8	95.58	200	600
7.	Total Hardness as CaCO ₃	mg/L	IS:3025 P- 21	1.0	209.02	187.4	182.6	198.3	190.9	200	600

(Signature)
वराबाबू पी. / VARABABU P.
 जन महासंसाधन (पी. एण्ड एच.) / DOM(P&H)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी हरियाना कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Page 1 of 2

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



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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 as Ca	mg/L	IS:3025 P- 40	1.0	51.0	40.80	44.80	46.92	55.08	75	200
9.	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	22.84	22.54	21.37	21.72	23.08	30	100
10.	Chloride as Cl	mg/L	IS:3025 P- 32	1.0	44.7	47.9	48.7	39.2	45.3	250	1000
11.	Fluoride as F	mg/L	IS:3025 P- 60	0.05	0.22	0.19	0.24	0.19	0.22	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	35.7	31.3	39.1	28.4	27.3	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.6	10.4	8.9	10.3	12.5	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 as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.036	0.033	0.040	0.05	0.05
17.	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05	1.5
18.	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	0.091	0.096	0.092	0.085	0.098	1.0	1.0
19.	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.033	0.038	0.034	0.031	0.036	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.

(Signature)

वराबाबू पी. / VARABABU P.
जन सहकारिता (पी. एण्ड एन.) / JSCMP
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)



**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow...***An ISO:9001:2015 & OHSAS:18001:2007**


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	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	16.12.2023	Sample Collected by	Md. Razaur Rahman
Date of Sample Receiving	16.12.2023	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/23/362/WT-244/01-05	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	16.12.2023 to 19.12.2023	Report Release Date	19.12.2023
Meteorological Information	Ambient Temperature : 18.0°C, Barometric Pressure :1022 mBar, Relative Humidity : 58%, 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.


वराबाबु पी. / VARABABU P.
 जन प्रशासनिक (पी. एन.एस.) / DOM(P&S)
 लिमिटेड / NTPC Limited
 चट्टी बरियतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory


Quality Manager
 (Piyush Ranjan)

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

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

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001911F		
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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	16.12.2023	Sample Collected By	Md. Razaur Rahman
Date of Sample Receiving	16.12.2023	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/23/362/WT-245/01-02	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	16.12.2023 to 19.12.2023	Report Release Date	19.12.2023
Meteorological Information	Ambient Temperature : 18.0°C, Barometric Pressure :1022 mBar, Relative Humidity : 58%, 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	8.34	7.82	6.0 to 9.0
2	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	418.6	334.4	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D 23 rd Ed.	2.0	0.4	6.7	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B 23 rd Ed	5.0	29.7	32.5	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 23 rd Ed	3.0	9.50	4.48	Not specified
7	Total Alkalinity as CaCO ₃	mg/L	IS:3025 P- 23	0.5	48.58	130.98	Not specified
8	Calcium as Ca	mg/L	IS:3025 P- 40	1.0	38.76	42.84	Not specified
9	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	21.96	22.30	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	29.7	26.9	600

(Signature)
वराबाबू पी. / VARABABU P.
 जन महासंरक्षक (पी. एण्ड एच.) / DOM(P&H)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग-1/Hazaribagh

Authorized Signatory

(Signature)
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 : scacplmdp@gmail.com



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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	0.63	0.71	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	36.9	40.7	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	6.4	6.7	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.61	0.58	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Total Chromium as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	0.20	0.24	1.5
18	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.071	0.077	Not specified
20	Nickel as Ni	mg/L	IS:3025 P- 54 a	0.03	0.032	0.035	Not specified
21	Lead as Pb	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.

वराबाबु पी. / VARABABU P.

वन मंत्रालय (पी. एच. एन.) / DOM(P&S)

एनटीपीसी लिमिटेड / NTPC Limited

बड़ी बरियान कोयला खनन परियोजना / CBCMP
हज़ारिबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)

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...***An ISO:9001:2015 & OHSAS:18001:2007**

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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	16.12.2023	Sample Collected By	Md. Razaur Rahman
Date of Sample Receiving	16.12.2023	Sampling Plan	SCECPL/SOP/WA/01
Type of Sample	Water	Sample Condition	Scaled & Preserved
		Sampling Method	IS 17614 (Part 1): 2021
Sample Details	Surface Water (Barki River)	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/362/WT-245/01-02	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	16.12.2023 to 19.12.2023	Report Release Date	19.12.2023
Meteorological Information	Ambient Temperature : 18.0°C, Barometric Pressure :1022 mBar, Relative Humidity : 58%, 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 (1982) 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
19/12/2023
Quality Manager
(Piyush Ranjan)

वराबाबू पी. / VARABABU P.

एन. वाराबाबु (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000175F	
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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	10.01.2024	Sample Collected by	Vivek Kumar Malakar
Date of Sample Receiving	11.01.2024	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/24/15/WT-12/01-05	<u>Location With Coordinate-</u>	
		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	12.01.2024 to 15.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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	7.43	7.85	7.03	6.82	7.69	6.5 to 8.5	6.5 to 8.5
2.	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	1415.0	1131.0	873.7	309.6	565.0	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.5	0.8	0.9	1.1	0.9	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	187.0	817.0	694.0	289.0	394.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	335.12	74.62	64.38	134.7	95.38	200	600
7.	Total Hardness as CaCO ₃	mg/L	IS:3025 P- 21	1.0	215.8	194.4	176.3	194.5	187.8	200	600

वराबाबु पी. / VARABABU P.
 जन परियोजना (पी. एच. एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Page 1 of 2

Authorized Signatory

16/01/2024
 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
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 MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

ULR No.: TC994824000000175F

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 as Ca	mg/L	IS:3025 P- 40	1.0	49.0	42.30	43.70	46.14	55.02	75	200
9.	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	20.80	23.92	22.32	22.62	24.50	30	100
10.	Chloride as Cl	mg/L	IS:3025 P- 32	1.0	43.6	47.4	49.9	42.3	46.3	250	1000
11.	Fluoride as F	mg/L	IS:3025 P- 60	0.05	0.21	0.19	0.23	0.20	0.22	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	38.3	32.7	38.8	29.43	27.9	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	9.9	11.1	9.2	9.9	12.1	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 as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.038	0.034	0.039	0.05	0.05
17.	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05	1.5
18.	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	0.094	0.098	0.094	0.083	0.093	1.0	1.0
19.	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.035	0.041	0.037	0.029	0.038	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.

वराबाबु पी. / VARABABU P.
जन सहकारिता (पी. एण्ड एन.) / JSM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरिकानु कोवला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)
RECPL MADHUPUR

Page 2 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



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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	10.01.2024	Sample Collected by	Vivek Kumar Malakar
Date of Sample Receiving	11.01.2024	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/24/15/WT-12/01-05	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	12.01.2024 to 15.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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
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वराबाबू पी. / VARABABU P.
जन. महाराष्ट्र (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

Piyush
16/01/2024
Quality Manager
(Piyush Ranjan)

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



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



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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	10.01.2024	Sample Collected By	Vivek Kumar Malakar
Date of Sample Receiving	11.01.2024	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/24/15/WT-13/01-02	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	12.01.2024 to 15.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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 (1982) 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)

वराबाबू पी. / VARABABU P.

जन प्रज्ञावाक्य (पी. एण्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)
16/01/2024

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.



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000176F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Discipline	Chemical
		Group	Water & Residues in Water
Address	At- Chatti Bariatu, Jorlag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	10.01.2024	Sample Collected By	Vivek Kumar Malakar
Date of Sample Receiving	11.01.2024	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/24/15/WT-13/01-02	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	12.01.2024 to 15.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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	8.01	7.36	6.0 to 9.0
2	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	385.0	280.2	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D 23 rd Ed.	2.0	3.66	2.16	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B 23 rd Ed	5.0	35.9	36.8	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 23 rd Ed	3.0	11.70	14.90	Not specified
7	Total Alkalinity as CaCO ₃	mg/L	IS:3025 P- 23	0.5	44.22	119.74	Not specified
8	Calcium as Ca	mg/L	IS:3025 P- 40	1.0	36.72	40.80	Not specified
9	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	23.03	21.96	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	31.9	27.8	600

(Signature)

वराबाबू पी. / VARABABU P.

एन एमएलएस (पी. एंड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बहु परिसर कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory

(Signature)
16/01/2024
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



मेममे
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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

ULR No. TC994824000000176F

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	0.58	0.68	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	39.8	37.6	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	7.7	7.2	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.72	0.60	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Total Chromium as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	0.22	0.24	1.5
18	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.069	0.085	Not specified
20	Nickel as Ni	mg/L	IS:3025 P- 54 a	0.03	0.035	0.039	Not specified
21	Lead as Pb	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.

(Signature)

वराबाबू पी. / VARABABU P.
जन महासंयोजक (पी. एन्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरिकानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory



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

TC-9948



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Unique Lab Report No. (ULR No.)		TEST REPORT		TC994824000000177F	
Name of 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	Particular of the Plant	Coal Mines		
Date of Sampling	10.01.2024	Sample Collected by	Vivek Kumar Malakar		
Date of Sample Receiving	11.01.2024	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		
Sample ID	SCECPL/TR/24/15/WT-14/01-02	<u>Location:</u> 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	12.01.2024 to 15.01.2024	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)		
Sampling Method	IS 17614 (Part 1): 2021	Report Release Date	16.01.2024		
Metrological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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 rd Ed	4.0	7.12	7.17	5.5 to 9.0
2	Total Suspended Solids	mg/L	APHA 2540 D: 23 rd Ed	1.0	19.3	20.4	100
3	Total Dissolved Solids	mg/L	APHA 2540-C: 23 rd Ed	1.0	283.0	294.0	2100
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B: 23 rd Ed	5.0	24.3	25.9	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 rd 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	0.12	0.13	2
9	Chloride as Cl	mg/L	APHA 4500 Cl- B	1.0	39.7	37.8	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)
वराबाबू पी. / VARABABU P.
 जन प्रशिक्षण (पी. एन. एन.) / JOM(PAB)
 इन्फोर्सी लिमिटेड / NTPC Limited
 वडी बरियतु कोवला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribagh

Authorized Signatory

(Signature)
Quality Manager
 (Piyush Ranjan)

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



मेमि
 सूक्ष्म, लघु एवं मध्यम उद्यम
 MICRO, SMALL & MEDIUM ENTERPRISES



Sabz Care Environmental Consultancy Pvt. Ltd.



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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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	17.02.2024	Sample Collected by	Md. Razaur Rahman
Date of Sample Receiving	17.02.2024	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/24/50/WT-28/01-05	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	17.02.2024 to 20.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 24.0°C, Barometric Pressure : 1014 mBar, Relative Humidity : 22%, Weather Condition - Sunny		

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
- 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.

वरबाबू पी. / VARABABU P.
वन पर्यावरण (पी. एण्ड एन.) / DOM(P&E)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिक्तु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

21/02/2024
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
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MICRO, SMALL & MEDIUM ENTERPRISES



Sabz Care Environmental Consultancy Pvt. Ltd.



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC99482400000258F		
Name of Customer	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	17.02.2024	Particular of the Plant	Coal Mines
Date of Sample Receiving	17.02.2024	Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Type of Sample	Water	Sample Collected by	Md. Razaur Rahman
Sample Details	Ground Water	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/24/50/WT-28/01-05	Sample Condition	Sealed & Preserved
Period of Analysis	17.02.2024 to 20.02.2024	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Ambient Temperature : 24.0°C, Barometric Pressure : 1014 mBar, Relative Humidity : 22%, Weather Condition - Sunny		
		Sample Drawn By	Sabz Care Lab
		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	
		Report Release Date	21.02.2024

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	7.39	7.51	6.54	7.12	8.29	6.5 to 8.5	6.5 to 8.5
2.	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	1380.9	1336.0	819.5	225.1	501.1	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.3	0.5	1.8	0.4	0.6	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	826.0	815.0	532.0	135.0	321.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	177.0	153.4	224.2	82.6	141.6	200	600
7.	Total Hardness as CaCO ₃	mg/L	IS:3025 P- 21	1.0	207.3	162.2	184.5	189.7	182.5	200	600

Varababu P.
वरबाबु पी. / VARABABU P.
जन सहकारिता (पी. एण्ड एस.) / DOM(PAS)
इन्टरनैशनील लिमिटेड / NTPC Limited
बहु उद्योग कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Page 1 of 2

Authorized Signatory
Prash Ranjan
21/02/2024
Quality Manager
(Prash Ranjan)

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





TEST REPORT

ULR No.: TC99482400000258F

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 as Ca	mg/L	IS:3025 P- 40	1.0	46.92	40.80	44.88	48.96	51.0	75	200
9.	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	18.40	20.21	23.03	24.30	24.69	30	100
10.	Chloride as Cl	mg/L	IS:3025 P- 32	1.0	41.9	49.9	51.6	44.7	45.9	250	1000
11.	Fluoride as F	mg/L	IS:3025 P- 60	0.05	0.20	0.19	0.22	0.21	0.22	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	37.4	30.9	38.2	31.2	32.7	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	10.9	11.7	9.6	10.3	12.5	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 as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.037	0.032	0.036	0.05	0.05
17.	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05	1.5
18.	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	0.093	0.096	0.090	0.0837	0.092	1.0	1.0
19.	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.037	0.040	0.035	0.031	0.034	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
- 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)

वराबाबू पी. / VARABABU P.
वन पर्यावरण (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी परियोजना कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
(Signature)
Quality Manager
(Piyush Ranjan)
21/02/2024

Page 2 of 2

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

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



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



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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	17.02.2024	Sample Collected By	Md. Razaur Rahman
Date of Sample Receiving	17.02.2024	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/24/50/WT-29/01-02	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	17.02.2024 to 20.02.2024	Report Release Date	21.02.2024
Meteorological Information	Ambient Temperature : 24.0°C, Barometric Pressure : 1014 mBar, Relative Humidity : 22%, Weather Condition - Sunny		

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
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
- 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)
वराबाबू पी. / VARABABU P.
जन महसुसदाता (पी. एण्ड एस.) / JOM(P&S)
इन्टीग्रेटी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory
Piyush
21/02/2024
Quality Manager
(Piyush Ranjan)

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



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MICRO, SMALL & MEDIUM ENTERPRISES



Sabz Care Environmental Consultancy Pvt. Ltd.



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC99482400000259F		
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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	17.02.2024	Sample Collected By	Md. Razaur Rahman
Date of Sample Receiving	17.02.2024	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/24/50/WT-29/01-02	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	17.02.2024 to 20.02.2024	Report Release Date	21.02.2024
Meteorological Information	Ambient Temperature : 24.0°C, Barometric Pressure : 1014 mBar, Relative Humidity : 22%, Weather Condition - Sunny		

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	6.77	6.98	6.0 to 9.0
2	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	182.3	117.1	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D 23 rd Ed.	2.0	3.44	2.07	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B 23 rd Ed	5.0	41.3	44.7	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 23 rd Ed	3.0	9.30	10.40	Not specified
7	Total Alkalinity as CaCO ₃	mg/L	IS:3025 P- 23	0.5	64.3	88.2	Not specified
8	Calcium as Ca	mg/L	IS:3025 P- 40	1.0	34.68	38.76	Not specified
9	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	23.13	20.60	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	29.3	26.9	600

Varababu P.

वराबाबु पी. / VARABABU P.

अन्य परामर्शदाता (पी. एण्ड एन.) / DOM(P&A)

एनटीपीसी लिमिटेड / NTPC Limited

बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribagh

Piyush Ranjan
21/02/2024
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



MSME
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MICRO, SMALL & MEDIUM ENTERPRISES

TEST REPORT


ULR No. TC994824000000259F

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	0.55	0.62	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	43.4	39.9	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	8.3	7.9	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.79	0.68	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Total Chromium as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	0.20	0.23	1.5
18	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	0.074	0.081	Not specified
20	Nickel as Ni	mg/L	IS:3025 P- 54 a	0.03	0.039	0.044	Not specified
21	Lead as Pb	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
- 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.


वराबाबू पी. / VARABABU P.
जन गणमण्डल (पी. एण्ड एन.) / JGM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


Authorized Signatory
ush
21/02/2024
Quality Manager
(Piyush Ranjan)

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000347F	
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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	13.03.2024	Sample Collected by	Md. Razaur Rahman
Date of Sample Receiving	13.03.2024	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/24/80/WT-36/01-05	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	13.03.2024 to 16.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1014 mBar Relative Humidity : 61%, 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	7.45	7.85	6.82	7.22	7.98	6.5 to 8.5	6.5 to 8.5
2.	Electrical Conductivity	µS/cm	IS:3025 P- 14	5.0	498.5	1531.0	890.2	276.7	590.1	Not specified	Not specified
3.	Turbidity	NTU	IS:3025 P- 10	0.1	1.7	0.5	2.5	0.2	0.3	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	328.0	872.0	543.0	166.0	385.0	500	2000
6.	Total Alkalinity	mg/L	IS:3025 P- 23	0.5	241.82	223.74	193.23	100.57	85.88	200	600
7.	Total Hardness as CaCO ₃	mg/L	IS:3025 P- 21	1.0	287.64	208.08	165.24	106.08	359.04	200	600

वराबाबू पी. / VARABABU P.

जन प्रशासनिक (पी. एण्ड एम.) / DOM(P&M)
 इन्टीग्रेटेड लिमिटेड / NTPC Limited
 बड़ी बरियतु कोयला खनन परियोजना / CBMP
 हजारीबाग / Jharkhand

Page 1 of 2

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


ULR No.: TC994824000000347F

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 as Ca	mg/L	IS:3025 P- 40	1.0	57.12	46.92	48.96	22.44	65.28	75	200
9.	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	22.64	23.57	21.42	19.18	26.05	30	100
10.	Chloride as Cl	mg/L	IS:3025 P- 32	1.0	26.8	164.3	144.27	22.78	35.73	250	1000
11.	Fluoride as F	mg/L	IS:3025 P- 60	0.05	0.21	0.18	0.23	0.20	0.24	1.0	1.5
12.	Sulphate	mg/L	IS:3025 P- 24	1.0	40.3	34.1	37.3	33.1	35.2	200	200
13.	Nitrate	mg/L	IS:3025 P- 34	0.1	11.3	12.2	9.9	10.6	11.9	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 as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.039	0.033	0.034	0.05	0.05
17.	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	BDL	BDL	BDL	BDL	BDL	0.05	1.5
18.	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	0.092	BDL	BDL	BDL	BDL	1.0	1.0
19.	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	BDL	BDL	BDL	BDL	BDL	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
- 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.


वराबाबू पी. / VARABABU P.
 जन पर्यावरण (पी. एन्ड एच.) / JOM(P&H)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी परियोजना कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
 Quality Manager
 (Piyush Ranjan)

Page 2 of 2

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



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



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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date 02.05.2023)
Date of Sampling	13.03.2024	Sample Collected by	Md. Razaur Rahman
Date of Sample Receiving	13.03.2024	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/24/80/WT-36/01-05	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	13.03.2024 to 16.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1014 mBar Relative Humidity : 61%, 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
- 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)

वराबाबू पी. / VARABABU P.

जन महासंघ (पी. एन्ड एन.) / DOM(PAN)
इन्टरनेट लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
16/03/2024
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.)	TC99482400000348F		
Name of Customer	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	13.03.2024	Particular of the Plant	Coal Mines
Date of Sample Receiving	13.03.2024	Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Type of Sample	Water	Sample Collected By	Md. Razaur Rahman
Sample Details	Surface Water (Barki River)	Sampling Plan	SCECPL/SOP/WA/01
Sample ID	SCECPL/TR/24/80/WT-37/01-02	Sample Condition	Sealed & Preserved
Period of Analysis	13.03.2024 to 16.03.2024	Sampling Method	IS 17614 (Part 1): 2021
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1014 mBar Relative Humidity : 61%, Weather Condition - Clear	Sample Drawn By	Sabz Care Lab
		Location:	SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'18.44"N to 85°1'56.84"E) SW2 : Downstream of Barki River near Pachaura (Coordinate: 23°53'52.38"N to 85°1'17.38"E)
		Report Release Date	16.03.2024

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	8.05	8.08	6.0 to 9.0
2	Electrical Conductivity	μS/cm	IS:3025 P- 14	5.0	419.8	331.1	Not specified
3	Total Suspended Solids	mg/L	APHA 2540 D 23 rd Ed.	2.0	5.4	3.9	Not specified
4	Chemical Oxygen Demand (COD)	mg/L	APHA 5220 B 23 rd Ed	5.0	47.9	51.3	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 23 rd Ed	3.0	10.9	12.4	Not specified
7	Total Alkalinity as CaCO ₃	mg/L	IS:3025 P- 23	0.5	179.67	136.73	Not specified
8	Calcium as Ca	mg/L	IS:3025 P- 40	1.0	87.72	61.20	Not specified
9	Magnesium as Mg	mg/L	IS:3025 P- 46	1.0	26.0	24.20	Not specified
10	Chloride	mg/L	IS:3025 P- 32	1.0	16.52	22.7	600

(Signature)
वराबाबू पी. / VARABABU P.
 जन प्रशिक्षण (पी. एच. एच.) / DOM(P&S)
 भारतीय नदी निगम / NTPC Limited

Authorized Signatory
(Signature)
Quality Manager
(Piyush Ranjan)

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





TEST REPORT

ULR No. TC994824000000348F

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	0.59	0.66	1.5
12	Sulphate	mg/L	IS:3025 P- 24	1.0	38.3	34.3	400
13	Nitrate	mg/L	IS:3025 P- 34	0.1	9.2	8.7	50
14	Phosphate	mg/L	IS:3025 P- 31	0.1	0.72	0.69	Not specified
15	Arsenic	mg/L	IS:3025 P- 37	0.05	BDL	BDL	0.2
16	Total Chromium as Cr	mg/L	IS:3025 P- 52 i	0.03	BDL	BDL	0.05
17	Copper as Cu	mg/L	IS:3025 P- 42 a	0.03	0.17	0.19	1.5
18	Iron as Fe	mg/L	IS:3025 P- 53 a	0.075	BDL	BDL	50
19	Manganese as Mn	mg/L	IS:3025 P- 59 b	0.01	BDL	0.01	Not specified
20	Nickel as Ni	mg/L	IS:3025 P- 54 a	0.03	0.033	0.041	Not specified
21	Lead as Pb	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
- 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.

वराबाबु पी. / VARABABU P.
जन गणमण्डल (पी. एनड एन.) / DOM(PAN)
एनटीपीसी लिमिटेड / NTPC Limited
बहु वरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

16/03/2024
Quality Manager
(Piyush Ranjan)





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.	Particular of the Plant	Coal Mines
		Work Order No.	CBCMPL/WO/23-24/018 (Date- 02.05.2023)
Date of Sampling	13.03.2024	Sample Collected By	Md. Razaur Rahman
Date of Sample Receiving	13.03.2024	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/24/80/WT-37/01-02	Location:	SW1 : Upstream of Barki River near Kishunpur (Coordinate : 23°55'18.44"N to 85°1'56.84"E) SW2 : Downstream of Barki River near Pachaura (Coordinate: 23°53'41.36"N to 85°1'51.65"E)
Period of Analysis	13.03.2024 to 16.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1014 mBar Relative Humidity : 61%, 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 (1982) 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
- 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.

वराबाबू पी. / VARABABU P.
जन महामंडळ (पी. एण्ड एस.) / DOM(P&S)
इन्स्टीट्यूट लिमिटेड / NTPC Limited
वडी हरिवानु कोवला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)
16/3/2024

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



Varababu P.

वराबाबू पी. / VARABABU P.

एन एनटीपीसी लिमिटेड (पी. एनड एन.) / DCM(P&S)

एनटीपीसी लिमिटेड / NTPC Limited

बड़ी हरियाणु कोयला खनन परियोजना / CBCMP

हजारीबाग / Hazaribag



Varababu P.

वराबाबु पी. / VARABABU P.

डन पावर प्रोजेक्ट (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिखु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag



Varababu P.

वराबाबू पी. / VARABABU P.
 जल महासंवेद्यक (पी. एच. एन.) / DOM(P&N)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag



Varababu P.

वराबाबु पी. / VARABABU P.


अन मलप्रबंधक (पी. एनड एन.) / DOM(P&S)


एनटीपीसी लिमिटेड / NTPC Limited

बड़ी हरिकानु कोयला खनन परियोजना / CBCMP

हजारीबाग / Hazaribag

CHATTI BARIATU COAL MINING PROJECT OF NTPC		
Environmental Expenditure for the FY (April-2023 to March-2024)		
SI NO	Purpose of Expense	Amount (in Rs.)
(A) For Dump Slope Stabilization		
1	Retaining Wall, Garland Drain, Settling Pit and its Maintenance	15607500.00
2	Dozer Operator Salary, HSD Cost and its Maintenance	
(B) For Dust Suppression		
1	Water tanker and its maintenance	3780300.00
(C) Environmental Monitoring		
1	Annual Maintenance Contract of Instruments	1862700.00
2	Environmental Monitoring (AAQ, Water, Noise etc.)	
(D) Plantation and its maintenance charge		2510700.00
(E) Environment Staff Salary		360000.00
(F) Scientific Study		2360000.00
Total Amount		26481200.00


 (Satish K. Singh)
 Env. Officer


 वराबाबु पी. / VARABABU P.
 जूनियर प्रोफेशनल (सी. एन्ड. एम.) / DOM(PAS)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
 हज़ारिबाग / Hazaribag



Sabz Care
Environmental Consultancy Pvt. Ltd.



Let's start thinking about nature for tomorrow

TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001642F		
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	12.10.2023 to 13.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-304/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023 to 16.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	59.76	57.35	44.83	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	95.24	93.68	87.41	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	38.54	34.17	31.55	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.43	39.68	35.37	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

वराबाबु पी. / VARABABU P.
जन प्रशिक्षण (पी. एन्ड एन.) / JOM(P&N)
एन्टीपोली सिस्टिम्स / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)
19/10/23

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

TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001643F	
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	13.10.2023 to 14.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-305/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023 to 16.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)
Duration of Sampling: 24 hours each location

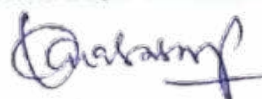
B. TEST RESULTS

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 _{2.5}	µg/m ³	IS 5182 (Part 24)	50.71	40.15	39.53	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	91.45	76.82	83.25	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	35.42	28.38	30.47	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	37.52	31.47	33.61	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.


वराबाबू पी. / VARABABU P.
जन पर्यावरण (पी. एन्ड एच.) / DOM(P&H)
एन्टीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001644F		
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	13.10.2023 to 14.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-306-01 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023 to 16.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	33.89	32.18	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	75.67	73.29	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182 (Part 2)	25.52	27.34	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182 (Part 6)	27.36	30.68	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

Varababu P.

वराबाबू पी. / VARABABU P.

अन मॉनिटरिंग (पी. एन्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरिवातु कोदरा खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
19/10/23
Quality Manager
(Piyush Ranjan)

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

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



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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		
Date of Sampling	12.10.2023 to 13.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-304/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 ³	IS 5182(Part 10)	0.52	0.50	0.35	2 (mg/m ³)

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

जन महासंरक्षण (पी. एण्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरिवातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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



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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	13.10.2023 to 14.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-305/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 ³	IS 5182(Part 10)	0.43	0.34	0.38	2 (mg/m ³)

*** 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.

(Signature)
वराबाबू पी. / VARABABU P.
अन्य परामर्शदाता (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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



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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	13.10.2023 to 14.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-306-03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 ³	IS 5182(Part 10)	0.29	0.31	2 (mg/m ³)

*** 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.
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यराबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एच.) / DOM(P&H)
ल्टीमीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory


19/10/23
Quality Manager
(Piyush 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 Consultancy Pvt. Ltd.

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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		
Date of Sampling	12.10.2023 to 13.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	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/23/321/AA-304/07	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.10.2023	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS	Requirements/ Specifications
1	Arsenic as As	ng/m ³	EPA IO 3.2 1999/APHA 23 rd Edition 3114 C	BDL (MDL=0.30)	06 (NAAQS)
2	Mercury as Hg	ng/m ³	EPA IO 3.2 1999/APHA 23 rd Edition 3114 C	BDL (MDL=20)	100000 (NIOSH)
3	Nickel as Ni	ng/m ³	EPA IO 3.2 1999/APHA 23 rd Edition 3114 C	BDL (MDL=0.02)	20 (NAAQS)
4	Cadmium as Cd	ng/m ³	EPA IO 3.2 1999/APHA 23 rd Edition 3114 C	(BDL=0.02)	5000 (OHSAS)
5	Chromium as Cr	ng/m ³	EPA IO 3.2 1999/APHA 23 rd Edition 3114 C	BDL (MDL=0.01)	50000 (NIOSH 7300)

BDL= Below Detection Limit & MDL= Minimum Detection Limit

*** END OF REPORT ***

Remarks:

- Test values are reported based on the samples received.
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(Signature)
वरबाबू पी. / VARABABU P.
अन्य परामर्शदाता (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
पुर्वी बरिकात कोयला खनन परियोजना - CBCMP

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001743F	
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	27.10.2023 to 28.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-317/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023 to 31.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	58.41	56.87	46.10	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	94.29	91.53	89.76	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	39.58	36.72	35.16	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	42.41	40.65	37.52	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

वराबाबु पी. / VARABABU P.
जन महसुसक (पी. एण्ड एस.) / DOM(PAS)
इन्टीपीसी लिमिटेड / NTPC Limited
वही हरिकानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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





TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001744F		
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	28.10.2023 to 29.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-318/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023 to 31.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure : 1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	51.10	42.54	40.16	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	90.58	79.81	86.31	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	36.46	30.47	32.57	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	39.48	32.44	34.59	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.


वराबाबु पी. / VARABABU P.
जन प्रसंशोधक (पी. एण्ड एस.) / JOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरिकानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribagh

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.)		TC994823000001745F	
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	28.10.2023 to 29.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-319-01 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023 to 31.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure : 1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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/Spe cifications as per CPCB
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	34.64	33.14	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	77.66	74.41	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	27.34	29.43	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	29.71	31.66	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

वराबाबू पी. / VARABABU P.
जन महासंरक्षक (पी. एन्ड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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





dc

Sabz Care Environmental Cosultancy Pvt. Ltd.

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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	27.10.2023 to 28.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-317/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 ³	IS 5182(Part 10)	0.51	0.48	0.38	2 (mg/m ³)

***** 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.


वराबाबू पी. / VARABABU P.
जन प्रशिक्षक (पी. एच. एन.) / JOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियारु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


Authorized Signatory

Quality Manager
(Piyush Ranjan)

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

Contact : 99334315731, 07563048389 e-mail : sccecplmdp@gmail.com

**MSME**

सूक्ष्म, लघु एवं मध्यम उद्यम

MICRO, SMALL & MEDIUM ENTERPRISE



Sabz Care Environmental Cosultancy Pvt. Ltd.

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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	28.10.2023 to 29.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-318/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure : 1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 ³	IS 5182(Part 10)	0.44	0.33	0.39	2 (mg/m ³)

*** 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.

वरबाबु पी. / VARABABU P.
जन महामंडळ (पी. एन्ड एच.) / DOM(P&H)
इन्टरनॅशनल लिमिटेड / NTPC Limited
वडी बरिवातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

Piyush
11/11/23
Quality Manager
(Piyush Ranjan)

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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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	28.10.2023 to 29.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	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/23/336/AA-319-03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.10.2023	Report Release Date	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure : 1018 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 ³	IS 5182(Part 10)	0.30	0.33	2 (mg/m ³)

*** 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.

वराबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एच. एच.) / JMM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)

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



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



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001780F	
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	09.11.2023 to 10.11.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	11.11.2023	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/23/346/AA-327/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023 to 13.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure : 1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	57.69	58.36	48.78	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	92.46	94.65	90.25	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	40.62	37.50	36.46	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	43.39	41.43	38.50	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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)
वराबाबू पी. / VARABABU P.
जन प्रशिक्षक (पी. एच. एन.) / DOM(PAB)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory
(Signature)
Quality Manager
(Piyush Ranjan)

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





TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001781F	
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	10.11.2023 to 11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	11.11.2023	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/23/346/AA-328/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023 to 13.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure :1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	50.39	44.46	42.16	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	91.27	83.51	81.73	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	35.68	32.55	34.38	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	36.73	35.76	36.35	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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)

वराबाबू पी. / VARABABU P.
जन प्रशिक्षण (पी. एन्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

(Signature)
16/11/23
Quality Manager
(Piyush Ranjan)

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





TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001782F	
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	10.11.2023 to 11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	11.11.2023	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/23/346/AA-329-01 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023 to 13.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure : 1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	36.49	35.74	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	79.63	76.23	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	28.38	30.47	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	31.47	32.64	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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)

वरबाबू पी. / VARABABU P.

अप. महासंचालक (पी. एम्ब. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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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	09.11.2023 to 10.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	11.11.2023	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/23/346/AA-327/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure :1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 ³	IS 5182(Part 10)	0.53	0.51	0.40	2 (mg/m ³)

*** 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.

वराबाबू पी. / VARABABU P.
जन महसुसक (पी. एण्ड एम.) / JOM(P&M)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरिकतु कोवला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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



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



Sabz Care Environmental Consultancy Pvt. Ltd.

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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	10.11.2023 to 11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	11.11.2023	Sample Condition	Scaled 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/23/346/AA-328/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure :1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 ³	IS 5182(Part 10)	0.49	0.38	0.41	2 (mg/m ³)

*** 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

वराबाबू पी. / VARABABU P.
अप मरुतवक (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिवतु कोवता खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Quality Manager
(Piyush Ranjan)

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



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Sabz Care Environmental Consultancy Pvt. Ltd.

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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	10.11.2023 to 11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	11.11.2023	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/23/346/AA-329-03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	11.11.2023	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure : 1018 mBar Relative Humidity : 59%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 ³	IS 5182(Part 10)	0.35	0.37	2 (mg/m ³)

*** 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.


वराबाबू पी. / VARABABU P.
 जन पर्यावरण (पी. एण्ड एच.) / JOM(P&H)
 इन्टीग्रेटी लिमिटेड / NTPC Limited
 चट्टी बरियातु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory


Quality Manager
(Piyush Ranjan)
 16/11/23

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



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 MICRO, SMALL & MEDIUM ENTERPRISES



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001881F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	27.11.2023 to 28.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	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/23/354/AA-332/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023 to 30.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	55.62	57.13	45.07	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	90.84	92.25	85.28	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	39.58	36.46	34.64	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.43	38.30	36.35	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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)
वराबाबू पी. / VARABABU P.
जन पर्यावरण (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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



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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001882F	
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	28.11.2023 to 29.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	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/23/354/AA-333/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023 to 30.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
 Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
 Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	48.43	42.77	40.37	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	89.69	81.36	78.18	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	32.55	30.47	31.59	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	34.59	33.61	32.64	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

वराबाबु पी. / VARABABU P.
 जन प्रशासक (पी. एण्ड एस.) / DOM(PAS)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी बरियानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

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

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MICRO, SMALL & MEDIUM ENTERPRISES

TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001883F		
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	28.11.2023 to 29.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	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/23/354/AA-334/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023 to 30.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	35.57	36.80	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	77.48	74.22	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182 (Part 2)	27.60	29.69	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182 (Part 6)	30.68	33.61	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.

वराबाबू पी. / VARABABU P.

अन मल्लिकार्जुन (पी. एन. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
30/11/2023
Quality Manager
(Piyush Ranjan)

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





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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	27.11.2023 to 28.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	Sample Condition	Scaled 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/23/354/AA-332/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 ³	IS 5182(Part 10)	0.51	0.47	0.38	2 (mg/m ³)

*** 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
30/11/2023
Quality Manager
(Piyush Ranjan)

Varababu P.
वराबाबु पी. / VARABABU P.

अन्य परामर्शदाता (पी. एन. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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

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



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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	28.11.2023 to 29.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	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/23/354/AA-333/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 ³	IS 5182(Part 10)	0.45	0.35	0.40	2 (mg/m ³)

*** 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

वराबाबू पी. / VARABABU P.
 जन महासंरक्षक (पी. एन्ड एच.) / JOM(P&H)
 एनटीपीसी लिमिटेड / NTPC Limited
 चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Quality Manager
(Piyush Ranjan)

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



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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	28.11.2023 to 29.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	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/23/354/AA-334/03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023	Report Release Date	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.33	0.34	2 (mg/m ³)

*** 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.


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जन महासंरक्षण (पी. एनड एम.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory


Quality Manager
(Piyush Ranjan)
30/11/2023

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

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001904F		
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	14.12.2023 to 15.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-339/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	16.12.2023 to 18.12.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18.0°C, Barometric Pressure :1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	54.70	58.13	46.90	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	91.77	93.36	86.54	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	38.54	39.58	34.38	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	40.44	41.71	36.63	80 (µg/m ³)

*** 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.


वरबाबू पी. / VARABABU P.
जन प्रदूषण नियंत्रण (पी. एण्ड एन.) / DOM(P&N)
इन्टरपोली लिमिटेड / NTPC Limited
बड़ी बरिबु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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.)	TC994823000001905F		
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	15.12.2023 to 16.12.2023	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-340/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	16.12.2023 to 18.12.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure :1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

- Location of Sampling:** Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	47.32	41.58	42.54	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	88.90	80.21	76.27	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	32.55	29.43	30.54	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	34.30	33.33	32.60	80 (µg/m ³)

*** END OF REPORT ***

- Test values are reported based on the samples received.
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यराबाबु पी. / VARABABU P.
जन प्रसंशक (पी. एण्ड एस.) / JPM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिबानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Quality Manager
(Piyush Ranjan)
19/12/2023

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



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001906F	
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	15.12.2023 to 16.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-341/I & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	16.12.2023 to 18.12.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure : 1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	34.61	35.20	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	73.55	75.33	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	31.51	33.59	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	33.45	34.51	80 (µg/m ³)

*** END OF REPORT ***

- Test values are reported based on the samples received.
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वराबाबू पी. / VARABABU P.
 जन महासंसाधन (पी. एनड एन.) / DOM(P&S)
 इन्टीग्रेटी लिमिटेड / NTPC Limited
 वडी करिवानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory


Quality Manager
(Piyush Ranjan)

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

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



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

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

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**An ISO:9001:2015 & OHSAS:18001:2007**

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	14.12.2023 to 15.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-339/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	16.12.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure : 1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
 Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
 Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 ³	IS 5182(Part 10)	0.52	0.45	0.40	2 (mg/m ³)

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

- Test values are reported based on the samples received.
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Authorized Signatory

Piyush Ranjan
 Quality Manager
 (Piyush Ranjan)

Varababu P.

वराबाबू पी. / VARABABU P.
 जन पर्यावरण रक्षक (पी. एण्ड एन.) / JOM(P&E)
 इन्टरपोली लिमिटेड / NTPC Limited
 चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

**Sabz Care****Environmental Consultancy Pvt. Ltd.***lets start thinking about nature for tomorrow...***An ISO:9001:2015 & OHSAS:18001:2007**

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	15.12.2023 to 16.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-340/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	16.12.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure :1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
 Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
 Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 ³	IS 5182(Part 10)	0.47	0.38	0.41	2 (mg/m ³)

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

- Test values are reported based on the samples received.
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Authorized Signatory

Piyush Ranjan
 19/12/2023
Quality Manager
(Piyush Ranjan)

Varababu P.

वराबाबू पी. / VARABABU P.
 जन प्रशासनिक (पी. एच. एस.) / DOM(PAS)
 इन्स्टीट्यूट लिमिटेड / NTPC Limited
 बड़ी हरियाना कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

**Sabz Care****Environmental Consultancy Pvt. Ltd.***let's start thinking about nature for tomorrow...***An ISO:9001:2015 & OHSAS:18001:2007**

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	15.12.2023 to 16.12.2023	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	16.12.2023	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/23/362/AA-341/03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.11.2023	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure :1022 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION**Location of Sampling:** Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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/Specifications as per CPCB
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.38	0.36	2 (mg/m ³)

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

- Test values are reported based on the samples received.
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Authorized Signatory**वराबाबू पी. / VARABABU P.**

जन पर्यावरण (पी. एण्ड एन.) / JDM(P&E)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

19/12/2023
**Quality Manager
(Piyush Ranjan)**

TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001919F	
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	21.12.2023 to 22.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	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/23/371/AA-347/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023 to 25.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	56.89	54.22	49.41	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	93.71	90.22	87.52	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	37.50	40.62	38.54	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	40.44	43.62	40.65	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- Test values are reported based on the samples received.
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वराबाबु पी. / VARABABU P.
 जन प्रशासक (पी. एण्ड एस.) / DOM(P&S)
 इन्टीपीसी लिमिटेड / NTPC Limited
 चट्टी बरिबतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag


 Authorized Signatory
 Ranjeet Yadav
 Quality Manager
 (Prakash Ranjan)

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



TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001920F		
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	22.12.2023 to 23.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	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/23/371/AA-348/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023 to 25.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	40.08	41.88	38.15	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	82.23	78.60	79.34	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	36.46	33.59	34.64	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	38.23	36.63	37.47	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


यराबाबू पी. / VARABABU P.
एन पीएल (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिखु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag


Authorized Signatory
Ranjeet Yadav
26/12/2023
Quality Manager
(Ranjeet 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.)	TC994823000001921F		
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	22.12.2023 to 23.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	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/23/371/AA-349/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023 to 25.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	35.60	33.11	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	71.74	74.35	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	33.59	32.55	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	35.57	36.42	80 (µg/m ³)

*** END OF REPORT ***

Remarks: The ambient air quality with respect to Particulate matters, SO₂ and NO₂ 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.


वरबाबू पी. / VARABABU P.
जन महासंरक्षक (पी. एण्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag


Authorized Signatory
Ranjeet Yadav
Quality Manager
(Ranjeet Ranjan)
26/12/2023

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

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





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	21.12.2023 to 22.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	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/23/371/AA-347/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)


B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.54	0.47	0.38	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वरबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एन्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी करियातु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory

26/12/2023

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



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	22.12.2023 to 23.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	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/23/371/AA-348/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.43	0.39	0.42	2 (mg/m ³)

*** 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.

वराबाबू पी. / VARABABU P.
जन पर्यावरण (पी. एन. एस.) / JOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
Quality Manager
SCECPL, MADHUPUR

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





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	22.12.2023 to 23.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	Sample Condition	Sealed and Preserved
Sampling Method	IS 5182 and CPCB Air Manual Volume I (NAAQM/36/2012-13)	Sampling Plan	SCECPL/SOP/AA/01
Sample Details	Ambient Air	Sample Drawn By	Sabz Care Lab
Sample ID	SCECPL/TR/23/371/AA-349/03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	23.12.2023	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure :1018 mBar Relative Humidity : 64%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.40	0.39	2 (mg/m ³)

*** 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.


वराबाबु पी. / VARABABU P.
जन प्रसंख्यक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरिबतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory



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.)		TC994824000000169F	
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	08.01.2024 to 09.01.2024	Sample Collected by	Vivek Kr. Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-14/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024 to 11.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	54.79	53.27	51.30	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	92.46	90.28	88.73	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	39.84	41.41	37.50	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	42.56	44.46	40.65	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- Test values are reported based on the samples received.
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वराबाबू पी. / VARABABU P.
जन महसुसक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory


Quality Manager
(Piyush Ranjan)
16/01/2024


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.)	TC994824000000170F		
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	09.01.2024 to 10.01.2024	Sample Collected by	Vivek Kr Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-15/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024 to 11.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E) -
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	43.58	39.11	37.64	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	86.94	79.62	80.17	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	35.16	34.38	33.59	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	37.48	36.84	35.57	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वरबाबू पी. / VARABABU P.
जन पर्यावरण (पी. एन्ड एन.) / JOM(P&E)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोवला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory


16/01/2024
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.)		TC994824000000171F	
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	09.01.2024 to 10.01.2024	Sample Collected by	Vivek Kr Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-16/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024 to 11.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	34.13	32.62	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	74.61	70.43	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	34.38	33.59	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	37.48	36.20	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबू पी. / VARABABU P.
एन पीएचएलएल (पी. एनड एन.) / DOM(PAN)
एनटीपीसी लिमिटेड / NTPC Limited
बहु परियोजना कोयला खनन परियोजना / CBCMP
हज़ारिबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
Quality Manager
(Piyush Ranjan)
16/01/2024

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

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





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	08.01.2024 to 09.01.2024	Sample Collected by	Vivek Kr. Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-14/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)


B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.52	0.49	0.39	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वराबाबु पी. / VARABABU P.
जन प्रशिक्षण (पी. एन. एन.) / JOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory


Prayush Ranjan
Quality Manager
(Prayush Ranjan)


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





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	09.01.2024 to 10.01.2024	Sample Collected by	Vivek Kr Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-15/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS


S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.45	0.37	0.43	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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


वरबाबू पी. / VARABABU P.
जन प्रशिक्षण (पी. एण्ड एन.) / JDM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बहु बरियत कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag


16/01/2024
Quality Manager
(Divyash Ranjan)

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



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



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	09.01.2024 to 10.01.2024	Sample Collected by	Vivek Kr Malakar & Team
Sample Receiving Date	10.01.2024	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/24/15/AA-16/03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	10.01.2024	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 58%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.41	0.38	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबू पी. / VARABABU P.
जन प्रशिक्षक (पी. एन. एस.) / JOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory



(Signature)
Quality Manager
(Piyush Ranjan)
16/01/2024

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.



TC-9948



Let's start thinking about nature for tomorrow

TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000208F	
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	29.01.2024 to 30.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-34/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024 to 01.02.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	56.70	54.11	50.44	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	94.25	91.82	89.54	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	38.54	39.32	36.46	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.29	42.35	39.17	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबू पी. / VARABABU P.
जन. महसुलवाला (पी. एच. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

Quality Manager
(Piyush Ranjan)
21/02/2024

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000209F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	30.01.2024 to 31.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-35/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024 to 01.02.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)

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

Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	42.14	38.60	36.55	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	84.37	81.47	78.71	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	34.11	30.99	32.55	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	37.26	34.09	34.51	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबू पी. / VARABABU P.
 जन प्रसन्नता (पी. एण्ड एन.) / JOM(P&N)
 एनटीपीसी लिमिटेड / NTPC Limited
 चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

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


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 MICRO, SMALL & MEDIUM ENTERPRISES

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000210F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Sampling	30.01.2024 to 31.01.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-36/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024 to 01.02.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	35.11	30.56	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	75.63	69.34	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	30.21	29.69	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	32.55	31.51	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबु पी. / VARABABU P.
 जूनियर प्रोफेशनल (सी. एच. एन.) / JCM(P&S)
 इन्स्टीट्यूट ऑफ़ एनवायरनमेंटल एंड क्लाइमेट / NTPC Limited
 चट्टी बरियतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory
Dr. Anshu Ranjan
 02/02/2024
Quality Manager
(Dr. Anshu Ranjan)

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

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



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 MICRO, SMALL & MEDIUM ENTERPRISES



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	29.01.2024 to 30.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-34/04, 05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.50	0.48	0.41	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबू पी. / VARABABU P.
अन पर्यावरण (पी. एन. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag



Authorized Signatory
Prash Ranjan
02/02/2024
Quality Manager
(Prash Ranjan)

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

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





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	30.01.2024 to 31.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-35/04,05 & 06	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.46	0.34	0.44	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबु पी. / VARABABU P.
अन पर्यावरण (पी. एम. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

02/02/2024
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

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	30.01.2024 to 31.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	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/24/34/AA-36/03 & 04	Type of Sample	Suspended Dust and Gases
Period of Analysis	31.01.2024	Report Release Date	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.38	0.37	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबू पी. / VARABABU P.
एन एमएसएल (पी. एनड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकात कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
(Signature)
02/02/2024
Quality Manager
SCECPL (Piyush Ranjan)

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

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



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

TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000252F		
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	15.02.2024 to 16.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-55/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	17.02.2024 to 19.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure : 1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	55.10	53.67	48.50	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	93.28	90.37	88.62	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	39.32	37.50	34.64	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.50	39.37	36.42	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वराबाबू पी. / VARABABU P.
जन प्रशिक्षक (पी. एन्ड एन.) / JDM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

Piyush Ranjan
21/02/2024
Quality Manager
(Piyush Ranjan)

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.)	TC994824000000253F		
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	16.02.2024 to 17.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-56/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	17.02.2024 to 19.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	43.87	39.68	34.51	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	85.15	80.43	76.92	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	33.33	28.38	26.04	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	35.57	30.54	29.43	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वरबाबू पी. / VARABABU P.
जन महासंरक्षक (पी. एण्ड एस.) / JOM(P&S)
इन्टरपोली लिमिटेड / NTPC Limited
बड़ी हरिकानु कोवता खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory

21/02/2024
Quality Manager
(Piyush 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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000254F		
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	16.02.2024 to 17.02.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-57/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	17.02.2024 to 19.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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/Spec ifications as per CPCB
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	32.79	31.63	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	74.92	68.14	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	24.48	23.44	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	27.60	26.30	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एण्ड एन.) / DOM(P&N)
लवटोपीली लिमिटेड / NTPC Limited
बहु वरियतु कोवता जनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory
(Signature)
21/02/2024
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



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	15.02.2024 to 16.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-55/04, 05 & 06	Type of Sample	Gases
Period of Analysis	17.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure : 1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.48	0.46	0.39	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एनड एच.) / JOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

21/02/2024
Quality Manager
(Piyush Ranjan)

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

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



मेममे
सूक्ष्म, लघु एवं मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES



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	16.02.2024 to 17.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-56/04,05 & 06	Type of Sample	Gases
Period of Analysis	17.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.44	0.32	0.41	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबु पी. / VARABABU P.
जन प्रशासक (पी. एन्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिवातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
(Signature)
21/02/2024
Quality Manager
(Piyush Ranjan)

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

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



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



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	16.02.2024 to 17.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	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/24/50/AA-57/03 & 04	Type of Sample	Gases
Period of Analysis	17.02.2024	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.31	0.30	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)
वराबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एण्ड एच.) / DOM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
21/02/2024
Quality Manager
Piyush Ranjan





Sabz Care Environmental Consultancy Pvt. Ltd.



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000300F		
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	26.02.2024 to 27.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-70/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.02.2024 to 01.03.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	56.16	57.99	46.43	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	94.34	91.87	85.55	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	38.54	39.32	32.55	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.41	42.71	45.57	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वरबाबू पी. / VARABABU P.
जन महासंस्था (पी. एच. एच.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी खरिवल कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

02/03/2024.
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000301F	
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	27.02.2024 to 28.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-71/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.02.2024 to 01.03.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	44.70	38.57	32.35	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	87.16	76.83	78.53	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	35.42	28.65	30.47	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	37.47	30.49	31.76	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वरबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एन.) / JDM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
Piyush Ranjan
02/03/2024
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000302F	
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	27.02.2024 to 28.02.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-72/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	29.02.2024 to 01.03.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	31.64	30.54	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	73.60	70.37	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	26.30	25.52	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	27.95	27.31	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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)
वराबाबू पी. / VARABABU P.
जन. प्रशासक (पी. एण्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
(Signature)
Quality Manager
(Priyush Ranjan)
02/03/2024

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

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



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



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	26.02.2024 to 27.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-70/04, 05 & 06	Type of Sample	Gases
Period of Analysis	29.02.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.51	0.44	0.38	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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

(Signature)

वराबाबू पी. / VARABABU P.
जन. महासंस्था (पी. एन्ड एन.) / JOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

(Signature)
02/03/2024
Quality Manager
(Riyush Ranjan)

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

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



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



Sabz Care Environmental Consultancy Pvt. Ltd.



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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	27.02.2024 to 28.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-71/04,05 & 06	Type of Sample	Gases
Period of Analysis	29.02.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.48	0.30	0.40	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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

(Signature)

वराबाबू पी. / VARABABU P.
वन प्रसंस्करण (पी. एन्ड एन.) / DOM(P&N)
लन्टीपीसी लिमिटेड / NTPC Limited
बड़ी हरिकानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

(Signature)
02/03/2024
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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	27.02.2024 to 28.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	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/24/59/AA-72/03 & 04	Type of Sample	Gases
Period of Analysis	29.02.2024	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.28	0.31	2 (mg/m ³)

*** END OF REPORT ***

Remarks:.

- 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)

वराबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एच.) / JDM(P&H)
लन्टीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
02/03/2024
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.)		TC994824000000341F	
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	11.03.2024 to 12.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-95/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	13.03.2024 to 14.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	57.29	58.40	44.53	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	92.87	95.63	84.39	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182 (Part 2)	39.84	38.28	31.25	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182 (Part 6)	41.92	40.65	33.30	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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


वराबाबु पी. / VARABABU P.
जन महासंघ (पी. एंड एन.) / DOM(PAN)
लट्टीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag


Quality Manager
(Piyush Ranjan)

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.**

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000342F	
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	12.03.2024 to 13.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-96/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	14.03.2024 to 15.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
 Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
 Location-6: Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	46.11	40.53	34.66	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	86.85	81.62	79.43	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	36.20	30.49	28.58	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	38.74	32.39	30.49	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबू पी. / VARABABU P.
 जन. महासंयोजक (पी. एण्ड एस.) / JGM(P&S)
 इन्टीग्रेटी लिमिटेड / NTPC Limited
 बड़ी बरियतु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory

 16/03/2024
 Quality Manager
 (Piyush Ranjan)

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

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



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 MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000343F	
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	12.03.2024 to 13.03.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-97/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	13.03.2024 to 14.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 _{2.5}	µg/m ³	IS 5182 (Part 24)	30.65	32.26	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	75.26	78.46	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	24.22	23.44	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	26.04	25.41	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वरबाबु पी. / VARABABU P.
अन परामर्शक (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोदला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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	11.03.2024 to 12.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-95/04, 05 & 06	Type of Sample	Gases
Period of Analysis	13.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.50	0.46	0.34	2 (mg/m ³)

*** END OF REPORT ***

Remarks: .

- 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
14/03/2024
Quality Manager
(Piyush Ranjan)

Varababu P.
वराबाबू पी. / VARABABU P.
जन प्रमाणन (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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

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





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	12.03.2024 to 13.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-97/04,05 & 06	Type of Sample	Gases
Period of Analysis	13.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.45	0.28	0.38	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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)

वराबाबू पी. / VARABABU P.

जन महासंरक्षण (पी. एण्ड एच.) / JOM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
चट्टी बरिआतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
16/03/2024
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

C/C



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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	12.03.2024 to 13.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	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/24/80/AA-97/03 & 04	Type of Sample	Gases
Period of Analysis	13.03.2024	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.27	0.25	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वराबाबू पी. / VARABABU P.
जन. महासंस्थान (पी. एन. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी खरिवान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory


16/03/2024
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000391F	
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Particular of the Plant	Coal Mines
Address	At- Chatti Bariatu, Jorag & 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	27.03.2024 to 28.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-114/01, 02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.03.2024 to 01.04.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure :1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	58.77	57.83	42.40	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	94.26	92.66	80.29	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	38.54	36.46	32.55	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	41.50	38.53	35.57	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.

वराबाबु पी. / VARABABU P.
जन प्रसंख्यक (पी. एन्ड एन.) / DOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरिवन कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

01/04/2024
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.)	TC994824000000392F		
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	28.03.2024 to 29.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-115/01,02 & 03	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.03.2024 to 01.04.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure :1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"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 as per NAAQS 2009
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	48.65	39.21	38.57	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	89.73	78.55	79.16	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182(Part 2)	34.38	28.38	30.47	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182(Part 6)	36.42	30.70	32.60	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वरबाबू पी. / VARABABU P.
जन महासंरक्षण (पी. एन्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी करिवानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory


01/04/2024
Quality Manager
(Piyush Ranjan)

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.)		TC994824000000393F	
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	28.03.2024 to 29.03.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-116/1 & 02	Type of Sample	Suspended Dust and Gases
Period of Analysis	30.03.2024 to 01.04.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure : 1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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/Spec ifications as per CPCB
1.	Particulate Matter as PM _{2.5}	µg/m ³	IS 5182 (Part 24)	32.85	31.73	60 (µg/m ³)
2.	Particulate Matter as PM ₁₀	µg/m ³	IS 5182 (Part 23)	72.57	70.35	100 (µg/m ³)
3.	Sulphur Dioxide as SO ₂	µg/m ³	IS 5182 (Part 2)	23.44	21.62	80 (µg/m ³)
4.	Nitrogen Dioxide as NO ₂	µg/m ³	IS 5182 (Part 6)	25.62	23.50	80 (µg/m ³)

*** END OF REPORT ***

Remarks:

- 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.


वरबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एच.) / DOM(PAS)
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चट्टी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory


Quality Manager
(Piyush Ranjan)
01/04/2024

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

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





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	27.03.2024 to 28.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-114/04, 05 & 06	Type of Sample	Gases
Period of Analysis	30.03.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure :1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-1: Mine Area near Sub-Station (Coordinates- 23°53'28.77"N to 85°04'46.85"E)
Location-2: Mine Area near East Pit (Coordinates- 23°53'49"N to 85°03'44"E)
Location-3: Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.48	0.43	0.39	2 (mg/m ³)

*** END OF REPORT ***

Remarks: .

- 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
01/04/2024
Quality Manager
(Piyush Ranjan)

Varababu P.

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जन. महासंकेतक (पी. एण्ड एस.) / DOM(P&S)
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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	28.03.2024 to 29.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-115/04,05 & 06	Type of Sample	Gases
Period of Analysis	30.03.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure : 1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-4: Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)
Location-5: Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)
Location-6: Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)

B. TEST RESULTS

S.N.	PARAMETERS	UNIT	TEST METHOD	RESULTS (Location-1)	RESULTS (Location-2)	RESULTS (Location-3)	Requirements as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.44	0.26	0.36	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

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अन मधुपुर (पी. एच. एच.) / DOM(P&S)
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Authorized Signatory

01/04/2024
Quality Manager
(Piyush Ranjan)

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



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	28.03.2024 to 29.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	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/24/95/AA-116/03 & 04	Type of Sample	Gases
Period of Analysis	30.03.2024	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure : 1013 mBar Relative Humidity : 60%, Weather Condition - Clear		

A. GENERAL INFORMATION

Location of Sampling: Location-7: Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"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 as per NAAQS 2009
1	Carbon Monoxide as CO	mg/m ³	IS 5182(Part 10)	0.24	0.22	2 (mg/m ³)

*** END OF REPORT ***

Remarks:

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Quality Manager
(Piyush Ranjan)

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

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



CHATTIBARIATU COAL MINING PROJECT, NTPC LIMITED				
Report Type: Average Report- Static Details and Interval: day Time Range : 2023-10-01 06:00:00 to 2024-03-31 05:59:56				
Date (YYYY-MM-DD)	NTPC_CAMP PM10 (ug/m3)	NTPC_CAMP PM2.5 (ug/m3)	NTPC_CAMP SO2 (ug/m3)	NTPC_CAMP NOx (ug/m3)
Avg	57.6	49.95	2.14	12.7
Min	5.95	8.8	0.02	5.71
Max	99.97	60	11.12	25.78
Geom.Mean	57.6	49.95	2.14	12.7
Median	51.82	49.83	1.78	12.51
Mode	87.04	78.34	2.29	8.91
Std.Deviation	35.15	23.82	1.67	2.91
Prescribed Standard	None	None	None	None
First Max occurred at	2023-10-09	2024-03-29	2024-03-10	2024-02-09
First Min occurred at	2024-01-07	2024-03-08	2023-11-26	2023-12-19
Valid Data Points	148	157	161	161
Total Data Points	183	183	183	183
Data Availability %	80.87	85.79	87.98	87.98
Uncertainty	0	0	0	0
2023-10-01	17.78	13.36	0.62	8.91
2023-10-02	NA	NA	NA	NA
2023-10-03	20.72	15.54	2.69	9.01
2023-10-04	19.49	14.64	0.86	11.12
2023-10-05	33.70	25.31	2.48	9.54
2023-10-06	NA	NA	0.28	10.55
2023-10-07	42.41	31.73	2.42	12.05
2023-10-08	75.45	56.60	0.06	11.20
2023-10-09	98.91	56.40	1.74	11.88
2023-10-10	97.55	53.20	3.36	13.25
2023-10-11	87.90	55.94	2.08	12.96
2023-10-12	84.54	53.39	2.52	13.33
2023-10-13	71.78	53.84	5.20	13.39
2023-10-14	78.30	58.72	8.25	14.19
2023-10-15	74.57	55.93	3.34	13.77
2023-10-16	90.39	57.78	3.29	15.25
2023-10-17	NA	NA	2.94	11.83
2023-10-18	NA	NA	0.77	10.02
2023-10-19	77.64	58.31	5.40	8.84
2023-10-20	60.58	45.40	3.18	13.19
2023-10-21	53.84	40.36	1.71	12.32
2023-10-22	94.17	50.66	1.07	14.67
2023-10-23	NA	NA	NA	NA
2023-10-24	NA	NA	NA	NA
2023-10-25	62.37	46.84	2.93	8.31
2023-10-26	72.28	54.23	3.75	13.06
2023-10-27	74.15	55.66	1.41	14.39
2023-10-28	56.89	42.66	0.77	13.01
2023-10-29	49.59	37.21	1.79	13.83
2023-10-30	54.73	41.05	3.47	11.93

वराबाबु पी. / VARABABU P.
 जन प्रशासक (पी. एन्ड एच.) / DOM(P&H)
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 चंडी बरियाबु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

2023-10-31	61.90	46.42	0.81	13.81
2023-11-01	NA	NA	NA	NA
2023-11-02	57.53	43.20	1.45	11.29
2023-11-03	87.52	55.63	5.59	14.70
2023-11-04	72.62	54.49	2.19	14.53
2023-11-05	78.37	58.82	2.60	14.85
2023-11-06	85.06	53.86	2.41	14.55
2023-11-07	99.97	54.98	2.41	15.70
2023-11-08	94.16	51.87	3.27	16.68
2023-11-09	94.86	60.00	4.03	13.73
2023-11-10	93.76	59.06	3.47	14.69
2023-11-11	95.76	41.82	7.86	14.03
2023-11-12	95.35	54.06	1.64	13.76
2023-11-13	90.68	47.97	0.92	13.87
2023-11-14	85.25	53.90	1.13	15.84
2023-11-15	98.22	53.65	0.79	13.93
2023-11-16	87.04	35.26	1.86	12.98
2023-11-17	50.60	38.00	1.80	11.41
2023-11-18	57.38	43.01	0.40	12.77
2023-11-19	46.26	34.69	1.06	16.93
2023-11-20	49.09	36.81	0.46	14.29
2023-11-21	93.99	38.02	2.40	15.36
2023-11-22	81.83	43.92	0.77	12.18
2023-11-23	84.01	55.56	0.75	16.32
2023-11-24	99.00	54.29	1.49	15.88
2023-11-25	98.21	53.62	0.89	14.19
2023-11-26	75.56	49.14	0.02	16.31
2023-11-27	81.97	56.54	2.29	10.22
2023-11-28	84.26	45.73	1.12	18.32
2023-11-29	97.64	53.27	2.17	18.27
2023-11-30	96.82	42.61	1.97	15.15
2023-12-01	96.46	37.36	1.37	11.25
2023-12-02	81.01	59.71	1.84	13.74
2023-12-03	56.54	42.42	1.60	14.64
2023-12-04	85.71	54.26	3.17	14.25
2023-12-05	68.19	51.13	1.64	13.50
2023-12-06	35.19	26.38	0.96	9.83
2023-12-07	52.68	39.51	1.77	10.91
2023-12-08	39.56	29.63	2.00	11.48
2023-12-09	65.94	49.51	1.33	13.73
2023-12-10	62.86	47.22	0.72	14.17
2023-12-11	49.26	36.93	0.63	21.77
2023-12-12	NA	NA	NA	NA
2023-12-13	52.55	39.41	0.72	10.78
2023-12-14	81.70	41.30	0.60	13.13
2023-12-15	87.04	55.27	0.61	12.45
2023-12-16	84.03	52.98	0.95	11.32
2023-12-17	73.76	55.35	0.64	10.72
2023-12-18	94.01	57.97	0.73	8.94
2023-12-19	68.62	51.47	0.83	5.71

वराबाबू पी. / VARABABU P.

एन एनएसएल (पी. एनएस.)/ DOM(PAS)
 एनटीपीसी लिमिटेड/ NTPC Limited
 चंडी हरिकानु कोयला खनन परियोजना/ CBCMP
 हजारीबाग / Hazaribag

2023-12-20	92.48	59.35	0.85	9.23
2023-12-21	94.19	40.64	1.20	10.84
2023-12-22	90.26	47.65	1.49	10.64
2023-12-23	99.01	54.22	1.53	11.89
2023-12-24	95.52	41.70	2.29	17.08
2023-12-25	NA	NA	NA	NA
2023-12-26	84.42	38.34	1.32	8.57
2023-12-27	81.22	58.43	2.14	13.43
2023-12-28	71.64	51.24	2.22	13.72
2023-12-29	95.36	54.05	0.96	13.31
2023-12-30	53.74	50.28	1.33	11.52
2023-12-31	98.47	43.86	3.14	10.24
2024-01-01	80.68	50.41	0.70	9.36
2024-01-02	90.51	57.88	2.29	7.85
2024-01-03	84.61	78.34	1.25	11.36
2024-01-04	13.92	11.04	1.48	12.41
2024-01-05	26.10	NA	1.48	16.94
2024-01-06	73.44	42.54	2.57	11.55
2024-01-07	55.95	20.50	0.92	12.02
2024-01-08	75.54	37.31	1.85	18.94
2024-01-09	83.63	36.87	1.02	12.08
2024-01-10	90.82	54.70	0.22	12.41
2024-01-11	NA	NA	NA	NA
2024-01-12	NA	NA	NA	NA
2024-01-13	87.62	52.71	0.51	9.73
2024-01-14	82.28	54.82	0.23	11.00
2024-01-15	97.15	48.76	1.08	12.89
2024-01-16	74.49	32.57	3.24	10.39
2024-01-17	85.61	40.46	4.62	9.13
2024-01-18	71.28	52.39	2.55	9.05
2024-01-19	84.97	36.12	2.58	9.14
2024-01-20	62.48	52.05	2.07	10.03
2024-01-21	82.93	51.34	0.91	8.88
2024-01-22	89.48	42.43	2.20	13.90
2024-01-23	67.56	37.39	2.01	11.78
2024-01-24	62.41	52.43	0.98	14.61
2024-01-25	90.73	41.23	0.79	11.36
2024-01-26	NA	NA	NA	NA
2024-01-27	NA	NA	NA	NA
2024-01-28	NA	NA	NA	NA
2024-01-29	74.47	25.73	1.79	9.40
2024-01-30	62.43	49.83	1.67	14.74
2024-01-31	75.48	54.62	1.83	11.61
2024-02-01	83.54	52.44	2.31	11.92
2024-02-02	83.28	47.79	0.31	13.53
2024-02-03	NA	NA	NA	NA
2024-02-04	NA	NA	NA	NA
2024-02-05	NA	NA	NA	NA
2024-02-06	NA	NA	NA	NA
2024-02-07	NA	NA	NA	NA

(Signature)

वराबाबु पी. / VARABABU P.

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2024-02-08	31.14	22.05	7.31	10.29
2024-02-09	70.74	38.23	6.20	25.78
2024-02-10	NA	NA	NA	NA
2024-02-11	NA	NA	NA	NA
2024-02-12	89.78	33.47	5.61	7.31
2024-02-13	83.73	50.71	3.00	12.51
2024-02-14	81.43	51.30	2.07	13.12
2024-02-15	97.53	33.60	2.94	11.69
2024-02-16	94.08	25.79	4.16	11.95
2024-02-17	91.56	32.13	5.03	13.88
2024-02-18	62.69	35.27	2.96	15.49
2024-02-19	63.09	34.06	4.46	13.26
2024-02-20	73.04	42.02	5.79	17.28
2024-02-21	77.91	21.34	3.42	15.47
2024-02-22	66.97	23.39	1.45	14.04
2024-02-23	87.10	17.37	1.00	13.20
2024-02-24	NA	24.79	2.61	12.34
2024-02-25	NA	22.59	0.95	9.13
2024-02-26	NA	27.58	2.37	11.53
2024-02-27	NA	17.36	2.06	15.08
2024-02-28	NA	26.63	3.15	8.11
2024-02-29	NA	41.01	2.35	13.79
2024-03-01	NA	25.27	2.06	15.99
2024-03-02	NA	27.06	2.56	13.67
2024-03-03	NA	32.43	0.90	11.72
2024-03-04	NA	25.92	1.34	11.05
2024-03-05	96.93	22.24	0.97	15.39
2024-03-06	82.19	15.19	1.78	16.81
2024-03-07	NA	NA	NA	NA
2024-03-08	16.89	8.80	1.22	8.91
2024-03-09	31.40	23.76	1.74	11.76
2024-03-10	46.04	23.19	11.12	10.10
2024-03-11	43.27	25.88	1.62	10.04
2024-03-12	43.51	25.32	2.07	14.75
2024-03-13	51.09	31.66	1.61	24.45
2024-03-14	NA	NA	NA	NA
2024-03-15	26.53	12.32	2.96	6.92
2024-03-16	30.00	22.49	0.08	11.80
2024-03-17	27.27	24.24	2.26	10.39
2024-03-18	59.44	18.00	0.94	8.33
2024-03-19	44.83	15.94	1.22	13.39
2024-03-20	32.62	16.87	0.46	12.82
2024-03-21	12.87	11.79	1.43	12.51
2024-03-22	20.67	19.25	3.36	12.56
2024-03-23	44.57	27.39	4.30	13.49
2024-03-24	50.00	30.50	1.42	14.71
2024-03-25	26.01	31.67	5.89	11.72
2024-03-26	36.62	26.48	3.92	11.03
2024-03-27	34.76	22.38	2.38	9.52
2024-03-28	33.23	19.75	1.10	11.95

वराबाबू पी. / VARABABU P.

डन पावरप्लान (पी. एन. डन.) / DOM(P&D)
 एनटीपीसी लिमिटेड / NTPC Limited
 चंडी हरिकानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

2024-03-29	41.23	56.54	1.11	9.94
2024-03-30	NA	NA	NA	NA
2024-03-31	NA	NA	NA	NA

वराबाबू पी. / VARABABU P.

एन. महाबलेश्वर (पी. एमड एन.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 बड़ी हरियाना कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001645F		
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	Ranjeet Yadav & Team
Date of Study	12.10.2023 to 13.10.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	14.10.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/321/NR-213/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C , Barometric Pressure : 1016 mBar Relative Humidity : 61%, 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	Ld-Mean (Day)	Ln-Mean (Night)	L _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.5	74.1	59.0	72.9	79.8
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	53.6	74.1	61.3	73.5	79.4
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	55.4	72.0	56.9	70.8	77.7

*** 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.

वराबाबू पी. / VARABABU P.

जन महासंरक्षण (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग, Jharkhand

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001646F
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand
Discipline	Chemical
Date of Study	13.10.2023 to 14.10.2023
Sample Receiving Date	14.10.2023
Sample ID	SCECPL/TR/23/321/NR-214/04 & 05
Sample details	Ambient Noise
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure : 1016 mBar Relative Humidity : 61%, 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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	57.2	73.8	58.7	72.6	79.5
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	49.4	67.8	55.2	67.1	72.8

*** 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.

(Signature)

वराबाबु पी. / VARABABU P.

अन परामर्शदाता (पी. एन्ड एल.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी रीकवरी कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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TC-0948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001647F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	13.10.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	14.10.2023	Sample Condition	Scaled and Preserved
Sample ID	SCECPL/TR/23/321/NR-215/01,02,03,04	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	19.10.2023
Meteorological Information	Average Ambient Temperature : 30.0°C, Barometric Pressure :1016 mBar Relative Humidity : 61%, 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	Leq Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	58.9	78.8	84.7
2. Dozer CAT - D8 480 (10 meter Distance from Source)	63.9	79.3	86.2
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	63.3	89.1	83.2
4. Near Secondary Crusher 480 (10 meter Distance from Source)	54.2	74.1	80.0

*** 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.

(Signature)

यराबाबु पी. / VARABABU P.

एन एनएचएल (पी. एनड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory
(Signature)
Quality Manager
(Piyush Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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TEST REPORT



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Unique Lab Report No. (ULR No.)	TC994823000001746F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	27.10.2023 to 28.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/336/NR-221/01,02 & 03	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 25.5°C , Barometric Pressure :1018 mBar Relative Humidity : 60%, Weather Condition - Clear		
Report Release Date	01.11.2023		

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 _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	52.2	72.1	58.1	71.1	76.9
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	57.6	74.2	59.1	73.0	79.9
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.6	72.5	58.5	71.5	77.3

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

एन एमएलएल (पी. एनएल.)/ DOM(P&A)
एनटीपीसी लिमिटेड/ NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना/ CBCMP
हजारीबाग, Jharkhand

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



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MICRO, SMALL & MEDIUM ENTERPRISES



Sabz Care Environmental Consultancy Pvt. Ltd.



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001747F		
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	
Discipline	Chemical	Particular of the Plant	Coal Mines
Date of Study	28.10.2023 to 29.10.2023	Group	Atmospheric Pollution
Sample Receiving Date	30.10.2023	Sample Collected by	Anup Dutta & Team
Sample ID	SCECPL/TR/23/336/NR-222/04 & 05	Sample Condition	Sealed and Preserved
Sample details	Ambient Noise	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure :1018 mBar Relative Humidity : 01%, Weather Condition - Clear		
	Report Release Date - 01.11.2023		

Limit in Leq dB(A)

(CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF
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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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	57.8	74.4	59.3	73.2	80.1
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	50.8	69.2	56.6	68.5	74.2

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

अन परामर्शदाता (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001748F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.10.2023	Sample Collected by	Anup Dutta & Team
Sample Receiving Date	30.10.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/336/NR-223/01,02,03,04	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	01.11.2023
Meteorological Information	Average Ambient Temperature : 25.5°C, Barometric Pressure : 1018 mBar Relative Humidity : 60%, 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	Leq Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	59.1	77.9	83.4
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)	68.1	83.5	90.4
4. Near Secondary Crusher 480 (10 meter Distance from Source)	55.4	73.1	78.8

*** END OF REPORT ***

Remarks-

dB(A) L_{eq} & 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.

वराबाबू पी. / VARABABU P.

जन महासंघ (पी. एन्ड एन.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

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

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

Authorized Signatory

Quality Manager
(Piyush Ranjan)



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001783F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jorag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Ranjeet Yadav & Team
Date of Study	09.11.2023 to 10.11.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	11.11.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/346/NR-230/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C , Barometric Pressure :1018 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)	L _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	54.4	72.8	60.2	72.1	77.8
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	54.4	74.3	60.3	73.3	79.1
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	57.2	74.0	58.7	72.8	79.1

*** 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.

वराबाबू पी. / VARABABU P.
जन प्रसंख्यक (पी. एन्ड एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियान कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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

TEST REPORT

Unique Lab Report No. (ULR No.)		TC994823000001784F	
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	Ranjeet Yadav & Team
Date of Study	10.11.2023 to 11.11.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	11.11.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/346/NR-231/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.11.2023
Meteorological Information	Average Ambient Temperature : 25.0°C, Barometric Pressure :1018 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
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	58.3	74.9	59.8	73.7	80.6
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	38.7	59.3	46.4	58.6	64.5

*** 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.

वरबाबू पी. / VARABABU P.

एन. एम. एल. (पी. एन. एल.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियातु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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 : scecpmdp@gmail.com



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

TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001785F		
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	
Discipline	Chemical	Particular of the Plant	Coal Mines
Date of Study	10.11.2023	Group	Atmospheric Pollution
Sample Receiving Date	11.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample ID	SCECPL/TR/23/346/NR-232/01,02,03,04	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 : 25.0°C, Barometric Pressure :1018 mBar Relative Humidity : 59%, Weather Condition - Clear	Report Release Date	16.11.2023

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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	56.9	76.8	82.7
2. Dozer CAT - D8 480 (10 meter Distance from Source)	60.3	79.1	84.6
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	62.7	82.6	88.5
4. Near Secondary Crusher 480 (10 meter Distance from Source)	58.9	74.3	81.2

*** 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.

वराबाबू पी. / VARABABU P.

अन परामर्शदाता (पी. एच. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिकातु कोयला खनन परियोजना / CBCMP
हजारीबाग, Jharkhand

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

Authorized Signatory
Quality Manager
(Piyush Ranjan)



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



Sabz Care Environmental Consultancy Pvt. Ltd.



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001884F
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.
Address	At- Chatti Bariatu, Jordag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand
Discipline	Chemical
Date of Study	27.11.2023 to 28.11.2023
Sample Receiving Date	29.11.2023
Sample ID	SCECPL/TR/23/354/NR-234/01,02 & 03
Sample details	Ambient Noise
Meteorological Information	Average Ambient Temperature : 24.5°C , Barometric Pressure : 1019 mBar Relative Humidity : 61%, Weather Condition - Clear
Work Order No.	CBCMPL/VO/23-24/018 Date - 02.05.2023
Particular of the Plant	Coal Mines
Group	Atmospheric Pollution
Sample Collected by	Ranjeet Yadav & Team
Sample Condition	Sealed and Preserved
Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample Drawn by	Sabz Care Lab
Report Release Date	30.11.2023

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 _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	57.6	74.2	59.1	73.0	79.9
2. Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	54.0	73.7	59.9	72.8	78.3
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	54.8	73.2	60.6	72.5	78.2

*** 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.

वरबाबू पी. / VARABABU P.

जय प्रकाश प्रोजेक्ट (पी. एन्ड एल.) / JPM(P&E)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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MICRO, SMALL & MEDIUM ENTERPRISES

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001885F
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.
Address	At- Chatti Bariatu, Jordag & Pagar, P.S.-Keredari, District-Hazaribagh, State-Jharkhand
Discipline	Chemical
Date of Study	28.11.2023 to 29.11.2023
Sample Receiving Date	29.11.2023
Sample ID	SCECPL/TR/23/354/NR-235/04 & 05
Sample details	Ambient Noise
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, 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
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	52.6	72.3	58.5	71.4	76.9
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	44.4	61.0	45.9	59.8	66.7

*** 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.

वराबाबू पी. / VARABABU P.

जन प्रशासक (पी. एण्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
राष्ट्रीय पर्यावरण कोषता खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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



मेमे
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MICRO, SMALL & MEDIUM ENTERPRISES



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001886F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.11.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	29.11.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/354/NR-236/01,02,03,04	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	30.11.2023
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure : 1019 mBar Relative Humidity : 61%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 480 (10 meter Distance from Source)	58.4	76.1	81.8
2. Dozer CAT - D8 480 (10 meter Distance from Source)	63.1	78.5	85.4
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	61.5	81.4	87.3
4. Near Secondary Crusher (10 meter Distance from Source)	58.6	74.0	80.9

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

अन्य परामर्शदाता (पी. एच. एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणा कोयला खदान परियोजना / CBCMP
हजारीबाग / Hazaribagh

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



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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001907F		
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	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Md. R. Rahman & Team
Date of Study	14.12.2023 to 15.12.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	16.12.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/362/NR-240/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C , Barometric Pressure :1022 mBar Relative Humidity : 58%, 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	Ld-Mean (Day)	Ln-Mean (Night)	L _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	54.0	73.7	59.9	72.8	78.3
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	54.6	73.0	60.4	72.3	78.0
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.9	72.3	59.7	71.6	77.3

*** 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.

(Signature)

वरबाबू पी. / VARABABU P.

जन प्रशासनिक (पी. एन्ड एम.) / DOM(P&M)

एनटीपीसी लिमिटेड / NTPC Limited

बड़ो बरिबारा कोयला खनन परियोजना / CBCMP

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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





TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001908F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	15.12.2023 to 16.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/362/NR-241/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure : 1022 mBar Relative Humidity : 58%, Weather Condition - Clear		
Report Release Date	19.12.2023		

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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	52.2	72.8	59.9	72.1	78.0
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	41.7	61.3	46.9	60.2	65.1

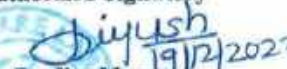
*** END OF REPORT ***

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.


वराबाबू पी. / VARABABU P.
जन प्रशिक्षक (पी. एण्ड एन.) / JDM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribagh

Authorized Signatory


Quality Manager
(Piyush Ranjan)
19/12/2023

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



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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001909F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	15.12.2023	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	16.12.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/362/NR-242/01,02,03 & 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	19.12.2023
Meteorological Information	Average Ambient Temperature : 18°C, Barometric Pressure : 1022 mBar Relative Humidity : 58%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	Leq Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	58.1	75.8	81.5
2. Dozer CAT - D8 480 (10 meter Distance from Source)	57.6	77.2	82.8
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	60.7	80.6	86.5
4. Near Secondary Crusher (10 meter Distance from Source)	56.1	73.8	79.5

*** END OF REPORT ***

Remarks-

- dB(A) L_{eq} & 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.

वरबाबु पी. / VARABABU P.जन प्रदूषण नियंत्रण बोर्ड (पी. एन. डी. सी.) / DOM(P&S)
राज्यीय स्तर पर / NTPC Limited

Authorized Signatory

Quality Manager
(Piyush Ranjan)Registered Office : Aarti Bhawan, Balwan Bighas, PO- Madhupur, Dist-Deoghar-815353 (Jharkhand)
Contact : 09334315731, 07563048389, e-mail : scecpmdp@gmail.com**मेमे**
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MICRO - SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001922F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jorag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Ranjeet Yadav & Team
Date of Study	21.12.2023 to 22.12.2023	Sample Condition	Sealed and Preserved
Sample Receiving Date	23.12.2023	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/371/NR-246/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	26.12.2023
Meteorological Information	Average Ambient Temperature : 19°C , Barometric Pressure :1018 mBar Relative Humidity : 64%, 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	Ld-Mean (Day)	Ln-Mean (Night)	L _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	53.7	72.1	59.5	71.4	77.1
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	52.2	72.5	58.9	71.6	76.8
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.5	72.2	58.4	71.3	76.8

*** 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.

(Signature)
वराबाबु पी. / VARABABU P.
जन प्रशासनिक (पी. एच. एच.) / JOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
एडी बरियतु कोयला खनन परियोजना / CBCMP

Authorized Signatory
(Signature)
Prakash Ranjan
26/12/2023
Quality Manager
(Prakash Ranjan)

Registered Office : Aarti Bhawan, Bawani Singh / Hazaribagh - Madhupur, Dist-Deoghar-815353 (Jharkhand)
Contact : 09334315731, 07563048389, e-mail : scecpimdp@gmail.com



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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001923F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	22.12.2023 to 23.12.2023	Sample Collected by	Ranjeet Yadav & Team
Sample Receiving Date	23.12.2023	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/371/NR-247/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, Weather Condition - Clear	Report Release Date	26.12.2023

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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	48.7	69.3	56.4	68.6	74.5
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	44.7	65.3	52.4	64.6	70.5

*** 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.

Varababu P.
वराबाबू पी. / VARABABU P.
 जन प्रशिक्षण (पी. एच. एस.) / DOM(P&S)
 इन्टीग्रेटेड सिस्टिम्स / NTPC Limited
 बड़ी बरिबानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

Authorized Signatory
Ranjeet Yadav
Ranjeet Yadav
 Quality Manager
 (Ranjeet Ranjan)
 26/12/2023

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

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994823000001924F		
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	
Discipline	Chemical	Particular of the Plant	Coal Mines
Date of Study	22.12.2023	Group	Atmospheric Pollution
Sample Receiving Date	23.12.2023	Sample Collected by	Ranjeet Vadav & Team
Sample ID	SCECPL/TR/23/371/NR-248/01,02,03,04	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 : 19°C, Barometric Pressure : 1018 mBar Relative Humidity : 64%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	54.7	74.6	80.5
2. Dozer CAT - D8 480 (10 meter Distance from Source)	61.4	76.8	83.7
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	63.5	81.2	86.9
4. Near Secondary Crusher (10 meter Distance from Source)	58.8	74.2	81.1

*** 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.

वरबाबू पी. / VARABABU P.

जन महासंस्था (पी. एच. एस.) / DOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited



Authorized Signatory
Ranjeet Ranjan
Quality Manager
(Piyush Ranjan)

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000172F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	08.01.2024 to 09.01.2024	Sample Collected by	Vivek Kr. Malakar & Team
Sample Receiving Date	10.01.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/15/NR-12/01,02 & 03	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 18.5°C , Barometric Pressure :1017 mBar Relative Humidity : 58%, 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	Ld-Mean (Day)	Ln-Mean (Night)	L _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	53.1	71.5	58.9	70.8	76.5
2. Kabed Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	53.5	73.1	58.7	72.0	76.9
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.0	72.7	58.9	71.8	77.3

*** 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.

यराबाबू पी. / VARABABU P.

अध्यक्ष, कोयला खनन परियोजना / CBCMP
हजारबिहारी, जहार्खण्ड / Hazaribagh

Authorized Signatory

16/01/2024
Quality Manager
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bazar, P.O. Machupur, Dist-Deoghar-815353 (Jharkhand)
Contact : 09334315731, 07563048389, e-mail : scecpmdpl@gmail.com



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Sabz Care Environmental Consultancy Pvt. Ltd.



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000173F	
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	Vivek Kr. Malakar & Team
Date of Study	09.01.2024 to 10.01.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	10.01.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/15/NR-13/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	48.7	68.4	54.6	67.5	73.0
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	48.4	66.8	54.2	66.1	71.8

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

जन प्रशिक्षण (पी. एन्ड एन.) / JOM(PAN)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियत कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag



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



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Sabz Care Environmental Consultancy Pvt. Ltd.



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000174F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	09.01.2024	Sample Collected by	Vivek Kr. Malakar & Team
Sample Receiving Date	10.01.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/15/NR-14/01,02,03,04	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	16.01.2024
Meteorological Information	Average Ambient Temperature : 18.5°C, Barometric Pressure :1017 mBar Relative Humidity : 58%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	55.0	73.8	79.3
2. Dozer CAT - D8 480 (10 meter Distance from Source)	60.5	75.9	82.8
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	60.9	79.4	84.3
4. Near Secondary Crusher (10 meter Distance from Source)	54.0	73.9	79.8

*** 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.

Varababu P.

वराबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एण्ड एस.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला-खनन परियोजना / CBCMP
हजारिबाग / Hazaribagh

Authorized Signatory
16/01/2024
Quality Manager
(Rush Ranjan)

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000211F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	29.01.2024 to 30.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/34/NR-27/01,02 & 03	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure :1017 mBar Relative Humidity : 56%, Weather Condition - Clear		
Report Release Date	02.02.2024		

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 CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	50.6	71.0	57.8	70.2	75.8
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	56.5	73.1	58.0	71.9	78.8
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	52.2	72.8	59.9	72.1	78.0

*** 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.

Varababu P.

वराबाबु पी. / VARABABU P.
अन परामर्शदाता (पी. एन. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory
Pradyumn Ranjan
02/02/2024
Quality Manager
(Pradyumn Ranjan)

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



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MICRO, SMALL & MEDIUM ENTERPRISES

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

TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000212F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	30.01.2024 to 31.01.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	31.01.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/23/34/NR-28/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure :1017 mBar Relative Humidity : 56%, Weather Condition - Clear		
	Report Release Date		
	02.02.2024		

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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	53.2	71.6	59.0	70.9	76.6
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	48.3	68.9	56.0	68.2	74.1

*** 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.

(Signature)
वराबाबू पी. / VARABABU P.
 जन प्रशासक (पी. एन्ड एच.) / DOM(P&H)
 एनटीपीसी लिमिटेड / NTPC Limited
 पट्टी परियोजना कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag

(Signature)
Authorized Signatory
Quality Manager
 Divyush Ranjan

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

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



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 MICRO, SMALL & MEDIUM ENTERPRISES



Sabz Care Environmental Consultancy Pvt. Ltd.



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000213F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	30.01.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	31.01.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/34/NR-29/01,02,03,04	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	02.02.2024
Meteorological Information	Average Ambient Temperature : 20.5°C, Barometric Pressure :1017 mBar Relative Humidity : 56%, Weather Condition - Clear		

Limit in Leg 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	54.2	74.1	80.0
2. Dozer CAT - D8 480 (10 meter Distance from Source)	59.4	74.8	81.7
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	58.8	78.7	84.6
4. Near Secondary Crusher (10 meter Distance from Source)	55.2	72.9	78.6

*** END OF REPORT ***

Remarks-

- dB(A) L_{eq} & 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.

वराबाबू पी. / VARABABU P.

जन महासंघ (पी. एनड एम.) / DOM(PAN)
इन्टीग्रेटी लिमिटेड / NTPC Limited
बड़ी बरियानु खोदला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory
02/02/2024
Quality Manager
Prayush Ranjan

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000255F	
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	Md. R. Rahamn & Team
Date of Study	15.02.2024 to 16.02.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	17.02.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/24/50/NR-42/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, 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 _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	49.2	69.8	56.9	69.1	75.0
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	52.1	71.7	57.3	70.6	75.5
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	56.1	72.7	57.6	71.5	78.4

*** 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.

(Signature)
वरबाबू पी. / VARABABU P.
अन मल्लभारत (पी. एन. एन.) / DOM(P&B)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
(Signature)
Quality Manager
(Priyush Ranjan)
21/02/2024

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.)		TC994824000000256F	
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	Md. R. Rahman & Team
Date of Study	16.02.2024 to 17.02.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	17.02.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/24/50/NR-43/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure :1016 mBar Relative Humidity : 55%, 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
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	51.3	71.9	59.0	71.2	77.1
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	49.8	68.2	55.6	67.5	73.2

*** 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.

वराबाबू पी. / VARABABU P.

जन प्रशिक्षण (पी. एच. एच.) / DDM(PAB)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory
21/02/2024
Quality Manager
(Diyash Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES

TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000257F		
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	16.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	17.02.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/50/NR-44/01,02,03,04	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	21.02.2024
Meteorological Information	Average Ambient Temperature : 23.5°C, Barometric Pressure : 1016 mBar Relative Humidity : 55%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	55.3	74.9	78.7
2. Dozer CAT - D8 480 (10 meter Distance from Source)	58.8	75.4	81.1
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	57.9	78.5	83.7
4. Near Secondary Crusher (10 meter Distance from Source)	53.2	73.8	79.0

*** 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.

(Signature)

वराबाबु पी. / VARABABU P.

एन एमएलएल (पी. एनड एन.) / DOM(P&N)

एनटीपीसी लिमिटेड / NTPC Limited

जड़ी सीक्यु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

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





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TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000303F		
Name of Customer	Chatti Bariatu Coal Mining Project, NTPC Ltd.	Work Order No.	CBCMPL/WO/23-24/018
Address	At- Chatti Bariatu, Jorlag & Pagar P.S.-Keredari, District-Hazaribagh State-Jharkhand	Particular of the Plant	Coal Mines
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Md. R. Rahamn & Team
Date of Study	26.02.2024 to 29.02.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	29.02.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/24/59/NR-48/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1017 mBar Relative Humidity : 61%, 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 _{eq} Mean	Maximum
1. Site Office CBCMP* (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	50.2	70.8	57.9	70.1	76.0
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	52.7	73.1	59.9	72.3	77.9
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	53.1	71.5	58.9	70.8	76.5

*** 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.

Varababu P.

वराबाबु पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory

Piyush Ranjan
02/03/2024
Quality Manager
(Piyush/Ranjan)

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000304F	
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	Md. R. Rahman & Team
Date of Study	27.02.2024 to 28.02.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	29.02.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/23/59/NR-49/04 & 05	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1017 mBar Relative Humidity : 61%, 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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	55.6	72.2	57.1	71.0	77.9
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	49.2	67.6	55.0	66.9	72.6

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

जन महासंघ (पी. एन्ड एन.) / JOM(P&N)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग-1, Hazaribagh

Authorized Signatory
(Signature)
02/03/2024
Quality Manager
(Priyush Ranjan)

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

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



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



Sabz Care Environmental Consultancy Pvt. Ltd.



TC-9948



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TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000305F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	27.02.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	29.02.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/59/NR-50/01,02,03,04	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	02.03.2024
Meteorological Information	Average Ambient Temperature : 24.5°C, Barometric Pressure :1017 mBar Relative Humidity : 61%, Weather Condition - Clear		

Limit in Leg 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	57.4	72.8	79.7
2. Dozer CAT - D8 480 (10 meter Distance from Source)	53.0	72.9	78.8
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	57.6	76.4	81.9
4. Near Secondary Crusher (10 meter Distance from Source)	53.3	73.2	79.1

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

अन्य परामर्शदाता (पी. एच. एन.) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियतु कोयला-खनन-परियोजना / CBCMP
हजारबहाग / Hazaribagh

Authorized Signatory
yush
02/03/2024
Quality Manager
(Piyush Ranjan)

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



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



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000344F	
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	Md. R. Rahamn & Team
Date of Study	11.03.2024 to 12.03.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	13.03.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/24/80/NR-63/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure :1014 mBar Relative Humidity : 57%, 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 _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	50.4	71.0	58.1	70.3	76.2
2. Kaped Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	56.1	72.7	57.6	71.5	78.4
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	51.2	71.8	58.9	71.1	77.0

*** 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.

(Signature)
वरबाबू पी. / VARABABU P.
जन प्रशासनिक (पी. एण्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribagh

Authorized Signatory
(Signature)
Quality Manager
(Piyush Ranjan)
16/3/2024

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

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



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MICRO, SMALL & MEDIUM ENTERPRISES



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000345F		
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	12.03.2024 to 13.03.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	13.03.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/80/NR-64/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure : 1014 mBar Relative Humidity : 57%, Weather Condition - Clear		
	Report Release Date		
	16.03.2024		

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 _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	55.3	72.1	56.8	70.9	77.2
5. Kishumpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	49.4	67.8	55.2	67.1	72.8

*** 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.

Varababu P.
वरबाबू पी. / VARABABU P.
जन महासंस्था (पी. एच. एच.) / DOM(P&H)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

Authorized Signatory
Piyush Ranjan
Quality Manager
(Piyush Ranjan)
16/3/2024

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

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000346F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	12.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	13.03.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/80/NR-65/01,02,03,04	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	16.03.2024
Meteorological Information	Average Ambient Temperature : 26.5°C, Barometric Pressure :1014 mBar Relative Humidity : 57%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	53.2	73.1	79.0
2. Dozer CAT – D8 480 (10 meter Distance from Source)	58.9	74.3	81.2
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	55.6	75.2	80.8
4. Near Secondary Crusher (10 meter Distance from Source)	52.7	72.6	78.5

*** 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.

वरबाबू पी. / VARABABU P.

जन गणमण्डल (पी. एनड एन.) / DOM(PAN)
इन्स्टीट्यूट लिमिटेड / NTPC Limited
बड़ी बरियानु-कोयला खनन परियोजना / CBCMP
हजारिबाग, Jharkhand

Authorized Signatory
Piyush Ranjan
Quality Manager
(Piyush Ranjan)
16/3/2024

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

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000394F		
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
		Group	Atmospheric Pollution
Discipline	Chemical	Sample Collected by	Md. R. Rahamn & Team
Date of Study	27.03.2024 to 28.03.2024	Sample Condition	Sealed and Preserved
Sample Receiving Date	30.03.2024	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample ID	SCECPL/TR/24/95/NR-76/01,02 & 03	Sample Drawn by	Sabz Care Lab
Sample details	Ambient Noise	Report Release Date	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure : 1013 mBar Relative Humidity : 60%, 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 _{eq} Mean	Maximum
1. Site Office CBCMP (Coordinates- 23°53'28.16"N to 85°04'57.53"E)	53.7	72.1	59.5	71.4	77.1
2. Kated Village (Coordinates- 23°53'23.0"N to 85°05'23.8"E)	50.9	71.5	58.6	70.8	76.7
3. Keredari Village (Coordinates- 23°51'49.49"N to 85°05'19.06"E)	56.2	72.8	57.7	71.6	78.5

*** 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.

(Signature)

यराबाबु पी. / VARABABU P.
जन प्रशासनिक (पी. एन्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

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



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TEST REPORT

Unique Lab Report No. (ULR No.)	TC994824000000395F		
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	Particular of the Plant	Coal Mines
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.03.2024 to 29.03.2024	Sample Collected by	Md. R. Rahman & Team
Sample Receiving Date	30.03.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/95/NR-77/04 & 05	Sampling Method	IS:9989-1981 (Reaffirmed-2020)
Sample details	Ambient Noise	Sample Drawn by	Sabz Care Lab
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure :1013 mBar Relative Humidity : 60%, Weather Condition - Clear		
Report Release Date	01.04.2024		

Limit in Leg 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

Sampling Location	NOISE LEVEL IN dB(A)				
	Minimum	Ld-Mean (Day)	Ln-Mean (Night)	L _{eq} Mean	Maximum
4. Chatti Bariatu Village (Coordinates- 23°53'18.32"N to 85°04'16.70"E)	52.1	70.5	57.9	69.8	75.5
5. Kishunpur Village (Coordinates- 23°54'58.78"N to 85°01'0.19"E)	48.3	68.7	55.5	67.9	73.5

*** 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.

(Signature)

वराबाबू पी. / VARABABU P.

अन पर्यावरण (पी. एन्ड एन.) / DOM(P&A)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

Authorized Signatory

(Signature)
Quality Manager
(Piyush Ranjan)

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

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



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



TEST REPORT

Unique Lab Report No. (ULR No.)		TC994824000000396F	
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
Discipline	Chemical	Group	Atmospheric Pollution
Date of Study	28.03.2024	Sample Collected by	Md. R. Rahamn & Team
Sample Receiving Date	30.03.2024	Sample Condition	Sealed and Preserved
Sample ID	SCECPL/TR/24/95/NR-78/01,02,03,04	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	01.04.2024
Meteorological Information	Average Ambient Temperature : 30.5°C, Barometric Pressure :1013 mBar Relative Humidity : 60%, 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.

SOURCE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL IN dB(A)		
	Minimum	L _{eq} Mean	Maximum
1. Near Excavator Volvo Ex 410 (10 meter Distance from Source)	53.5	73.4	79.3
2. Dozer CAT - D8 480 (10 meter Distance from Source)	54.2	73.8	79.4
3. Tata Hitachi Drill (EX 2102C) 480 (10 meter Distance from Source)	56.3	76.2	82.1
4. Near Secondary Crusher (10 meter Distance from Source)	54.4	72.1	77.8

*** 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.

Varababu P.
वरबाबू पी. / VARABABU P.

Authorized Signatory

Piyush Ranjan
Quality Manager
(Piyush Ranjan)

Registered Office : Aarti Bhawan, Bawan Bighas, P.O. Machhua, Dist-Deoghar-815353 (Jharkhand)
Contact : 09334315731, 07583048389, Email : scacplndp@gmail.com



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



Varababu P.
वराबाबू पी. / VARABABU P.
एन एनटीपीसी लिमिटेड (पी. एनटीपीसी) / DOM(P&S)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी हरियाणु कोयला खनन परियोजना / CBCMP
हजारीबाग / Hazaribag

GENERAL INFORMATION

A. Demographics:

Name	Vidya Sagar Singh
Workman ID:	
Age:	22
Sex:	M
Contact No:	9123107647

B. Occupational Details:

Project Code:	
Contractor ID:	
Work ID:	
Department:	Admin
NTPC EIC No:	
Designation:	MTK
Work Skill Level:	Semi-Skilled
Location of Employment	Chatli Bariaatu Coal mine Pub. Ltd.
Address:	Plt- CBCMPL C/o NTPC Pub Ltd. Pagar Keredari Hazaribag.
Personal ID Name/Number	3185 5957 7012

(Signature)

यराबाबू पी. / VARABABU P.

जन महासंस्था (पी. एन्ड एन.) / JOM(PAS)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरिवातु कोयला खनन परियोजना / CBCMP
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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. 3000/RPL/66741/23-24

Certified that Shri /Shrimati* Nidyalagan Singh 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 22 years of age. The findings of the examining authority are given in the attached sheet. It is considered that Shri /Shrimati* Nidyalagan Singh

✓ (a) *Is medically fit for any employment/trade apprentice training in mines.

(b)* is suffering from.....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.



Signature of the Examining Authority
with seal

Name and designation in Block letters

Place: Hazaribagh

Date: 24/02/24

Dr. Anand
MBBS, MD (Path)
DMS RANCHI

*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.

Varababu P.
वरबाबू पी. / VARABABU P.

जन स्वास्थ्य रक्षक (पी. एन्ड एम.) / JDM(P&M)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
हजारिबाग / Hazaribag

2000
firedly
12.03.2024
श्री. पी. सुभाष कुमार / Dr. P. Subhash Kumar
जन स्वास्थ्य रक्षक (पी. एन्ड एम.) / JDM(P&M)
एनटीपीसी लिमिटेड / NTPC Limited
बड़ी बरियानु कोयला खनन परियोजना / CBCMP
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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. 5000/RPL/66741/28-24 as result of medical examination on 24/02/24
Identification Mark hole on face Left thumb impression of the candidate.

1 General development

Good/Fair/Poor

2. Height 170 cms.

3. Weight 62 Kg.

4. General & Physical Examination

Vidyalogaj Singh

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 81 cms, After full expiration 83 cms

(ii) Spirometry:

Parameters	Predicted Value	Performed Value	% of Predicted
Forced Vital Capacity(FEV)	<u>3.904</u>	<u>2.521</u>	<u>64.57</u>
Forced Vital Capacity I(FEV1)	<u>3.346</u>	<u>2.38</u>	<u>71.12</u>
FEV1/FVC	<u>83.25</u>	<u>94.38</u>	<u>113.3</u>
Peak Expiration Flow		<u>1.955</u>	

Enclosed Spirometry Report.

8. Circulatory System:

Blood Pressure 120/80 Pulse 80

Cardiological Assessment:

Auscultation	S1	<u>(+)</u>
	S2	<u>(+)</u>

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एन. एम. एल. (पी. एन्ड. एम.) / DOM(P&S)
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बड़ी बरियानु कोयला खनन परियोजना / CBCMP
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	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 Normal
 13. Hernia No
 14. Hydrocele NA
 15. Any other abnormality NAD
 16. Urine:
 Reaction Acidic Albumin (-) Sugar (-)
 17. Skiagram of chest Normal

18. ILO Classification of chest Radiograph:

Profusion of Peneumoconiotic Opacities	Grades	Types
Present/Absent		

19. Pathological/Microbiological investigation :

S. No	Tests	Findings
1	Blood- Tc, Dc, Hb, ESR, Platelets	WNL/Abnormal
2	Blood Group	B (+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: Hazaribag

Signature of the Examining Authority with seal



Dr. Anjana
 (Path)
 RANCHI

वराबाबू पी. / VARABABU P.

एन एनपीसी (पी. एन. एन.) / ENN (P.A.)
 एनपीसी लिमिटेड / NTPC Limited
 बड़ी हरिकान कोयला खनन परियोजना / CBCMP
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Training Session on Safety & Health



Varababu P.

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जन महासंस्था (पी. एन. एस.) / DOM(P&S)
 एनटीपीसी लिमिटेड / NTPC Limited
 चंडी हरिकानु कोयला खनन परियोजना / CBCMP
 हजारीबाग / Hazaribag